**Table A6.1.5 - 2 Data of Planned Transformers by the End of 2015**

| No. | Node (H)igh Voltage | Node (L)ow Voltage | Node (M)iddle Voltage | No. of Unit | Rated Voltage (kV) H | Rated Voltage (kV) L | Rated Voltage (kV) M | Rated Capacity (MVA) H | Rated Capacity (MVA) L | Rated Capacity (MVA) M | Impedance Voltage / Unit (%) between | (base MVA) | 100 MVA base | Tap (%, nos) | Highest | Lowest | Nos. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | VEYAN-1 | VEYAN-3 | | 1 | 132.0 | 33.0 | | 94.5 | 94.5 | | H-L | 10.00 (94.5) | 10.58 | H | 5.0 | -15.0 | 17 |
| 25 | RATMA-1 | RATMA-3 | | 1 | 132.0 | 33.0 | | 189.0 | 189.0 | | H-L | 10.00 (189.0) | 5.29 | H | 5.0 | -15.0 | 17 |
| 26 | PANNI-1 | PANNI-3 | | 1 | 132.0 | 33.0 | | 220.5 | 220.5 | | H-L | 10.00 (220.5) | 4.54 | H | 5.0 | -15.0 | 17 |
| 27 | KOLON-1 | KOLON-3 | | 1 | 132.0 | 33.0 | | 189.0 | 189.0 | | H-L | 10.00 (189.0) | 5.29 | H | 5.0 | -15.0 | 17 |
| 28 | AVISS-1 | AVISS-3 | | 1 | 132.0 | 33.0 | | 94.5 | 94.5 | | H-L | 10.00 (94.5) | 10.58 | H | 5.0 | -15.0 | 17 |
| 29 | PANAD-1 | PANAD-3 | | 1 | 132.0 | 33.0 | | 126.0 | 126.0 | | H-L | 10.00 (126.0) | 7.94 | H | 5.0 | -15.0 | 17 |
| 30 | SRIJA-1 | SRIJA-3 | | 1 | 132.0 | 33.0 | | 189.0 | 189.0 | | H-L | 10.00 (189.0) | 5.29 | H | 5.0 | -15.0 | 17 |
| 31 | KESBE-1 | KESBE-3 | | 1 | 132.0 | 33.0 | | 189.0 | 189.0 | | H-L | 10.00 (189.0) | 5.29 | H | 5.0 | -15.0 | 17 |
| 32 | GALLE-1 | GALLE-3 | | 1 | 132.0 | 33.0 | | 123.0 | 123.0 | | H-L | 10.00 (123.0) | 8.13 | H | 5.0 | -15.0 | 17 |
| 33 | MATAR-1 | MATAR-3 | | 1 | 132.0 | 33.0 | | 126.0 | 126.0 | | H-L | 10.00 (126.0) | 7.94 | H | 5.0 | -15.0 | 17 |
| 34 | N-GALL-1 | N-GALL-3 | | 1 | 132.0 | 33.0 | | 126.0 | 126.0 | | H-L | 10.00 (126.0) | 7.94 | H | 5.0 | -15.0 | 17 |
| 35 | BOOS-1 | BOOS-3 | | 1 | 132.0 | 33.0 | | 94.5 | 94.5 | | H-L | 10.00 (94.5) | 10.58 | H | 5.0 | -15.0 | 17 |
| 36 | THULH-1 | THULH-3 | | 1 | 132.0 | 33.0 | | 126.0 | 126.0 | | H-L | 10.00 (126.0) | 7.94 | H | 5.0 | -15.0 | 17 |
| 37 | RATNA-1 | RATNA-3 | | 1 | 132.0 | 33.0 | | 126.0 | 126.0 | | H-L | 10.00 (126.0) | 7.94 | H | 5.0 | -15.0 | 17 |
| 38 | KEGAL-1 | KEGAL-3 | | 1 | 132.0 | 33.0 | | 126.0 | 126.0 | | H-L | 10.00 (126.0) | 7.94 | H | 5.0 | -15.0 | 17 |
| 39 | AGURU-1 | AGURU-3 | | 1 | 132.0 | 33.0 | | 94.5 | 94.5 | | H-L | 10.00 (94.5) | 10.58 | H | 5.0 | -15.0 | 17 |
| 40 | EHELI-1 | EHELI-3 | | 1 | 132.0 | 33.0 | | 94.5 | 94.5 | | H-L | 10.00 (94.5) | 10.58 | H | 5.0 | -15.0 | 17 |
| 41 | SUB-B-1 | SUB-B-11 | | 1 | 132.0 | 11.0 | | 189.0 | 189.0 | | H-L | 10.00 (189.0) | 5.29 | H | 5.0 | -15.0 | 17 |
| 42 | IMBULG-1 | IMBULG-3 | | 1 | 132.0 | 33.0 | | 189.0 | 189.0 | | H-L | 10.00 (189.0) | 5.29 | H | 5.0 | -15.0 | 17 |
| 43 | KATANA-1 | KATANA-3 | | 1 | 132.0 | 33.0 | | 126.0 | 126.0 | | H-L | 10.00 (126.0) | 7.94 | H | 5.0 | -15.0 | 17 |
| 44 | GONAWA-1 | GONAWA-3 | | 1 | 132.0 | 33.0 | | 189.0 | 189.0 | | H-L | 10.00 (189.0) | 5.29 | H | 5.0 | -15.0 | 17 |
| 45 | ANIYA-1 | ANIYA-3 | | 1 | 132.0 | 33.0 | | 126.0 | 126.0 | | H-L | 10.00 (126.0) | 7.94 | H | 5.0 | -15.0 | 17 |
| 46 | ANURA-1 | ANURA-3 | | 1 | 132.0 | 33.0 | | 94.5 | 94.5 | | H-L | 10.00 (94.5) | 10.58 | H | 5.0 | -15.0 | 17 |
| 47 | MUTHR-2 | MUTHR-3 | | 1 | 220.0 | 33.0 | | 189.0 | 189.0 | | H-L | 13.00 (189.0) | 6.88 | H | 5.0 | -15.0 | 17 |
| 48 | KOLON-1 | KOLON-3 | | 1 | 132.0 | 33.0 | | 189.0 | 189.0 | | H-L | 10.00 (189.0) | 5.29 | H | 5.0 | -15.0 | 17 |

Notes:

1) Sources; * : CEB's record, ** : Name plate at the site, none : Assumed value
2) Shaded nodes; Not in operation

Table A6.1.5 - 3 Data of Planned Generators by the End of 2015

| No. | Node | Type | No. of Unit | Rated Voltage (kV) | Rated Capacity (MVA) | Rated Output (MW) | Xd" (%) |
|---|---|---|---|---|---|---|---|
| **Data modification for the system in 2015 year** | | | | | | | |
| **New construction** | | | | | | | |
| 1 | **Mawella P/S Total** | | | | **706.00** | **600.00** | |
| | MAWEL-G | coal | 2 | 11.0 | 353.00 | 300.00 | 16.0 |
| | | | | | | | |
| **Augmentation (Additional Capacity)** | | | | | | | |
| 2 | **Boosa P/S Total** | | | | **353.00** | **300.00** | |
| | BOOS-G | c. c. | 1 | 11.0 | 353.00 | 300.00 | 16.0 |
| | | | | | | | |
| 3 | **Trincomalee P/S Total** | | | | **353.00** | **300.00** | |
| | TRINC-G | coal | 1 | 11.0 | 353.00 | 300.00 | 16.0 |
| | | | | | | | |
| 4 | **Muthragawella P/S Total** | | | | **353.00** | **300.00** | |
| | MUTHR-G | c. c. | 1 | 11.0 | 353.00 | 300.00 | 16.0 |
| | | | | | | | |
| 5 | **Kelanitissa P/S Total** | | | | **353.00** | **300.00** | |
| | KELA-CC1 | c. c. | 1 | 11.0 | 353.00 | 300.00 | 16.0 |
| | | | | | | | |
| 5 | **Chunnakam P/S Total** | | | | **82.00** | **70.00** | |
| | CHUNN-G | gas | 1 | 11.0 | 82.00 | 70.00 | 16.0 |
| | | | | | | | |
| 6 | **Balangoda P/S Total** | | | | **82.00** | **70.00** | |
| | BALAN-G | | 1 | 11.0 | 82.00 | 70.00 | 16.0 |
| | | | | | | | |
| 7 | **Athurugiriya P/S Total** | | | | **82.00** | **70.00** | |
| | ATHUR-G | | 1 | 11.0 | 82.00 | 70.00 | 16.0 |
| | | | | | | | |
| | | | | | | | |
| **Retirement** | | | | | | | |
| | non | | | | | | |
| | | | | | | | |

**Table A6.1.5 - 4**

**Data of Planned Reactive Power Sources by the End of 2015**

| No. | Node | Rated Voltage (kV) | Rated Capacity (MVA) | Remarks |
|---|---|---|---|---|
| **Data modification for the system in 2015 year** | | | | |
| **Newly Add** | | | | |
| 1 | PANNI-1 | 132 | 200.00 | |
| 2 | SAPUG-1 | 132 | 200.00 | |
| 3 | K_NIYA-1 | 132 | 100.00 | |
| 4 | KOTUG-1 | 132 | 100.00 | |
| 5 | BIYAG-2 | 220 | 100.00 | |
| | | | | |
| | | | | |
| **Total** | | | 700.00 | |

**Table A6.1.5 - 5**

**Generator Output Schedule for 2015 System**

| No. | Node | Type | Scheduled Output (MW) | Max Output *2) (MW) |
|---|---|---|---|---|
| | | | | |
| 1 | LAX-G | hydro | 45.00 | 50.00 |
| 2 | N-LAX-G | hydro | 90.00 | 100.00 |
| 3 | WIMAL-G | hydro | 45.00 | 50.00 |
| 4 | CANYO-G | hydro | 54.00 | 60.00 |
| 5 | POLPI-G | hydro | 68.00 | 75.00 |
| 6 | UKUWE-G | hydro | 34.00 | 38.00 |
| 7 | BOWAT-G | hydro | 36.00 | 40.00 |
| 8 | VICTO-G | hydro | 189.00 | 210.00 |
| 9 | RANDE-G | hydro | 110.00 | 122.00 |
| 10 | KOTMA-G1 | hydro | 121.00 | 134.00 |
| 11 | KOTMA-G2 | hydro | 60.00 | 67.00 |
| 12 | RANTE-G | hydro | 44.00 | 49.00 |
| 13 | SAMAN-G | hydro | 108.00 | 120.00 |
| 14 | KUKULE-G | hydro | 70.00 | 78.20 |
| 15 | KELA-GT1 | gas | 14.00 | 18.00 |
| 16 | KELA-GT2 | gas | 72.00 | 90.00 |
| 17 | KELA-GT3 | gas | 82.00 | 102.60 |
| 18 | KELA-GT4 | gas | 19.00 | 23.40 |
| 19 | KELA-CC1 | c.c. | 405.00 | 405.00 |
| 20 | MUTHR-G | c.c. | 405.00 | 405.00 |
| 21 | N-GALL-G | gas | 50.00 | 63.00 |
| 22 | SAPU-GN1 | diesel | 29.00 | 36.00 |
| 23 | SAPU-GN2 | diesel | 29.00 | 36.00 |
| 24 | KHD-G | diesel | 37.00 | 46.00 |
| 25 | CHUNN-G | dg & gas | 72.00 | 90.00 |
| 26 | PUTTA-PG *1) | steam | 675.00 | 675.00 |
| 27 | TRINC-G | steam | 972.00 | 1080.00 |
| 28 | BOOS-G | c. c. | 540.00 | 540.00 |
| 29 | MAWEL-G | steam | 540.00 | 540.00 |
| 30 | BALAN-G | gas | 50.00 | 63.00 |
| 31 | ATHUR-G | gas | 50.00 | 63.00 |
| | | | | |
| Hydro total | | | 1074.00 | 1193.20 |
| Thermal total | | | 4041.00 | 4276.00 |
| **Total of Generation** | | | **5115.00** | **5469.20** |

Notes :

*1) Slack node and one unit (150 MW) under maintenance

*2) Maximum output = Rated output, for hydro stations

Maximum output = Rated output x 0.9, for thermal stations

| | | |
|---|---|---|
| Total Demand | = | 4944 (MW) |
| Maintenance | = | 150 (MW) |
| Total Reserve | = | 7.16 (%) |
| Spinning Res. | = | 2.41 (%) |
| Hot Reserve | = | 4.75 (%) |

Net supply (MW) = 4961.55

(considering 3.0 % system loss)

## Table A6.2 - 1 Formula for Ranking Evaluation

1. Over Load Ranking

$$PI = \sum_{\ell=1}^{L} W\ell \left(\frac{P\ell}{\overline{P}\ell}\right)^2$$

Where :

$W\ell$ = a real, constant weighting coefficient on circuit $\ell$

$P\ell$ = real power flow on circuit $\ell$

$\overline{P}\ell$ = real power flow limit on circuit $\ell$

L = total number of circuits

2. Voltage Collapse Ranking

$$PI = \sum_{\ell=1}^{L} X\ell \; P\ell^2$$

Where :

$X\ell$ = reactance of circuit $\ell$

$P\ell$ = real power flow on circuit $\ell$

# TABLE A6.2.1-1 Overload Ranking of 1995 System

28 Nov 1995 Evening Peak Load
Note Rating 'B' is the evening rating for the overheadlines, Rating 'C' is the emergency rating.

*** BRANCH OVERLOAD RANKING BASED ON 1.00 OF RATING-B ***

| RANK | FROM BUS | KV | TO BUS | KV | ID | FLOW | RATA | RATB | RATC | PI |
|---|---|---|---|---|---|---|---|---|---|---|
| ( 1) | 1220 KOTMA-1 | 132 | 1770 KIRIB-1 | 132 | 1 | 79 | 45 | 100 | 140 | 28.5 |
| ( 2) | 1200 UKUWE-1 | 132 | 1690 HABAR-1 | 132 | 1 | 40 | 45 | 100 | 140 | 26.6 |
| ( 3) | 3580 KOTUG-3 | 33.0 | 5581 KOTU-DU1 | 220 | 1 | -40 | 60 | 60 | 60 | 26.5 |
| ( 4) | 3580 KOTUG-3 | 33.0 | 5582 KOTU-DU2 | 220 | 1 | -40 | 60 | 60 | 60 | 26.5 |
| ( 5) | 1130 POLPI-1 | 132 | 1550 KOLON-1 | 132 | 1 | 47 | 45 | 100 | 140 | 26.2 |
| ( 6) | 1130 POLPI-1 | 132 | 1550 KOLON-1 | 132 | 2 | 47 | 45 | 100 | 140 | 26.2 |
| ( 7) | 2580 KOTUG-2 | 220 | 5582 KOTU-DU2 | 220 | 1 | 101 | 250 | 250 | 250 | 25.9 |
| ( 8) | 2580 KOTUG-2 | 220 | 5581 KOTU-DU1 | 220 | 1 | 101 | 250 | 250 | 250 | 25.9 |
| ( 9) | 1130 POLPI-1 | 132 | 1200 UKUWE-1 | 132 | 1 | 23 | 45 | 100 | 140 | 25.9 |
| ( 10) | 1130 POLPI-1 | 132 | 5531 THULH-T1 | 132 | 1 | 54 | 45 | 100 | 140 | 25.7 |
| ( 11) | 1130 POLPI-1 | 132 | 5532 THULH-T2 | 132 | 2 | 54 | 45 | 100 | 140 | 25.7 |
| ( 12) | 1110 N-LAX-1 | 132 | 1130 POLPI-1 | 132 | 1 | 42 | 45 | 100 | 140 | 25.7 |
| ( 13) | 1110 N-LAX-1 | 132 | 1130 POLPI-1 | 132 | 2 | 42 | 45 | 100 | 140 | 25.7 |
| ( 14) | 1580 KOTUG-1 | 132 | 5582 KOTU-DU2 | 220 | 1 | -61 | 250 | 250 | 250 | 25.7 |
| ( 15) | 1580 KOTUG-1 | 132 | 5581 KOTU-DU1 | 220 | 1 | -61 | 250 | 250 | 250 | 25.7 |
| ( 16) | 1690 HABAR-1 | 132 | 1700 ANURA-1 | 132 | 1 | 15 | 45 | 100 | 140 | 25.6 |
| ( 17) | 1560 PANNI-1 | 132 | 1570 BIYAG-1 | 132 | 1 | -46 | 165 | 225 | 250 | 25.6 |
| ( 18) | 1560 PANNI-1 | 132 | 1570 BIYAG-1 | 132 | 2 | -46 | 165 | 225 | 250 | 25.6 |
| ( 19) | 1100 LAX-1 | 132 | 1130 POLPI-1 | 132 | 1 | 40 | 45 | 100 | 140 | 25.6 |
| ( 20) | 1100 LAX-1 | 132 | 1130 POLPI-1 | 132 | 2 | 40 | 45 | 100 | 140 | 25.6 |
| ( 21) | 1530 THULH-1 | 132 | 5532 THULH-T2 | 132 | 2 | -22 | 45 | 100 | 140 | 25.5 |
| ( 22) | 1530 THULH-1 | 132 | 5531 THULH-T1 | 132 | 1 | -22 | 45 | 100 | 140 | 25.5 |
| ( 23) | 2570 BIYAG-2 | 220 | 2580 KOTUG-2 | 220 | 1 | 101 | 275 | 375 | 425 | 25.5 |
| ( 24) | 2570 BIYAG-2 | 220 | 2580 KOTUG-2 | 220 | 2 | 101 | 275 | 375 | 425 | 25.5 |
| ( 25) | 1700 ANURA-1 | 132 | 1770 KIRIB-1 | 132 | 1 | -22 | 45 | 100 | 140 | 25.5 |
| ( 26) | 2220 KOTMA-2 | 220 | 2570 BIYAG-2 | 220 | 1 | 194 | 550 | 750 | 850 | 25.5 |
| ( 27) | 2220 KOTMA-2 | 220 | 2570 BIYAG-2 | 220 | 2 | 194 | 550 | 750 | 850 | 25.5 |
| ( 28) | 1550 KOLON-1 | 132 | 1560 PANNI-1 | 132 | 1 | 35 | 45 | 100 | 140 | 25.4 |
| ( 29) | 1550 KOLON-1 | 132 | 1560 PANNI-1 | 132 | 2 | 35 | 45 | 100 | 140 | 25.4 |
| ( 30) | 2220 KOTMA-2 | 220 | 2230 VICTO-2 | 220 | 1 | -129 | 550 | 750 | 850 | 25.4 |
| ( 31) | 2220 KOTMA-2 | 220 | 2230 VICTO-2 | 220 | 2 | -129 | 550 | 750 | 850 | 25.4 |
| ( 32) | 1170 SAMAN-1 | 132 | 1630 BALAN-1 | 132 | 1 | 38 | 165 | 225 | 250 | 25.4 |
| ( 33) | 1170 SAMAN-1 | 132 | 1630 BALAN-1 | 132 | 2 | 38 | 165 | 225 | 250 | 25.4 |
| ( 34) | 5531 THULH-T1 | 132 | 5541 ORUWA-T1 | 132 | 1 | 31 | 45 | 100 | 140 | 25.4 |
| ( 35) | 5532 THULH-T2 | 132 | 5542 ORUWA-T2 | 132 | 2 | 31 | 45 | 100 | 140 | 25.4 |
| ( 36) | 1550 KOLON-1 | 132 | 5542 ORUWA-T2 | 132 | 2 | -31 | 45 | 100 | 140 | 25.4 |
| ( 37) | 1550 KOLON-1 | 132 | 5541 ORUWA-T1 | 132 | 1 | -30 | 45 | 100 | 140 | 25.4 |
| ( 38) | 1110 N-LAX-1 | 132 | 1630 BALAN-1 | 132 | 1 | 12 | 45 | 100 | 140 | 25.4 |
| ( 39) | 1110 N-LAX-1 | 132 | 1630 BALAN-1 | 132 | 2 | 12 | 45 | 100 | 140 | 25.4 |
| ( 40) | 1100 LAX-1 | 132 | 1120 WIMAL-1 | 132 | 1 | -12 | 45 | 100 | 140 | 25.4 |
| ( 41) | 1100 LAX-1 | 132 | 1120 WIMAL-1 | 132 | 2 | -12 | 45 | 100 | 140 | 25.4 |
| ( 42) | 1100 LAX-1 | 132 | 1110 N-LAX-1 | 132 | 1 | -10 | 45 | 100 | 140 | 25.4 |
| ( 43) | 1100 LAX-1 | 132 | 1110 N-LAX-1 | 132 | 2 | -10 | 45 | 100 | 140 | 25.4 |
| ( 44) | 1680 KURUN-1 | 132 | 1770 KIRIB-1 | 132 | 1 | -9 | 45 | 100 | 140 | 25.4 |
| ( 45) | 1680 KURUN-1 | 132 | 1770 KIRIB-1 | 132 | 2 | -9 | 45 | 100 | 140 | 25.4 |
| ( 46) | 1130 POLPI-1 | 132 | 1220 KOTMA-1 | 132 | 1 | 14 | 45 | 100 | 140 | 25.4 |
| ( 47) | 1310 SAPUG-1P | 132 | 1570 BIYAG-1 | 132 | 1 | 8 | 45 | 100 | 140 | 25.4 |
| ( 48) | 1310 SAPUG-1P | 132 | 1570 BIYAG-1 | 132 | 2 | 8 | 45 | 100 | 140 | 25.4 |
| ( 49) | 1170 SAMAN-1 | 132 | 1660 EMBIL-1 | 132 | 1 | 6 | 105 | 140 | 160 | 25.4 |
| ( 50) | 1170 SAMAN-1 | 132 | 1660 EMBIL-1 | 132 | 2 | 6 | 105 | 140 | 160 | 25.4 |
| ( 51) | 1570 BIYAG-1 | 132 | 5571 BIYA-DU2 | 132 | 1 | -65 | 250 | 250 | 250 | 25.4 |
| ( 52) | 1570 BIYAG-1 | 132 | 5570 BIYA-DU1 | 132 | 1 | -65 | 250 | 250 | 250 | 25.4 |
| ( 53) | 2570 BIYAG-2 | 220 | 5571 BIYA-DU2 | 132 | 1 | 89 | 250 | 250 | 250 | 25.4 |
| ( 54) | 2570 BIYAG-2 | 220 | 5570 BIYA-DU1 | 132 | 1 | 89 | 250 | 250 | 250 | 25.4 |
| ( 55) | 3570 BIYAG-3 | 33.0 | 5570 BIYA-DU1 | 132 | 1 | -24 | 60 | 60 | 60 | 25.4 |
| ( 56) | 3570 BIYAG-3 | 33.0 | 5571 BIYA-DU2 | 132 | 1 | -24 | 60 | 60 | 60 | 25.4 |
| ( 57) | 1250 RANTE-1 | 132 | 5251 RANT-DU1 | 132 | 1 | -17 | 35 | 35 | 35 | 25.4 |
| ( 58) | 1250 RANTE-1 | 132 | 5252 RANT-DU2 | 132 | 1 | -17 | 35 | 35 | 35 | 25.4 |
| ( 59) | 3250 RANTE-3 | 33.0 | 5251 RANT-DU1 | 132 | 1 | -5 | 10 | 10 | 10 | 25.4 |
| ( 60) | 3250 RANTE-3 | 33.0 | 5252 RANT-DU2 | 132 | 1 | -5 | 10 | 10 | 10 | 25.4 |
| ( 61) | 1300 KELAN-1 | 132 | 1550 KOLON-1 | 132 | 1 | 5 | 57 | 170 | 225 | 25.4 |
| ( 62) | 1300 KELAN-1 | 132 | 1550 KOLON-1 | 132 | 2 | 5 | 57 | 170 | 225 | 25.4 |
| ( 63) | 1300 KELAN-1 | 132 | 1570 BIYAG-1 | 132 | 1 | -27 | 300 | 400 | 460 | 25.3 |
| ( 64) | 1300 KELAN-1 | 132 | 1570 BIYAG-1 | 132 | 2 | -27 | 300 | 400 | 460 | 25.3 |

# TABLE A6.2.1-2 Voltage Collapse Ranking of 1995 System

28 Nov 1995 Evening Peak Load
Voltage collapse ranking

| RANK | FROM BUS | KV | TO BUS | KV | ID | FLOW | RATA | RATB | RATC | PI |
|---|---|---|---|---|---|---|---|---|---|---|
| | *** BRANCH Voltage Collapse RANKING BASED ON 1.00 OF RATING-B *** | | | | | | | | | |
| ( 1) | 1220 KOTMA-1 | 132 | 1770 KIRIB-1 | 132 | 1 | 79 | 45 | 100 | 140 | 2.41 |
| ( 2) | 2220 KOTMA-2 | 220 | 2570 BIYAG-2 | 220 | 1 | 194 | 550 | 750 | 850 | 2.18 |
| ( 3) | 2220 KOTMA-2 | 220 | 2570 BIYAG-2 | 220 | 2 | 194 | 550 | 750 | 850 | 2.18 |
| ( 4) | 3580 KOTUG-3 | 33.0 | 5581 KOTU-DU1 | 220 | 1 | -40 | 60 | 60 | 60 | 2.18 |
| ( 5) | 3580 KOTUG-3 | 33.0 | 5582 KOTU-DU2 | 220 | 1 | -40 | 60 | 60 | 60 | 2.18 |
| ( 6) | 1580 KOTUG-1 | 132 | 5582 KOTU-DU2 | 220 | 1 | -61 | 250 | 250 | 250 | 1.99 |
| ( 7) | 1580 KOTUG-1 | 132 | 5581 KOTU-DU1 | 220 | 1 | -61 | 250 | 250 | 250 | 1.99 |
| ( 8) | 1200 UKUWE-1 | 132 | 1690 HABAR-1 | 132 | 1 | 40 | 45 | 100 | 140 | 1.99 |
| ( 9) | 2220 KOTMA-2 | 220 | 2230 VICTO-2 | 220 | 1 | -129 | 550 | 750 | 850 | 1.91 |
| ( 10) | 2220 KOTMA-2 | 220 | 2230 VICTO-2 | 220 | 2 | -129 | 550 | 750 | 850 | 1.91 |
| ( 11) | 1130 POLPI-1 | 132 | 1200 UKUWE-1 | 132 | 1 | 23 | 45 | 100 | 140 | 1.90 |
| ( 12) | 1130 POLPI-1 | 132 | 5531 THULH-T1 | 132 | 1 | 54 | 45 | 100 | 140 | 1.90 |
| ( 13) | 1130 POLPI-1 | 132 | 5532 THULH-T2 | 132 | 2 | 54 | 45 | 100 | 140 | 1.90 |
| ( 14) | 1130 POLPI-1 | 132 | 1550 KOLON-1 | 132 | 1 | 47 | 45 | 100 | 140 | 1.90 |
| ( 15) | 1130 POLPI-1 | 132 | 1550 KOLON-1 | 132 | 2 | 47 | 45 | 100 | 140 | 1.90 |
| ( 16) | 1700 ANURA-1 | 132 | 1770 KIRIB-1 | 132 | 1 | -22 | 45 | 100 | 140 | 1.90 |
| ( 17) | 2570 BIYAG-2 | 220 | 2580 KOTUG-2 | 220 | 1 | 101 | 275 | 375 | 425 | 1.88 |
| ( 18) | 2570 BIYAG-2 | 220 | 2580 KOTUG-2 | 220 | 2 | 101 | 275 | 375 | 425 | 1.88 |
| ( 19) | 1690 HABAR-1 | 132 | 1700 ANURA-1 | 132 | 1 | 15 | 45 | 100 | 140 | 1.87 |
| ( 20) | 5531 THULH-T1 | 132 | 5541 ORUWA-T1 | 132 | 1 | 31 | 45 | 100 | 140 | 1.87 |
| ( 21) | 5532 THULH-T2 | 132 | 5542 ORUWA-T2 | 132 | 2 | 31 | 45 | 100 | 140 | 1.87 |
| ( 22) | 1550 KOLON-1 | 132 | 5542 ORUWA-T2 | 132 | 2 | -31 | 45 | 100 | 140 | 1.87 |
| ( 23) | 1550 KOLON-1 | 132 | 5541 ORUWA-T1 | 132 | 1 | -30 | 45 | 100 | 140 | 1.87 |
| ( 24) | 1130 POLPI-1 | 132 | 1220 KOTMA-1 | 132 | 1 | 14 | 45 | 100 | 140 | 1.87 |
| ( 25) | 1170 SAMAN-1 | 132 | 1630 BALAN-1 | 132 | 1 | 38 | 165 | 225 | 250 | 1.86 |
| ( 26) | 1170 SAMAN-1 | 132 | 1630 BALAN-1 | 132 | 2 | 38 | 165 | 225 | 250 | 1.86 |
| ( 27) | 1560 PANNI-1 | 132 | 1570 BIYAG-1 | 132 | 1 | -46 | 165 | 225 | 250 | 1.86 |
| ( 28) | 1560 PANNI-1 | 132 | 1570 BIYAG-1 | 132 | 2 | -46 | 165 | 225 | 250 | 1.86 |
| ( 29) | 1530 THULH-1 | 132 | 5532 THULH-T2 | 132 | 2 | -22 | 45 | 100 | 140 | 1.86 |
| ( 30) | 1530 THULH-1 | 132 | 5531 THULH-T1 | 132 | 1 | -22 | 45 | 100 | 140 | 1.86 |
| ( 31) | 1550 KOLON-1 | 132 | 1560 PANNI-1 | 132 | 1 | 35 | 45 | 100 | 140 | 1.86 |
| ( 32) | 1550 KOLON-1 | 132 | 1560 PANNI-1 | 132 | 2 | 35 | 45 | 100 | 140 | 1.86 |
| ( 33) | 1110 N-LAX-1 | 132 | 1130 POLPI-1 | 132 | 1 | 42 | 45 | 100 | 140 | 1.86 |
| ( 34) | 1110 N-LAX-1 | 132 | 1130 POLPI-1 | 132 | 2 | 42 | 45 | 100 | 140 | 1.86 |
| ( 35) | 1100 LAX-1 | 132 | 1130 POLPI-1 | 132 | 1 | 40 | 45 | 100 | 140 | 1.86 |
| ( 36) | 1100 LAX-1 | 132 | 1130 POLPI-1 | 132 | 2 | 40 | 45 | 100 | 140 | 1.86 |
| ( 37) | 1110 N-LAX-1 | 132 | 1630 BALAN-1 | 132 | 1 | 12 | 45 | 100 | 140 | 1.85 |
| ( 38) | 1110 N-LAX-1 | 132 | 1630 BALAN-1 | 132 | 2 | 12 | 45 | 100 | 140 | 1.85 |
| ( 39) | 1300 KELAN-1 | 132 | 1570 BIYAG-1 | 132 | 1 | -27 | 300 | 400 | 460 | 1.85 |
| ( 40) | 1300 KELAN-1 | 132 | 1570 BIYAG-1 | 132 | 2 | -27 | 300 | 400 | 460 | 1.85 |
| ( 41) | 1680 KURUN-1 | 132 | 1770 KIRIB-1 | 132 | 1 | -9 | 45 | 100 | 140 | 1.85 |
| ( 42) | 1680 KURUN-1 | 132 | 1770 KIRIB-1 | 132 | 2 | -9 | 45 | 100 | 140 | 1.85 |
| ( 43) | 1170 SAMAN-1 | 132 | 1660 EMBIL-1 | 132 | 1 | 6 | 105 | 140 | 160 | 1.85 |
| ( 44) | 1170 SAMAN-1 | 132 | 1660 EMBIL-1 | 132 | 2 | 6 | 105 | 140 | 160 | 1.85 |
| ( 45) | 1100 LAX-1 | 132 | 1120 WIMAL-1 | 132 | 1 | -12 | 45 | 100 | 140 | 1.85 |
| ( 46) | 1100 LAX-1 | 132 | 1120 WIMAL-1 | 132 | 2 | -12 | 45 | 100 | 140 | 1.85 |
| ( 47) | 1310 SAPUG-1P | 132 | 1570 BIYAG-1 | 132 | 1 | 8 | 45 | 100 | 140 | 1.85 |
| ( 48) | 1310 SAPUG-1P | 132 | 1570 BIYAG-1 | 132 | 2 | 8 | 45 | 100 | 140 | 1.85 |
| ( 49) | 1100 LAX-1 | 132 | 1110 N-LAX-1 | 132 | 1 | -10 | 45 | 100 | 140 | 1.85 |
| ( 50) | 1100 LAX-1 | 132 | 1110 N-LAX-1 | 132 | 2 | -10 | 45 | 100 | 140 | 1.85 |
| ( 51) | 1300 KELAN-1 | 132 | 1550 KOLON-1 | 132 | 1 | 5 | 57 | 170 | 225 | 1.85 |
| ( 52) | 1300 KELAN-1 | 132 | 1550 KOLON-1 | 132 | 2 | 5 | 57 | 170 | 225 | 1.85 |

# TABLE A6.2.2-1 Overload Ranking of 2000 System

POWER SYSTEM ANALYSIS FOR YEAR 2000 NIGHT PEAK CONDITIONS
OVERLOAD RANKING OF CIRCUITS BASED ON EVENING (B) RATING
(NOTE RATING AND FLOW FIGURES ARE GIVEN IN MVA. 'RATA' IS DAY TIME CYCLIC RATING 'RATB' IS EVENING CYCLIC RATING AND 'RATC' IS EMERGENCY SHORT TERM RATING. 'PI' IS A TPLAN CALCULATED INDEX)

*** BRANCH RANKING BASED ON 1.00 OF RATING-B ***

| RANK | FROM BUS | KV | TO BUS | KV | ID | FLOW | RATA | RATB | RATC | PI |
|---|---|---|---|---|---|---|---|---|---|---|
| ( 1) | 2230 VICTO-2 | 220 | 2240 RANDE-2 | 220 | 1 | -97 | 550 | 750 | 850 | 24.6 |
| ( 2) | 1630 BALAN-1 | 132 | 1655 N-GALL-1 | 132 | 1 | 47 | 40 | 80 | 110 | 20.4 |
| ( 3) | 2220 KOTMA-2 | 220 | 2570 BIYAG-2 | 220 | 1 | 192 | 550 | 750 | 850 | 20.1 |
| ( 4) | 2220 KOTMA-2 | 220 | 2570 BIYAG-2 | 220 | 2 | 192 | 550 | 750 | 850 | 20.1 |
| ( 5) | 1130 POLPI-1 | 132 | 5502 AVIS-1T2 | 132 | 1 | 45 | 45 | 100 | 140 | 19.8 |
| ( 6) | 1630 BALAN-1 | 132 | 1640 DENIY-1 | 132 | 1 | 56 | 40 | 80 | 110 | 19.7 |
| ( 7) | 1130 POLPI-1 | 132 | 1510 SITHA-1 | 132 | 1 | 50 | 45 | 100 | 140 | 19.7 |
| ( 8) | 1130 POLPI-1 | 132 | 5531 THULH-T1 | 132 | 1 | 54 | 45 | 100 | 140 | 19.6 |
| ( 9) | 1130 POLPI-1 | 132 | 5532 THULH-T2 | 132 | 2 | 54 | 45 | 100 | 140 | 19.6 |
| ( 10) | 3570 BIYAG-3 | 33.0 | 5570 BIYA-DU1 | 132 | 1 | -25 | 60 | 60 | 60 | 19.6 |
| ( 11) | 3570 BIYAG-3 | 33.0 | 5571 BIYA-DU2 | 132 | 1 | -25 | 60 | 60 | 60 | 19.6 |
| ( 12) | 3580 KOTUG-3 | 33.0 | 5581 KOTU-DU1 | 220 | 1 | -25 | 60 | 60 | 60 | 19.6 |
| ( 13) | 3580 KOTUG-3 | 33.0 | 5582 KOTU-DU2 | 220 | 1 | -25 | 60 | 60 | 60 | 19.6 |
| ( 14) | 1160 INGIN-1 | 132 | 1620 BADUL-1 | 132 | 1 | -23 | 45 | 100 | 130 | 19.5 |
| ( 15) | 2560 PANNI-2 | 220 | 5566 PANNI-D2 | 132 | 1 | 54 | 250 | 250 | 250 | 19.5 |
| ( 16) | 2560 PANNI-2 | 220 | 5565 PANNI-D1 | 132 | 1 | 54 | 250 | 250 | 250 | 19.5 |
| ( 17) | 1150 AMPA-1 | 132 | 1160 INGIN-1 | 132 | 1 | -21 | 45 | 100 | 140 | 19.5 |
| ( 18) | 2220 KOTMA-2 | 220 | 2230 VICTO-2 | 220 | 1 | -137 | 550 | 750 | 850 | 19.5 |
| ( 19) | 2220 KOTMA-2 | 220 | 2230 VICTO-2 | 220 | 2 | -137 | 550 | 750 | 850 | 19.5 |
| ( 20) | 1560 PANNI-1 | 132 | 5566 PANNI-D2 | 132 | 1 | -54 | 250 | 250 | 250 | 19.5 |
| ( 21) | 1560 PANNI-1 | 132 | 5565 PANNI-D1 | 132 | 1 | -54 | 250 | 250 | 250 | 19.5 |
| ( 22) | 1110 N-LAX-1 | 132 | 1130 POLPI-1 | 132 | 1 | 46 | 45 | 100 | 140 | 19.5 |
| ( 23) | 1110 N-LAX-1 | 132 | 1130 POLPI-1 | 132 | 2 | 46 | 45 | 100 | 140 | 19.5 |
| ( 24) | 3250 RANTE-3 | 33.0 | 5251 RANT-DU1 | 132 | 1 | -4 | 10 | 10 | 10 | 19.4 |
| ( 25) | 3250 RANTE-3 | 33.0 | 5252 RANT-DU2 | 132 | 1 | -4 | 10 | 10 | 10 | 19.4 |
| ( 26) | 1100 LAX-1 | 132 | 1130 POLPI-1 | 132 | 1 | 44 | 45 | 100 | 140 | 19.4 |
| ( 27) | 1100 LAX-1 | 132 | 1130 POLPI-1 | 132 | 2 | 44 | 45 | 100 | 140 | 19.4 |
| ( 28) | 2560 PANNI-2 | 220 | 2570 BIYAG-2 | 220 | 1 | -82 | 275 | 375 | 425 | 19.4 |
| ( 29) | 2560 PANNI-2 | 220 | 2570 BIYAG-2 | 220 | 2 | -82 | 275 | 375 | 425 | 19.4 |
| ( 30) | 1310 SAPU-1P | 132 | 1570 BIYAG-1 | 132 | 1 | 34 | 45 | 100 | 140 | 19.4 |
| ( 31) | 1310 SAPU-1P | 132 | 1570 BIYAG-1 | 132 | 2 | 34 | 45 | 100 | 140 | 19.4 |
| ( 32) | 1550 KOLON-1 | 132 | 5502 AVIS-1T2 | 132 | 2 | -30 | 45 | 100 | 140 | 19.4 |
| ( 33) | 1530 THULH-1 | 132 | 5532 THULH-T2 | 132 | 2 | -26 | 45 | 100 | 140 | 19.4 |
| ( 34) | 1530 THULH-1 | 132 | 5531 THULH-T1 | 132 | 1 | -26 | 45 | 100 | 140 | 19.4 |
| ( 35) | 1570 BIYAG-1 | 132 | 1590 SAPUG-1 | 132 | 1 | 79 | 165 | 225 | 255 | 19.3 |
| ( 36) | 1570 BIYAG-1 | 132 | 1590 SAPUG-1 | 132 | 2 | 79 | 165 | 225 | 255 | 19.3 |
| ( 37) | 1580 KOTUG-1 | 132 | 5581 KOTU-DU1 | 220 | 1 | -47 | 250 | 250 | 250 | 19.3 |
| ( 38) | 1580 KOTUG-1 | 132 | 5582 KOTU-DU2 | 220 | 1 | -47 | 250 | 250 | 250 | 19.3 |
| ( 39) | 1560 PANNI-1 | 132 | 1790 RATMA-1 | 132 | 1 | 30 | 45 | 100 | 140 | 19.3 |
| ( 40) | 1560 PANNI-1 | 132 | 1790 RATMA-1 | 132 | 2 | 30 | 45 | 100 | 140 | 19.3 |
| ( 41) | 1510 SITHA-1 | 132 | 5501 AVIS-1T1 | 132 | 1 | 33 | 45 | 100 | 140 | 19.3 |
| ( 42) | 1110 N-LAX-1 | 132 | 1630 BALAN-1 | 132 | 1 | 30 | 45 | 100 | 140 | 19.3 |
| ( 43) | 1110 N-LAX-1 | 132 | 1630 BALAN-1 | 132 | 2 | 30 | 45 | 100 | 140 | 19.3 |
| ( 44) | 1650 GALLE-1 | 132 | 1655 N-GALL-1 | 132 | 1 | -22 | 40 | 80 | 110 | 19.3 |
| ( 45) | 1650 GALLE-1 | 132 | 1655 N-GALL-1 | 132 | 2 | -22 | 40 | 80 | 110 | 19.3 |
| ( 46) | 2570 BIYAG-2 | 220 | 2580 KOTUG-2 | 220 | 1 | 72 | 275 | 375 | 425 | 19.3 |
| ( 47) | 2570 BIYAG-2 | 220 | 2580 KOTUG-2 | 220 | 2 | 72 | 275 | 375 | 425 | 19.3 |
| ( 48) | 1560 PANNI-1 | 132 | 5561 PANAD-T1 | 132 | 1 | 26 | 150 | 200 | 230 | 19.3 |
| ( 49) | 1560 PANNI-1 | 132 | 5562 PANAD-T2 | 132 | 2 | 26 | 150 | 200 | 230 | 19.3 |
| ( 50) | 1640 DENIY-1 | 132 | 1655 N-GALL-1 | 132 | 1 | 39 | 40 | 80 | 110 | 19.3 |
| ( 51) | 1550 KOLON-1 | 132 | 5501 AVIS-1T1 | 132 | 1 | -30 | 45 | 100 | 140 | 19.3 |
| ( 52) | 1220 KOTMA-1 | 132 | 1770 KIRIB-1 | 132 | 1 | 25 | 45 | 100 | 140 | 19.3 |
| ( 53) | 1220 KOTMA-1 | 132 | 1770 KIRIB-1 | 132 | 2 | 25 | 45 | 100 | 140 | 19.3 |
| ( 54) | 1130 POLPI-1 | 132 | 1220 KOTMA-1 | 132 | 1 | 26 | 45 | 100 | 140 | 19.3 |
| ( 55) | 1130 POLPI-1 | 132 | 1220 KOTMA-1 | 132 | 2 | 26 | 45 | 100 | 140 | 19.3 |
| ( 56) | 1300 KELAN-1 | 132 | 1550 KOLON-1 | 132 | 1 | 45 | 57 | 170 | 225 | 19.3 |
| ( 57) | 1300 KELAN-1 | 132 | 1550 KOLON-1 | 132 | 2 | 45 | 57 | 170 | 225 | 19.3 |
| ( 58) | 2220 KOTMA-2 | 220 | 2705 N_ANUR-2 | 220 | 1 | 46 | 275 | 375 | 425 | 19.3 |
| ( 59) | 2220 KOTMA-2 | 220 | 2705 N_ANUR-2 | 220 | 2 | 46 | 275 | 375 | 425 | 19.3 |
| ( 60) | 1150 AMPA-1 | 132 | 1780 VALAI-1 | 132 | 1 | 10 | 45 | 100 | 140 | 19.2 |
| ( 61) | 1860 CHILL-1 | 132 | 5861 CHILL-T1 | 132 | 1 | -16 | 45 | 100 | 140 | 19.2 |
| ( 62) | 1860 CHILL-1 | 132 | 5862 CHILL-T2 | 132 | 2 | -16 | 45 | 100 | 140 | 19.2 |
| ( 63) | 1595 KHD -1 | 132 | 1870 K_NIYA-1 | 132 | 1 | 56 | 165 | 225 | 255 | 19.2 |
| ( 64) | 1595 KHD -1 | 132 | 1870 K_NIYA-1 | 132 | 2 | 56 | 165 | 225 | 255 | 19.2 |
| ( 65) | 1700 ANURA-1 | 132 | 1705 N_ANUR-1 | 132 | 1 | -45 | 165 | 225 | 255 | 19.2 |

# TABLE A6.2.2-2 Voltage Collapse Ranking of 2000 System

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TPLAN * INTERACTIVE TRANSMISSION PLANNING PROGRAM *
 2000 NIGHT RAINY SEASON PEAK
 OPEN'AT AMPARA

          *** BRANCH Voltage Collapse RANKING BASED ON  1.00 OF RATING-B ***
 RANK   FROM BUS       KV      TO BUS       KV  ID  FLOW RATA RATB RATC     PI
(   1) 3570 BIYAG-3 33.0  5570 BIYA-DU1 132  1    -25   60   60   60   2.07
(   2) 3570 BIYAG-3 33.0  5571 BIYA-DU2 132  1    -25   60   60   60   2.07
(   3) 1630 BALAN-1  132  1640 DENIY-1  132  1     56   40   80  110   2.05
(   4) 1630 BALAN-1  132  1655 N-GALL-1 132  1     47   40   80  110   2.02
(   5) 1640 DENIY-1  132  1655 N-GALL-1 132  1     39   40   80  110   2.00
(   6) 1580 KOTUG-1  132  5581 KOTU-DU1 220  1    -47  250  250  250   1.99
(   7) 1580 KOTUG-1  132  5582 KOTU-DU2 220  1    -47  250  250  250   1.99
(   8) 1130 POLPI-1  132  5531 THULH-T1 132  1     55   45  100  140   1.99
(   9) 1130 POLPI-1  132  5532 THULH-T2 132  2     55   45  100  140   1.99
(  10) 1570 BIYAG-1  132  5571 BIYA-DU2 132  1    -45  250  250  250   1.98
(  11) 1570 BIYAG-1  132  5570 BIYA-DU1 132  1    -45  250  250  250   1.98
(  12) 1130 POLPI-1  132  1510 SITHA-1  132  1     50   45  100  140   1.98
(  13) 1130 POLPI-1  132  5502 AVIS-1T2 132  1     45   45  100  140   1.97
(  14) 2560 PANNI-2  220  5565 PANNI-D1 132  1     54  250  250  250   1.97
(  15) 2560 PANNI-2  220  5566 PANNI-D2 132  1     54  250  250  250   1.97
(  16) 1250 RANTE-1  132  2250 RANTE-2  220  1    -21  105  105  105   1.97
(  17) 1705 N_ANUR-1 132  2705 N_ANUR-2 220  1    -47  300  300  300   1.97
(  18) 1705 N_ANUR-1 132  2705 N_ANUR-2 220  2    -47  300  300  300   1.97
(  19) 1250 RANTE-1  132  1620 BADUL-1  132  2     34   45  100  140   1.96
(  20) 1560 PANNI-1  132  5566 PANNI-D2 132  1    -54  250  250  250   1.96
(  21) 1560 PANNI-1  132  5565 PANNI-D1 132  1    -54  250  250  250   1.96
(  22) 2300 KELAN-2  220  5300 KELAN-D2 132  1     29  150  150  150   1.96
(  23) 2300 KELAN-2  220  5301 KELAN-D1 132  1     29  150  150  150   1.96
(  24) 1200 UKUWE-1  132  1690 HABAR-1  132  1     21   45  100  140   1.96
(  25) 1110 N-LAX-1  132  1630 BALAN-1  132  1     31   45  100  140   1.96
(  26) 1110 N-LAX-1  132  1630 BALAN-1  132  2     31   45  100  140   1.96
(  27) 1560 PANNI-1  132  5562 PANAD-T2 132  2     26  150  200  230   1.96
(  28) 1560 PANNI-1  132  5561 PANAD-T1 132  1     26  150  200  230   1.96
(  29) 1510 SITHA-1  132  5501 AVIS-1T1 132  1     34   45  100  140   1.96
(  30) 1250 RANTE-1  132  1620 BADUL-1  132  1     29  105  140  160   1.96
(  31) 1300 KELAN-1  132  5300 KELAN-D2 132  1    -29  150  150  150   1.96
(  32) 1300 KELAN-1  132  5301 KELAN-D1 132  1    -29  150  150  150   1.96
(  33) 1550 KOLON-1  132  5502 AVIS-1T2 132  2    -31   45  100  140   1.96
(  34) 1550 KOLON-1  132  5501 AVIS-1T1 132  1    -31   45  100  140   1.96
(  35) 1170 SAMAN-1  132  1630 BALAN-1  132  1     38  165  225  250   1.96
(  36) 1170 SAMAN-1  132  1630 BALAN-1  132  2     38  165  225  250   1.96
(  37) 1820 ATHUR-1  132  5531 THULH-T1 132  1    -28   45  100  140   1.96
(  38) 1820 ATHUR-1  132  5532 THULH-T2 132  2    -28   45  100  140   1.96
(  39) 1530 THULH-1  132  5531 THULH-T1 132  1    -26   45  100  140   1.96
(  40) 1530 THULH-1  132  5532 THULH-T2 132  2    -26   45  100  140   1.96
(  41) 1700 ANURA-1  132  1810 PUTTA-1  132  1     14   45  100  140   1.96
(  42) 1700 ANURA-1  132  1810 PUTTA-1  132  2     14   45  100  140   1.96
(  43) 1700 ANURA-1  132  5720 KILIN-T1 132  1      7   45  100  140   1.95
(  44) 1700 ANURA-1  132  5721 KILIN-T2 132  2      7   45  100  140   1.95
(  45) 1130 POLPI-1  132  1220 KOTMA-1  132  1     28   45  100  140   1.95
(  46) 1130 POLPI-1  132  1220 KOTMA-1  132  2     28   45  100  140   1.95
(  47) 1170 SAMAN-1  132  1660 EMBIL-1  132  1     22  105  140  160   1.95
(  48) 1170 SAMAN-1  132  1660 EMBIL-1  132  2     22  105  140  160   1.95
(  49) 1690 HABAR-1  132  1700 ANURA-1  132  1    -14   45  100  140   1.95
(  50) 1580 KOTUG-1  132  1600 BOLAW-1  132  1     38  165  225  255   1.95
(  51) 1580 KOTUG-1  132  1600 BOLAW-1  132  2     38  165  225  255   1.95
(  52) 1220 KOTMA-1  132  1770 KIRIB-1  132  1     28   45  100  140   1.95
(  53) 1220 KOTMA-1  132  1770 KIRIB-1  132  2     28   45  100  140   1.95
(  54) 1660 EMBIL-1  132  1670 MATAR-1  132  1     17   45  100  140   1.95
(  55) 1660 EMBIL-1  132  1670 MATAR-1  132  2     17   45  100  140   1.95
(  56) 1110 N-LAX-1  132  1130 POLPI-1  132  1     47   45  100  140   1.95
(  57) 1110 N-LAX-1  132  1130 POLPI-1  132  2     47   45  100  140   1.95
(  58) 1800 MATUG-1  132  5561 PANAD-T1 132  1    -12  150  200  230   1.95
(  59) 1800 MATUG-1  132  5562 PANAD-T2 132  2    -12  150  200  230   1.95
(  60) 1100 LAX-1    132  1130 POLPI-1  132  1     45   45  100  140   1.95
(  61) 1100 LAX-1    132  1130 POLPI-1  132  2     45   45  100  140   1.95
(  62) 1300 KELAN-1  132  1550 KOLON-1  132  1     45   57  170  225   1.95
(  63) 1300 KELAN-1  132  1550 KOLON-1  132  2     45   57  170  225   1.95
(  64) 1850 PANAD-1  132  5561 PANAD-T1 132  1    -14   45  100  140   1.95
(  65) 1850 PANAD-1  132  5562 PANAD-T2 132  2    -14   45  100  140   1.95
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# TABLE A6.2.3-1 Overload Ranking of 2005 System

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O TPLAN * INTERACTIVE TRANSMISSION PLANNING PROGRAM *
O POWER SYSTEM ANALYSIS FOR YEAR 2005
O NIGHT PEAK CONDITIONS / RAINY SEASON
O
O                *** BRANCH OVERLOAD RANKING BASED ON  1.00 OF RATING-B ***
O  RANK   FROM BUS       KV     TO BUS       KV  ID  FLOW RATA RATB RATC      PI
O (   1) 2230 VICTO-2  220  2240 RANDE-2  220 1    -92  550  750  850  29.6
O (   2) 1650 GALLE-1  132  3650 GALLE-3 33.0 1     32   60   60   60  28.0
O (   3) 1130 POLPI-1  132  5502 AVIS-1T2 132 1     53   45  100  140  26.8
O (   4) 1130 POLPI-1  132  1510 SITHA-1  132 1     59   45  100  140  26.7
O (   5) 3580 KOTUG-3 33.0 5581 KOTU-DU1 220 1    -32   60   60   60  26.7
O (   6) 3580 KOTUG-3 33.0 5582 KOTU-DU2 220 1    -32   60   60   60  26.7
O (   7) 2220 KOTMA-2  220  2570 BIYAG-2  220 1    179  550  750  850  26.6
O (   8) 2220 KOTMA-2  220  2570 BIYAG-2  220 2    179  550  750  850  26.6
O (   9) 1480 MEDEGA-1 132  1620 BADUL-1  132 1    -29   45  100  130  26.6
O (  10) 1160 INGIN-1  132  1480 MEDEGA-1 132 1    -25   45  100  130  26.4
O (  11) 1150 AMPA-1   132  1160 INGIN-1  132 1    -24   45  100  140  26.4
O (  12) 1570 BIYAG-1  132  1590 SAPUG-1  132 1    117  165  225  255  26.4
O (  13) 1570 BIYAG-1  132  1590 SAPUG-1  132 2    117  165  225  255  26.4
O (  14) 1130 POLPI-1  132  5531 THULH-T1 132 1     60   45  100  140  26.4
O (  15) 1130 POLPI-1  132  5532 THULH-T2 132 2     60   45  100  140  26.4
O (  16) 1560 PANNI-1  132  5566 PANNI-D2 132 1    -67  250  250  250  26.3
O (  17) 1560 PANNI-1  132  5565 PANNI-D1 132 1    -67  250  250  250  26.3
O (  18) 1110 N-LAX-1  132  1630 BALAN-1  132 1     30   45  100  140  26.3
O (  19) 1110 N-LAX-1  132  1630 BALAN-1  132 2     30   45  100  140  26.3
O (  20) 2560 PANNI-2  220  5566 PANNI-D2 132 1     67  250  250  250  26.3
O (  21) 2560 PANNI-2  220  5565 PANNI-D1 132 1     67  250  250  250  26.3
O (  22) 1560 PANNI-1  132  1790 RATMA-1  132 1     38   45  100  140  26.3
O (  23) 1560 PANNI-1  132  1790 RATMA-1  132 2     38   45  100  140  26.3
O (  24) 1580 KOTUG-1  132  5582 KOTU-DU2 220 1    -62  250  250  250  26.2
O (  25) 1580 KOTUG-1  132  5581 KOTU-DU1 220 1    -62  250  250  250  26.2
O (  26) 2220 KOTMA-2  220  2230 VICTO-2  220 1   -150  550  750  850  26.2
O (  27) 2220 KOTMA-2  220  2230 VICTO-2  220 2   -150  550  750  850  26.2
O (  28) 2560 PANNI-2  220  2570 BIYAG-2  220 1   -112  275  375  425  26.2
O (  29) 2560 PANNI-2  220  2570 BIYAG-2  220 2   -112  275  375  425  26.2
O (  30) 1110 N-LAX-1  132  1130 POLPI-1  132 1     42   45  100  140  26.2
O (  31) 1110 N-LAX-1  132  1130 POLPI-1  132 2     42   45  100  140  26.2
O (  32) 1550 KOLON-1  132  2550 KOLON-2  220 1    -56  150  150  150  26.2
O (  33) 1550 KOLON-1  132  2550 KOLON-2  220 2    -56  150  150  150  26.2
O (  34) 1220 KOTMA-1  132  1770 KIRIB-1  132 1     35   45  100  140  26.2
O (  35) 1220 KOTMA-1  132  1770 KIRIB-1  132 2     35   45  100  140  26.2
O (  36) 2805 PUTTA-P2 220  2865 N_CHIL-2 220 1    149 1100 1500 1700  26.2
O (  37) 2805 PUTTA-P2 220  2865 N_CHIL-2 220 2    149 1100 1500 1700  26.2
O (  38) 1800 MATUG-1  132  5422 HORAN-D2 132 1     17  150  200  230  26.2
O (  39) 1420 HORAN-1  132  5422 HORAN-D2 132 1    -17  144  185  200  26.2
O (  40) 1630 BALAN-1  132  1640 DENIY-1  132 1     35   40   80  110  26.2
O (  41) 1650 GALLE-1  132  1655 N-GALL-1 132 1    -26   40   80  110  26.2
O (  42) 1650 GALLE-1  132  1655 N-GALL-1 132 2    -26   40   80  110  26.2
O (  43) 1410 KUKULE-1 132  1800 MATUG-1  132 1     40  144  185  200  26.2
O (  44) 1410 KUKULE-1 132  1800 MATUG-1  132 2     40  144  185  200  26.2
O (  45) 1550 KOLON-1  132  5502 AVIS-1T2 132 2    -32   45  100  140  26.2
O (  46) 1510 SITHA-1  132  5501 AVIS-1T1 132 1     40   45  100  140  26.2
O (  47) 1460 POLON-1  132  1690 HABAR-1  132 1    -14   45  100  140  26.2
O (  48) 2830 VEYAN-2  220  2865 N_CHIL-2 220 1    -99 1100 1500 1700  26.2
O (  49) 2830 VEYAN-2  220  2865 N_CHIL-2 220 2    -99 1100 1500 1700  26.2
O (  50) 1630 BALAN-1  132  1655 N-GALL-1 132 1     23   40   80  110  26.2
O (  51) 1590 SAPUG-1  132  1595 KHD -1   132 1     73  165  225  255  26.1
O (  52) 1590 SAPUG-1  132  1595 KHD -1   132 2     73  165  225  255  26.1
O (  53) 1240 VAVUNI-1 132  5720 KILIN-T1 132 1    22   45  100  140  26.1
O (  54) 1240 VAVUNI-1 132  5721 KILIN-T2 132 2    22   45  100  140  26.1
O (  55) 1200 UKUWE-1  132  1690 HABAR-1  132 1    20   45  100  140  26.1
O (  56) 1100 LAX-1    132  1130 POLPI-1  132 1    40   45  100  140  26.1
O (  57) 1100 LAX-1    132  1130 POLPI-1  132 2    40   45  100  140  26.1
O (  58) 1310 SAPU-1P  132  1570 BIYAG-1  132 1    29   45  100  140  26.1
O (  59) 1310 SAPU-1P  132  1570 BIYAG-1  132 2    29   45  100  140  26.1
O (  60) 1890 DEHIWA-1 132  5891 DEHI-DU1 132 1   -44  250  250  250  26.1
O (  61) 1890 DEHIWA-1 132  5892 DEHI-DU2 132 2   -44  250  250  250  26.1
O (  62) 1800 MATUG-1  132  5564 PANAD-D4 132 1    18  150  200  230  26.1
O (  63) 1850 PANAD-1  132  5564 PANAD-D4 132 1   -18   45  100  140  26.1
O (  64) 1500 AVISS-1  132  5502 AVIS-1T2 132 2   -20   45  100  140  26.1
O (  65) 1170 SAMAN-1  132  1660 EMBIL-1  132 1    33  105  140  160  26.1
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# TABLE A6.2.3-2 Voltage Collapse Ranking of 2005 System

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0 TPLAN * INTERACTIVE TRANSMISSION PLANNING PROGRAM *
0 POWER SYSTEM ANALYSIS FOR YEAR 2005
0 NIGHT PEAK CONDITIONS / RAINY SEASON
0
0          *** BRANCH Voltage Collapse RANKING BASED ON  1.00 OF RATING-B ***
0  RANK   FROM BUS       KV     TO BUS       KV  ID  FLOW RATA RATB RATC     PI
0 (   1) 2220 KOTMA-2   220  2570 BIYAG-2   220 1    179  550  750  850   3.06
0 (   2) 2220 KOTMA-2   220  2570 BIYAG-2   220 2    179  550  750  850   3.06
0 (   3) 3580 KOTUG-3 33.0  5581 KOTU-DU1  220 1    -32   60   60   60   3.05
0 (   4) 3580 KOTUG-3 33.0  5582 KOTU-DU2  220 1    -32   60   60   60   3.05
0 (   5) 2805 PUTTA-P2  220  2865 N_CHIL-2 220 1    149 1100 1500 1700   2.96
0 (   6) 2805 PUTTA-P2  220  2865 N_CHIL-2 220 2    149 1100 1500 1700   2.96
0 (   7) 2230 VICTO-2   220  2240 RANDE-2  220 1    -92  550  750  850   2.93
0 (   8) 2220 KOTMA-2   220  2230 VICTO-2  220 1   -150  550  750  850   2.92
0 (   9) 2220 KOTMA-2   220  2230 VICTO-2  220 2   -150  550  750  850   2.92
0 (  10) 1480 MEDEGA-1  132  1620 BADUL-1  132 1    -29   45  100  130   2.92
0 (  11) 1580 KOTUG-1   132  5582 KOTU-DU2 220 1    -62  250  250  250   2.90
0 (  12) 1580 KOTUG-1   132  5581 KOTU-DU1 220 1    -62  250  250  250   2.90
0 (  13) 1160 INGIN-1   132  1480 MEDEGA-1 132 1    -25   45  100  130   2.90
0 (  14) 1650 GALLE-1   132  3650 GALLE-3 33.0 1     32   60   60   60   2.90
0 (  15) 1150 AMPA-1    132  1160 INGIN-1  132 1    -24   45  100  140   2.90
0 (  16) 1130 POLPI-1   132  5531 THULH-T1 132 1     60   45  100  140   2.89
0 (  17) 1130 POLPI-1   132  5532 THULH-T2 132 2     60   45  100  140   2.89
0 (  18) 1130 POLPI-1   132  1510 SITHA-1  132 1     59   45  100  140   2.89
0 (  19) 2240 RANDE-2   220  2250 RANTE-2  220 1     30  550  750  850   2.88
0 (  20) 1130 POLPI-1   132  5502 AVIS-1T2 132 1     53   45  100  140   2.88
0 (  21) 2560 PANNI-2   220  2570 BIYAG-2  220 1   -112  275  375  425   2.88
0 (  22) 2560 PANNI-2   220  2570 BIYAG-2  220 2   -112  275  375  425   2.88
0 (  23) 1630 BALAN-1   132  1640 DENIY-1  132 1     35   40   80  110   2.88
0 (  24) 1865 N_CHIL-1  132  2865 N_CHIL-2 220 1    -50  150  150  150   2.87
0 (  25) 1865 N_CHIL-1  132  2865 N_CHIL-2 220 2    -50  150  150  150   2.87
0 (  26) 2220 KOTMA-2   220  2705 N_ANUR-2  220 1    39  275  375  425   2.87
0 (  27) 2220 KOTMA-2   220  2705 N_ANUR-2  220 2    39  275  375  425   2.87
0 (  28) 1730 CHUNN-1   132  5720 KILIN-T1 132 1    -16   45  100  140   2.87
0 (  29) 1730 CHUNN-1   132  5721 KILIN-T2 132 2    -16   45  100  140   2.87
0 (  30) 1250 RANTE-1   132  1620 BADUL-1  132 2     38   45  100  140   2.87
0 (  31) 1550 KOLON-1   132  2550 KOLON-2  220 1    -56  150  150  150   2.87
0 (  32) 1550 KOLON-1   132  2550 KOLON-2  220 2    -56  150  150  150   2.87
0 (  33) 1805 PUTTA-P1  132  1810 PUTTA-1  132 1     61  332  451  508   2.87
0 (  34) 1805 PUTTA-P1  132  1810 PUTTA-1  132 2     61  332  451  508   2.87
0 (  35) 1570 BIYAG-1   132  1590 SAPUG-1  132 1    117  165  225  255   2.87
0 (  36) 1570 BIYAG-1   132  1590 SAPUG-1  132 2    117  165  225  255   2.87
0 (  37) 1510 SITHA-1   132  5501 AVIS-1T1 132 1     40   45  100  140   2.87
0 (  38) 2560 PANNI-2   220  5566 PANNI-D2 132 1     67  250  250  250   2.86
0 (  39) 2560 PANNI-2   220  5565 PANNI-D1 132 1     67  250  250  250   2.86
0 (  40) 1650 GALLE-1   132  3650 GALLE-3 33.0 2     20   32   32   32   2.86
0 (  41) 1250 RANTE-1   132  1620 BADUL-1  132 1     33  105  140  160   2.86
0 (  42) 1600 BOLAW-1   132  1865 N_CHIL-1 132 1    -26   45  100  140   2.86
0 (  43) 1600 BOLAW-1   132  1865 N_CHIL-1 132 2    -26   45  100  140   2.86
0 (  44) 1805 PUTTA-P1  132  2805 PUTTA-P2  220 1   -61  250  250  250   2.86
0 (  45) 1805 PUTTA-P1  132  2805 PUTTA-P2  220 2   -61  250  250  250   2.86
0 (  46) 1820 ATHUR-1   132  5531 THULH-T1 132 1    -32   45  100  140   2.86
0 (  47) 1820 ATHUR-1   132  5532 THULH-T2 132 2    -32   45  100  140   2.86
0 (  48) 2830 VEYAN-2   220  2865 N_CHIL-2 220 1    -99 1100 1500 1700   2.86
0 (  49) 2830 VEYAN-2   220  2865 N_CHIL-2 220 2    -99 1100 1500 1700   2.86
0 (  50) 1170 SAMAN-1   132  1660 EMBIL-1  132 1     33  105  140  160   2.86
0 (  51) 1170 SAMAN-1   132  1660 EMBIL-1  132 2     33  105  140  160   2.86
0 (  52) 1410 KUKULE-1  132  1800 MATUG-1  132 1     40  144  185  200   2.86
0 (  53) 1410 KUKULE-1  132  1800 MATUG-1  132 2     40  144  185  200   2.86
0 (  54) 1240 VAVUNI-1  132  1700 ANURA-1  132 1    -25   45  100  140   2.86
0 (  55) 1240 VAVUNI-1  132  1700 ANURA-1  132 2    -25   45  100  140   2.86
0 (  56) 1110 N-LAX-1   132  1630 BALAN-1  132 1     30   45  100  140   2.86
0 (  57) 1110 N-LAX-1   132  1630 BALAN-1  132 2     30   45  100  140   2.86
0 (  58) 1240 VAVUNI-1  132  5720 KILIN-T1 132 1     22   45  100  140   2.86
0 (  59) 1240 VAVUNI-1  132  5721 KILIN-T2 132 2     22   45  100  140   2.86
0 (  60) 1200 UKUWE-1   132  1690 HABAR-1  132 1     20   45  100  140   2.86
0 (  61) 1560 PANNI-1   132  5565 PANNI-D1 132 1    -67  250  250  250   2.86
0 (  62) 1560 PANNI-1   132  5566 PANNI-D2 132 1    -67  250  250  250   2.86
0 (  63) 1630 BALAN-1   132  1655 N-GALL-1 132 1     23   40   80  110   2.86
0 (  64) 2570 BIYAG-2   220  2580 KOTUG-2  220 1    -38  275  375  425   2.86
0 (  65) 2570 BIYAG-2   220  2580 KOTUG-2  220 2    -38  275  375  425   2.86
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# TABLE A6.2.4-1 Overload Ranking of 2010 System

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 TPLAN * INTERACTIVE TRANSMISSION PLANNING PROGRAM *
 POWER SYSTEM ANALYSIS FOR YEAR 2010
 RAINY SEASON NIGHT PEAK WITH SPLIT ON AMPARA

                *** BRANCH OVERLOAD RANKING BASED ON  1.00 OF RATING-B ***
 RANK   FROM BUS       KV     TO BUS       KV  ID  FLOW RATA RATB RATC      PI
(   1) 1650 GALLE-1   132  3650 GALLE-3  33.0 1     41   60   60   60    44.4
(   2) 2230 VICTO-2   220  2240 RANDE-2  220  1    -77  550  750  850    43.5
(   3) 2690 N_HABA-2  220  2715 TRINC-P2 220  1   -276 1100 1500 1700    42.6
(   4) 2690 N_HABA-2  220  2715 TRINC-P2 220  2   -276 1100 1500 1700    42.6
(   5) 1135 N-POLP-1  132  1500 AVISS-1   132  1     59   45  100  140    41.8
(   6) 2550 KOLON-2   220  5552 KOLON-D2 132  2     86  250  250  250    41.8
(   7) 2550 KOLON-2   220  5551 KOLON-D1 132  1     86  250  250  250    41.8
(   8) 1550 KOLON-1   132  5552 KOLON-D2 132  2    -86  250  250  250    41.8
(   9) 1550 KOLON-1   132  5551 KOLON-D1 132  1    -86  250  250  250    41.8
(  10) 1570 BIYAG-1   132  5570 BIYA-DU1 132  1    -84  250  250  250    41.7
(  11) 2560 PANNI-2   220  5566 PANNI-D2 132  1    110  250  250  250    41.7
(  12) 2560 PANNI-2   220  5567 PANNI-D3 132  1    110  250  250  250    41.7
(  13) 2560 PANNI-2   220  5565 PANNI-D1 132  1    110  250  250  250    41.7
(  14) 2830 VEYAN-2   220  2865 N_CHIL-2 220  1   -139  825 1125 1275    41.6
(  15) 2830 VEYAN-2   220  2865 N_CHIL-2 220  2   -139  825 1125 1275    41.6
(  16) 1800 MATUG-1   132  5422 HORAN-D2 132  1     36  150  200  230    41.6
(  17) 1420 HORAN-1   132  5422 HORAN-D2 132  1    -35  144  185  200    41.6
(  18) 2690 N_HABA-2  220  2900 WARIYA-2 220  1    161 1100 1500 1700    41.6
(  19) 2690 N_HABA-2  220  2900 WARIYA-2 220  2    161 1100 1500 1700    41.6
(  20) 1800 MATUG-1   132  5564 PANAD-D4 132  1     42  150  200  230    41.6
(  21) 1850 PANAD-1   132  5564 PANAD-D4 132  1    -42  106  140  158    41.6
(  22) 1560 PANNI-1   132  1790 RATMA-1   132  1     46   45  100  140    41.5
(  23) 1560 PANNI-1   132  1790 RATMA-1   132  2     46   45  100  140    41.5
(  24) 2830 VEYAN-2   220  2900 WARIYA-2 220  1   -160 1100 1500 1700    41.5
(  25) 2830 VEYAN-2   220  2900 WARIYA-2 220  2   -160 1100 1500 1700    41.5
(  26) 2220 KOTMA-2   220  2570 BIYAG-2  220  1    160  550  750  850    41.5
(  27) 2220 KOTMA-2   220  2570 BIYAG-2  220  2    160  550  750  850    41.5
(  28) 1360 BOOS-1    132  2360 BOOS-2   220  1    -72  150  150  150    41.5
(  29) 1360 BOOS-1    132  2360 BOOS-2   220  2    -72  150  150  150    41.5
(  30) 1310 SAPU-1P   132  1590 SAPUG-1  132  1    111  165  225  255    41.5
(  31) 1310 SAPU-1P   132  1590 SAPUG-1  132  2    111  165  225  255    41.5
(  32) 1715 TRINC-P1  132  2715 TRINC-P2 220  1    -96  150  150  150    41.5
(  33) 1715 TRINC-P1  132  2715 TRINC-P2 220  2    -96  150  150  150    41.5
(  34) 1650 GALLE-1   132  1655 N-GALL-1 132  1    -33   40   80  110    41.5
(  35) 1650 GALLE-1   132  1655 N-GALL-1 132  2    -33   40   80  110    41.5
(  36) 1135 N-POLP-1  132  2135 N-POLP-2 220  1    -84  500  500  500    41.4
(  37) 1705 N_ANUR-1  132  2705 N_ANUR-2 220  1    -37  300  300  300    41.4
(  38) 1830 VEYAN-1   132  2830 VEYAN-2  220  1    -55  150  150  150    41.4
(  39) 1830 VEYAN-1   132  2830 VEYAN-2  220  2    -55  150  150  150    41.4
(  40) 1830 VEYAN-1   132  2830 VEYAN-2  220  3    -55  150  150  150    41.4
(  41) 1860 CHILL-1   132  1865 N_CHIL-1 132  1    -36   45  100  140    41.4
(  42) 1860 CHILL-1   132  1865 N_CHIL-1 132  2    -36   45  100  140    41.4
(  43) 1530 THULH-1   132  1830 VEYAN-1  132  1    -47  165  225  255    41.4
(  44) 1530 THULH-1   132  1830 VEYAN-1  132  2    -47  165  225  255    41.4
(  45) 1110 N-LAX-1   132  1630 BALAN-1  132  1     25   45  100  140    41.3
(  46) 1110 N-LAX-1   132  1630 BALAN-1  132  2     25   45  100  140    41.3
(  47) 1570 BIYAG-1   132  5571 BIYA-DU2 132  1    -84  250  250  250    41.3
(  48) 1800 MATUG-1   132  5801 MATU-DU1 220  1    -37  150  150  150    41.3
(  49) 1800 MATUG-1   132  5802 MATU-DU2 220  2    -37  150  150  150    41.3
(  50) 1560 PANNI-1   132  5261 KESBE-D1 132  1     46  150  200  230    41.3
(  51) 1560 PANNI-1   132  5262 KESBE-D2 132  1     46  150  200  230    41.3
(  52) 1260 KESBE-1   132  5261 KESBE-D1 132  1    -46  115  145  158    41.3
(  53) 1260 KESBE-1   132  5262 KESBE-D2 132  1    -46  115  145  158    41.3
(  54) 1100 LAX-1     132  5522 NUWAR-T2 132  2     21   45  100  140    41.3
(  55) 1100 LAX-1     132  5521 NUWAR-T1 132  1     21   45  100  140    41.3
(  56) 2800 MATUG-2   220  5801 MATU-DU1 220  1     37  150  150  150    41.3
(  57) 2800 MATUG-2   220  5802 MATU-DU2 220  2     37  150  150  150    41.3
(  58) 1135 N-POLP-1  132  1510 SITHA-1   132  1     62   45  100  140    41.3
(  59) 2580 KOTUG-2   220  2830 VEYAN-2  220  1   -141  550  750  850    41.3
(  60) 2580 KOTUG-2   220  2830 VEYAN-2  220  2   -141  550  750  850    41.3
(  61) 1310 SAPU-1P   132  1570 BIYAG-1  132  1    -82  165  225  255    41.3
(  62) 1310 SAPU-1P   132  1570 BIYAG-1  132  2    -82  165  225  255    41.3
(  63) 1350 MATAL-1   132  1690 HABAR-1  132  1     13   45  100  140    41.3
(  64) 2300 KELAN-2   220  5301 KELAN-D1 132  1    -31  150  150  150    41.3
(  65) 2300 KELAN-2   220  5300 KELAN-D2 132  1    -31  150  150  150    41.3
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# TABLE A6.2.4-2 Voltage Collapse Ranking of 2010 System

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TPLAN * INTERACTIVE TRANSMISSION PLANNING PROGRAM *
POWER SYSTEM ANALYSIS FOR YEAR 2010
RAINY SEASON NIGHT PEAK WITH SPLIT ON AMPARA

        *** BRANCH  Voltage Collapse RANKING BASED ON  1.00 OF RATING-B ***
 RANK  FROM BUS       KV     TO BUS       KV  ID  FLOW RATA RATB RATC     PI
(   1) 2690 N_HABA-2 220   2715 TRINC-P2 220 1   -276 1100 1500 1700   6.40
(   2) 2690 N_HABA-2 220   2715 TRINC-P2 220 2   -276 1100 1500 1700   6.40
(   3) 2815 PUTTA-P2 220   2865 N_CHIL-2 220 1    251  825 1125 1275   6.17
(   4) 2815 PUTTA-P2 220   2865 N_CHIL-2 220 2    251  825 1125 1275   6.17
(   5) 2690 N_HABA-2 220   2900 WARIYA-2 220 1    161 1100 1500 1700   5.93
(   6) 2690 N_HABA-2 220   2900 WARIYA-2 220 2    161 1100 1500 1700   5.93
(   7) 2230 VICTO-2  220   2240 RANDE-2  220 1    -77  550  750  850   5.92
(   8) 2220 KOTMA-2  220   2570 BIYAG-2  220 1    160  550  750  850   5.90
(   9) 2220 KOTMA-2  220   2570 BIYAG-2  220 2    160  550  750  850   5.90
(  10) 1570 BIYAG-1  132   5571 BIYA-DU2 132 1    -84  250  250  250   5.90
(  11) 2830 VEYAN-2  220   2900 WARIYA-2 220 1   -160 1100 1500 1700   5.90
(  12) 2830 VEYAN-2  220   2900 WARIYA-2 220 2   -160 1100 1500 1700   5.90
(  13) 2580 KOTUG-2  220   5583 KOTU-DU3 220 1     82  250  250  250   5.89
(  14) 3580 KOTUG-3 33.0   5583 KOTU-DU3 220 1    -26   60   60   60   5.89
(  15) 1580 KOTUG-1  132   5583 KOTU-DU3 220 1    -56  250  250  250   5.86
(  16) 1690 HABAR-1  132   1700 ANURA-1  132 1    -56   45  100  140   5.85
(  17) 1650 GALLE-1  132   3650 GALLE-3 33.0 1     41   60   60   60   5.84
(  18) 1570 BIYAG-1  132   5572 BIYA-DU2 132 1    -84  250  250  250   5.83
(  19) 2570 BIYAG-2  220   5572 BIYA-DU2 132 1    112  250  250  250   5.83
(  20) 1135 N-POLP-1 132   1500 AVISS-1  132 1     59   45  100  140   5.83
(  21) 2350 MATAL-2  220   2690 N_HABA-2 220 1    -95  275  375  425   5.83
(  22) 2350 MATAL-2  220   2690 N_HABA-2 220 2    -95  275  375  425   5.83
(  23) 2135 N-POLP-2 220   2230 VICTO-2  220 1   -115  550  750  850   5.82
(  24) 2135 N-POLP-2 220   2230 VICTO-2  220 2   -115  550  750  850   5.82
(  25) 1715 TRINC-P1 132   2715 TRINC-P2 220 1    -96  150  150  150   5.82
(  26) 1715 TRINC-P1 132   2715 TRINC-P2 220 2    -96  150  150  150   5.82
(  27) 2550 KOLON-2  220   5552 KOLON-D2 132 2     86  250  250  250   5.82
(  28) 2550 KOLON-2  220   5551 KOLON-D1 132 1     86  250  250  250   5.82
(  29) 1700 ANURA-1  132   1710 TRINC-1  132 1    -45   45  100  140   5.82
(  30) 1700 ANURA-1  132   1710 TRINC-1  132 2    -45   45  100  140   5.82
(  31) 1720 KILIN-1  132   1730 CHUNN-1  132 1     24   45  100  140   5.81
(  32) 1720 KILIN-1  132   1730 CHUNN-1  132 2     24   45  100  140   5.81
(  33) 2830 VEYAN-2  220   2865 N_CHIL-2 220 1   -139  825 1125 1275   5.81
(  34) 2830 VEYAN-2  220   2865 N_CHIL-2 220 2   -139  825 1125 1275   5.81
(  35) 1135 N-POLP-1 132   1510 SITHA-1  132 1     62   45  100  140   5.81
(  36) 1710 TRINC-1  132   1720 KILIN-1  132 1     33  115  145  158   5.81
(  37) 1710 TRINC-1  132   1720 KILIN-1  132 2     33  115  145  158   5.81
(  38) 2560 PANNI-2  220   5565 PANNI-D1 132 1    110  250  250  250   5.80
(  39) 2560 PANNI-2  220   5566 PANNI-D2 132 1    110  250  250  250   5.80
(  40) 2560 PANNI-2  220   5567 PANNI-D3 132 1    110  250  250  250   5.80
(  41) 1130 POLPI-1  132   1380 JUNC-1   132 1     67   45  100  140   5.80
(  42) 1130 POLPI-1  132   1380 JUNC-1   132 2     67   45  100  140   5.80
(  43) 1865 N_CHIL-1 132   2865 N_CHIL-2 220 1    -75  150  150  150   5.80
(  44) 1865 N_CHIL-1 132   2865 N_CHIL-2 220 2    -75  150  150  150   5.80
(  45) 1865 N_CHIL-1 132   2865 N_CHIL-2 220 3    -75  150  150  150   5.80
(  46) 1135 N-POLP-1 132   2135 N-POLP-2 220 1    -84  500  500  500   5.80
(  47) 1550 KOLON-1  132   5551 KOLON-D1 132 1    -86  250  250  250   5.80
(  48) 1550 KOLON-1  132   5552 KOLON-D2 132 2    -86  250  250  250   5.80
(  49) 3570 BIYAG-3 33.0   5572 BIYA-DU2 132 1    -29   60   60   60   5.79
(  50) 1600 BOLAW-1  132   1865 N_CHIL-1 132 1    -47   45  100  140   5.79
(  51) 1600 BOLAW-1  132   1865 N_CHIL-1 132 2    -47   45  100  140   5.79
(  52) 1360 BOOS-1   132   2360 BOOS-2   220 1    -72  150  150  150   5.79
(  53) 1360 BOOS-1   132   2360 BOOS-2   220 2    -72  150  150  150   5.79
(  54) 1650 GALLE-1  132   3650 GALLE-3 33.0 2     26   32   32   32   5.79
(  55) 2270 PADUK-2  220   2560 PANNI-2  220 1    148  550  750  850   5.79
(  56) 2270 PADUK-2  220   2560 PANNI-2  220 2    148  550  750  850   5.79
(  57) 2240 RANDE-2  220   2250 RANTE-2  220 1     32  550  750  850   5.79
(  58) 1250 RANTE-1  132   2250 RANTE-2  220 1    -32  105  105  105   5.79
(  59) 2135 N-POLP-2 220   2270 PADUK-2  220 1     74  550  750  850   5.78
(  60) 2135 N-POLP-2 220   2270 PADUK-2  220 2     74  550  750  850   5.78
(  61) 1200 UKUWE-1  132   1350 MATAL-1  132 1    -45   45  100  140   5.78
(  62) 1200 UKUWE-1  132   1350 MATAL-1  132 2    -45   45  100  140   5.78
(  63) 2580 KOTUG-2  220   2830 VEYAN-2  220 1   -141  550  750  850   5.78
(  64) 2580 KOTUG-2  220   2830 VEYAN-2  220 2   -141  550  750  850   5.78
(  65) 2360 BOOS-2   220   2800 MATUG-2  220 1     62  550  750  850   5.78
```

# TABLE A6.2.5-1 Overload Ranking of 2015 System

2015 RAINY SEASON NIGHT PEAK
OPEN AT AMPARA AND ANNURADHAPURA

*** BRANCH RANKING BY OVERLOAD BASED ON 1.00 OF RATING-B ***

| O | RANK | FROM BUS | KV | TO BUS | KV | ID | FLOW | RATA | RATB | RATC | PI |
|---|---|---|---|---|---|---|---|---|---|---|---|
| O | 1) | 2690 N_HABA-2 | 220 | 2715 TRINC-P2 | 220 | 1 | -407 | 1100 | 1500 | 1700 | 73.1 |
| O | 2) | 2690 N_HABA-2 | 220 | 2715 TRINC-P2 | 220 | 2 | -407 | 1100 | 1500 | 1700 | 73.1 |
| O | 3) | 1460 POLON-1 | 132 | 1690 HABAR-1 | 132 | 1 | -67 | 45 | 100 | 140 | 72.1 |
| O | 4) | 2570 BIYAG-2 | 220 | 5570 BIYA-DU1 | 132 | 1 | 205 | 250 | 250 | 250 | 71.5 |
| O | 5) | 2570 BIYAG-2 | 220 | 5572 BIYA-DU2 | 132 | 1 | 205 | 250 | 250 | 250 | 71.5 |
| O | 6) | 3570 BIYAG-3 | 33.0 | 5570 BIYA-DU1 | 132 | 1 | -50 | 60 | 60 | 60 | 71.5 |
| O | 7) | 3570 BIYAG-3 | 33.0 | 5572 BIYA-DU2 | 132 | 1 | -50 | 60 | 60 | 60 | 71.5 |
| O | 8) | 2230 VICTO-2 | 220 | 2240 RANDE-2 | 220 | 1 | -66 | 550 | 750 | 850 | 71.3 |
| O | 9) | 2550 KOLON-2 | 220 | 5551 KOLON-D1 | 132 | 1 | 148 | 250 | 250 | 250 | 71.2 |
| O | 10) | 2550 KOLON-2 | 220 | 5552 KOLON-D2 | 132 | 2 | 148 | 250 | 250 | 250 | 71.2 |
| O | 11) | 1360 BOOS-1 | 132 | 2360 BOOS-2 | 220 | 1 | -163 | 150 | 150 | 150 | 71.2 |
| O | 12) | 1360 BOOS-1 | 132 | 2360 BOOS-2 | 220 | 2 | -163 | 150 | 150 | 150 | 71.2 |
| O | 13) | 1135 N-POLP-1 | 132 | 2135 N-POLP-2 | 220 | 1 | -140 | 500 | 500 | 500 | 71.0 |
| O | 14) | 3570 BIYAG-3 | 33.0 | 5571 BIYA-DU2 | 132 | 1 | -50 | 60 | 60 | 60 | 70.9 |
| O | 15) | 2260 MAWEL-2 | 220 | 4260 MAWEL-G | 11.0 | 1 | -270 | 350 | 350 | 350 | 70.9 |
| O | 16) | 2260 MAWEL-2 | 220 | 4260 MAWEL-G | 11.0 | 2 | -270 | 350 | 350 | 350 | 70.9 |
| O | 17) | 1560 PANNI-1 | 132 | 1790 RATMA-1 | 132 | 1 | 73 | 45 | 100 | 140 | 70.8 |
| O | 18) | 1560 PANNI-1 | 132 | 1790 RATMA-1 | 132 | 2 | 73 | 45 | 100 | 140 | 70.8 |
| O | 19) | 2570 BIYAG-2 | 220 | 5571 BIYA-DU2 | 132 | 1 | 205 | 250 | 250 | 250 | 70.8 |
| O | 20) | 2690 N_HABA-2 | 220 | 2900 WARIYA-2 | 220 | 1 | 230 | 1100 | 1500 | 1700 | 70.7 |
| O | 21) | 2690 N_HABA-2 | 220 | 2900 WARIYA-2 | 220 | 2 | 230 | 1100 | 1500 | 1700 | 70.7 |
| O | 22) | 3250 RANTE-3 | 33.0 | 5251 RANT-DU1 | 132 | 1 | -7 | 10 | 10 | 10 | 70.7 |
| O | 23) | 3250 RANTE-3 | 33.0 | 5252 RANT-DU2 | 132 | 1 | -7 | 10 | 10 | 10 | 70.7 |
| O | 24) | 2560 PANNI-2 | 220 | 5565 PANNI-D1 | 132 | 1 | 185 | 250 | 250 | 250 | 70.6 |
| O | 25) | 2560 PANNI-2 | 220 | 5566 PANNI-D2 | 132 | 1 | 185 | 250 | 250 | 250 | 70.6 |
| O | 26) | 2560 PANNI-2 | 220 | 5567 PANNI-D3 | 132 | 1 | 185 | 250 | 250 | 250 | 70.6 |
| O | 27) | 1480 MEDEGA-1 | 132 | 1620 BADUL-1 | 132 | 1 | -28 | 45 | 100 | 130 | 70.6 |
| O | 28) | 1310 SAPU-1P | 132 | 1590 SAPUG-1 | 132 | 1 | 185 | 165 | 225 | 255 | 70.6 |
| O | 29) | 1310 SAPU-1P | 132 | 1590 SAPUG-1 | 132 | 2 | 185 | 165 | 225 | 255 | 70.6 |
| O | 30) | 1800 MATUG-1 | 132 | 5802 MATU-DU2 | 220 | 2 | -86 | 150 | 150 | 150 | 70.6 |
| O | 31) | 1800 MATUG-1 | 132 | 5801 MATU-DU1 | 220 | 1 | -86 | 150 | 150 | 150 | 70.6 |
| O | 32) | 2830 VEYAN-2 | 220 | 2900 WARIYA-2 | 220 | 1 | -228 | 1100 | 1500 | 1700 | 70.5 |
| O | 33) | 2830 VEYAN-2 | 220 | 2900 WARIYA-2 | 220 | 2 | -228 | 1100 | 1500 | 1700 | 70.5 |
| O | 34) | 1800 MATUG-1 | 132 | 5422 HORAN-D2 | 132 | 1 | 61 | 150 | 200 | 230 | 70.5 |
| O | 35) | 1830 VEYAN-1 | 132 | 2830 VEYAN-2 | 220 | 1 | -95 | 150 | 150 | 150 | 70.5 |
| O | 36) | 1830 VEYAN-1 | 132 | 2830 VEYAN-2 | 220 | 2 | -95 | 150 | 150 | 150 | 70.5 |
| O | 37) | 1830 VEYAN-1 | 132 | 2830 VEYAN-2 | 220 | 3 | -95 | 150 | 150 | 150 | 70.5 |
| O | 38) | 1420 HORAN-1 | 132 | 5422 HORAN-D2 | 132 | 1 | -61 | 144 | 185 | 200 | 70.5 |
| O | 39) | 1650 GALLE-1 | 132 | 1655 N-GALL-1 | 132 | 1 | -49 | 40 | 80 | 110 | 70.4 |
| O | 40) | 1650 GALLE-1 | 132 | 1655 N-GALL-1 | 132 | 2 | -49 | 40 | 80 | 110 | 70.4 |
| O | 41) | 1800 MATUG-1 | 132 | 5564 PANAD-D4 | 132 | 1 | 75 | 150 | 200 | 230 | 70.4 |
| O | 42) | 1850 PANAD-1 | 132 | 5564 PANAD-D4 | 132 | 1 | -74 | 106 | 140 | 158 | 70.4 |
| O | 43) | 1530 THULH-1 | 132 | 1830 VEYAN-1 | 132 | 1 | -71 | 165 | 225 | 255 | 70.3 |
| O | 44) | 1530 THULH-1 | 132 | 1830 VEYAN-1 | 132 | 2 | -71 | 165 | 225 | 255 | 70.3 |
| O | 45) | 1580 KOTUG-1 | 132 | 5581 KOTU-DU1 | 220 | 1 | -96 | 250 | 250 | 250 | 70.3 |
| O | 46) | 1580 KOTUG-1 | 132 | 5582 KOTU-DU2 | 220 | 1 | -96 | 250 | 250 | 250 | 70.3 |
| O | 47) | 1580 KOTUG-1 | 132 | 5583 KOTU-DU3 | 220 | 1 | -96 | 250 | 250 | 250 | 70.3 |
| O | 48) | 1160 INGIN-1 | 132 | 1480 MEDEGA-1 | 132 | 1 | -22 | 45 | 100 | 130 | 70.3 |
| O | 49) | 1310 SAPU-1P | 132 | 1570 BIYAG-1 | 132 | 1 | -156 | 165 | 225 | 255 | 70.3 |
| O | 50) | 1310 SAPU-1P | 132 | 1570 BIYAG-1 | 132 | 2 | -156 | 165 | 225 | 255 | 70.3 |
| O | 51) | 1135 N-POLP-1 | 132 | 1510 SITHA-1 | 132 | 1 | 72 | 45 | 100 | 140 | 70.3 |
| O | 52) | 2360 BOOS-2 | 220 | 2800 MATUG-2 | 220 | 1 | 214 | 550 | 750 | 850 | 70.2 |
| O | 53) | 2360 BOOS-2 | 220 | 2800 MATUG-2 | 220 | 2 | 214 | 550 | 750 | 850 | 70.2 |
| O | 54) | 1130 POLPI-1 | 132 | 1380 JUNC-1 | 132 | 1 | 91 | 45 | 100 | 140 | 70.2 |
| O | 55) | 1130 POLPI-1 | 132 | 1380 JUNC-1 | 132 | 2 | 91 | 45 | 100 | 140 | 70.2 |
| O | 56) | 1715 TRINC-P1 | 132 | 2715 TRINC-P2 | 220 | 1 | -127 | 150 | 150 | 150 | 70.2 |
| O | 57) | 1715 TRINC-P1 | 132 | 2715 TRINC-P2 | 220 | 2 | -127 | 150 | 150 | 150 | 70.2 |
| O | 58) | 1570 BIYAG-1 | 132 | 5571 BIYA-DU2 | 132 | 1 | -155 | 250 | 250 | 250 | 70.2 |
| O | 59) | 1860 CHILL-1 | 132 | 1865 N_CHIL-1 | 132 | 1 | -50 | 45 | 100 | 140 | 70.2 |
| O | 60) | 1860 CHILL-1 | 132 | 1865 N_CHIL-1 | 132 | 2 | -50 | 45 | 100 | 140 | 70.2 |
| O | 61) | 1150 AMPA-1 | 132 | 1160 INGIN-1 | 132 | 1 | -19 | 45 | 100 | 140 | 70.2 |
| O | 62) | 1560 PANNI-1 | 132 | 5261 KESBE-D1 | 132 | 1 | 60 | 150 | 200 | 230 | 70.2 |
| O | 63) | 1560 PANNI-1 | 132 | 5262 KESBE-D2 | 132 | 1 | 60 | 150 | 200 | 230 | 70.2 |
| O | 64) | 1260 KESBE-1 | 132 | 5261 KESBE-D1 | 132 | 1 | -60 | 115 | 145 | 158 | 70.2 |
| O | 65) | 1260 KESBE-1 | 132 | 5262 KESBE-D2 | 132 | 1 | -60 | 115 | 145 | 158 | 70.2 |

# TABLE A6.2.5-2 Voltage Collapse Ranking of 2015 System

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0 TPLAN * INTERACTIVE TRANSMISSION PLANNING PROGRAM *
0 2015 RAINY SEASON NIGHT PEAK
0 OPEN AT AMPARA AND ANNURADHAPURA
0
0          *** BRANCH VOLTAGE COLLAPSE RANKING BASED ON  1.00 OF RATING-B ***
0  RANK   FROM BUS       KV     TO BUS       KV  ID  FLOW RATA RATB RATC     PI
0 (   1) 2690 N_HABA-2 220  2715 TRINC-P2 220 1   -407 1100 1500 1700   12.6
0 (   2) 2690 N_HABA-2 220  2715 TRINC-P2 220 2   -407 1100 1500 1700   12.6
0 (   3) 2260 MAWEL-2  220  4260 MAWEL-G 11.0 1   -270  350  350  350   11.8
0 (   4) 2260 MAWEL-2  220  4260 MAWEL-G 11.0 2   -270  350  350  350   11.8
0 (   5) 1460 POLON-1  132  1690 HABAR-1  132 1    -67   45  100  140   11.6
0 (   6) 2690 N_HABA-2 220  2900 WARIYA-2 220 1    230 1100 1500 1700   11.6
0 (   7) 2690 N_HABA-2 220  2900 WARIYA-2 220 2    230 1100 1500 1700   11.6
0 (   8) 2815 PUTTA-P2 220  2865 N_CHIL-2 220 1    213  825 1125 1275   11.5
0 (   9) 2815 PUTTA-P2 220  2865 N_CHIL-2 220 2    213  825 1125 1275   11.5
0 (  10) 2830 VEYAN-2  220  2900 WARIYA-2 220 1   -228 1100 1500 1700   11.5
0 (  11) 2830 VEYAN-2  220  2900 WARIYA-2 220 2   -228 1100 1500 1700   11.5
0 (  12) 2360 BOOS-2   220  2800 MATUG-2  220 1    214  550  750  850   11.5
0 (  13) 2360 BOOS-2   220  2800 MATUG-2  220 2    214  550  750  850   11.5
0 (  14) 1690 HABAR-1  132  1700 ANURA-1  132 1    -93   45  100  140   11.5
0 (  15) 2220 KOTMA-2  220  2570 BIYAG-2  220 1    180  550  750  850   11.5
0 (  16) 2220 KOTMA-2  220  2570 BIYAG-2  220 2    180  550  750  850   11.5
0 (  17) 2350 MATAL-2  220  2690 N_HABA-2 220 1   -152  275  375  425   11.4
0 (  18) 2350 MATAL-2  220  2690 N_HABA-2 220 2   -152  275  375  425   11.4
0 (  19) 2260 MAWEL-2  220  2280 SWS-2    220 1    159  550  750  850   11.4
0 (  20) 2260 MAWEL-2  220  2280 SWS-2    220 2    159  550  750  850   11.4
0 (  21) 1360 BOOS-1   132  2360 BOOS-2   220 1   -163  150  150  150   11.4
0 (  22) 1360 BOOS-1   132  2360 BOOS-2   220 2   -163  150  150  150   11.4
0 (  23) 2270 PADUK-2  220  2280 SWS-2    220 1   -158  550  750  850   11.4
0 (  24) 2270 PADUK-2  220  2280 SWS-2    220 2   -158  550  750  850   11.4
0 (  25) 1580 KOTUG-1  132  5582 KOTU-DU2 220 1    -96  250  250  250   11.4
0 (  26) 1580 KOTUG-1  132  5583 KOTU-DU3 220 1    -96  250  250  250   11.4
0 (  27) 1580 KOTUG-1  132  5581 KOTU-DU1 220 1    -96  250  250  250   11.4
0 (  28) 2570 BIYAG-2  220  5572 BIYA-DU2 132 1    205  250  250  250   11.4
0 (  29) 2570 BIYAG-2  220  5570 BIYA-DU1 132 1    205  250  250  250   11.4
0 (  30) 3580 KOTUG-3 33.0 5582 KOTU-DU2 220 1    -30   60   60   60   11.4
0 (  31) 3580 KOTUG-3 33.0 5583 KOTU-DU3 220 1    -30   60   60   60   11.4
0 (  32) 3580 KOTUG-3 33.0 5581 KOTU-DU1 220 1    -30   60   60   60   11.4
0 (  33) 1700 ANURA-1  132  1710 TRINC-1  132 1    -67   45  100  140   11.4
0 (  34) 1700 ANURA-1  132  1710 TRINC-1  132 2    -67   45  100  140   11.4
0 (  35) 2230 VICTO-2  220  2240 RANDE-2  220 1    -66  550  750  850   11.4
0 (  36) 3570 BIYAG-3 33.0 5572 BIYA-DU2 132 1    -50   60   60   60   11.4
0 (  37) 3570 BIYAG-3 33.0 5570 BIYA-DU1 132 1    -50   60   60   60   11.4
0 (  38) 1715 TRINC-P1 132 2715 TRINC-P2 220 1   -127  150  150  150   11.4
0 (  39) 1715 TRINC-P1 132 2715 TRINC-P2 220 2   -127  150  150  150   11.4
0 (  40) 1135 N-POLP-1 132 2135 N-POLP-2 220 1   -140  500  500  500   11.4
0 (  41) 1310 SAPU-1P  132 1590 SAPUG-1  132 1    185  165  225  255   11.4
0 (  42) 1310 SAPU-1P  132 1590 SAPUG-1  132 2    185  165  225  255   11.4
0 (  43) 2270 PADUK-2  220 2560 PANNI-2  220 1    234  550  750  850   11.3
0 (  44) 2270 PADUK-2  220 2560 PANNI-2  220 2    234  550  750  850   11.3
0 (  45) 1310 SAPU-1P  132 1570 BIYAG-1  132 1   -156  165  225  255   11.3
0 (  46) 1310 SAPU-1P  132 1570 BIYAG-1  132 2   -156  165  225  255   11.3
0 (  47) 1130 POLPI-1  132 1380 JUNC-1   132 1     91   45  100  140   11.3
0 (  48) 1130 POLPI-1  132 1380 JUNC-1   132 2     91   45  100  140   11.3
0 (  49) 1865 N_CHIL-1 132 2865 N_CHIL-2 220 1    -98  150  150  150   11.3
0 (  50) 1865 N_CHIL-1 132 2865 N_CHIL-2 220 2    -98  150  150  150   11.3
0 (  51) 1865 N_CHIL-1 132 2865 N_CHIL-2 220 3    -98  150  150  150   11.3
0 (  52) 2560 PANNI-2  220 5567 PANNI-D3 132 1    185  250  250  250   11.3
0 (  53) 2560 PANNI-2  220 5566 PANNI-D2 132 1    185  250  250  250   11.3
0 (  54) 2560 PANNI-2  220 5565 PANNI-D1 132 1    185  250  250  250   11.3
0 (  55) 1135 N-POLP-1 132 1510 SITHA-1  132 1     72   45  100  140   11.3
0 (  56) 1800 MATUG-1  132 5564 PANAD-D4 132 1     75  150  200  230   11.3
0 (  57) 1850 PANAD-1  132 5564 PANAD-D4 132 1    -74  106  140  158   11.3
0 (  58) 1460 POLON-1  132 1780 VALAI-1  132 1     30   45  100  140   11.3
0 (  59) 2260 MAWEL-2  220 2360 BOOS-2   220 1    109  550  750  850   11.3
0 (  60) 2260 MAWEL-2  220 2360 BOOS-2   220 2    109  550  750  850   11.3
0 (  61) 1800 MATUG-1  132 5422 HORAN-D2 132 1     61  150  200  230   11.3
0 (  62) 1420 HORAN-1  132 5422 HORAN-D2 132 1    -61  144  185  200   11.3
0 (  63) 1480 MEDEGA-1 132 1620 BADUL-1  132 1    -28   45  100  130   11.3
0 (  64) 2135 N-POLP-2 220 2230 VICTO-2  220 1   -121  550  750  850   11.3
0 (  65) 2135 N-POLP-2 220 2230 VICTO-2  220 2   -121  550  750  850   11.3
```
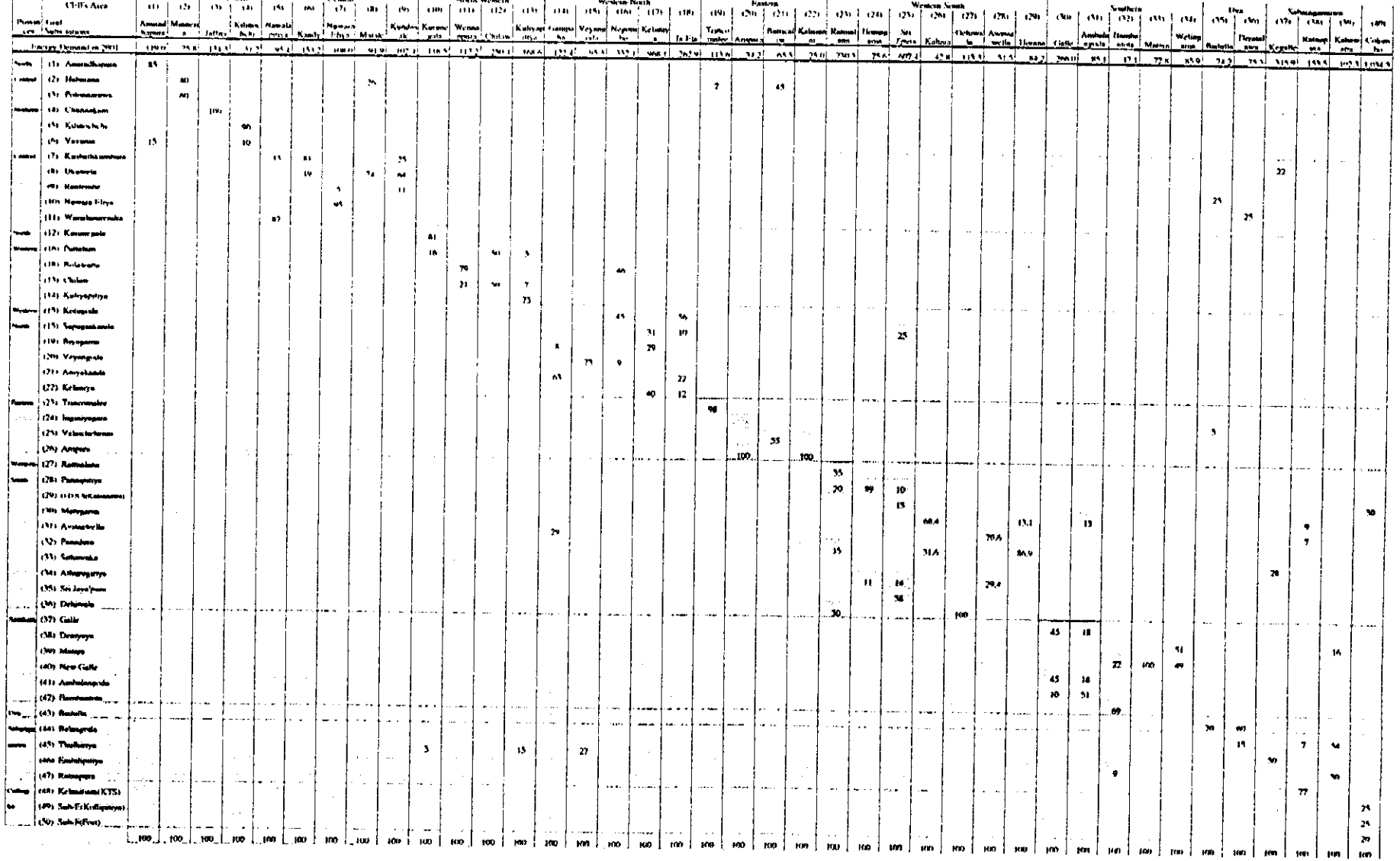
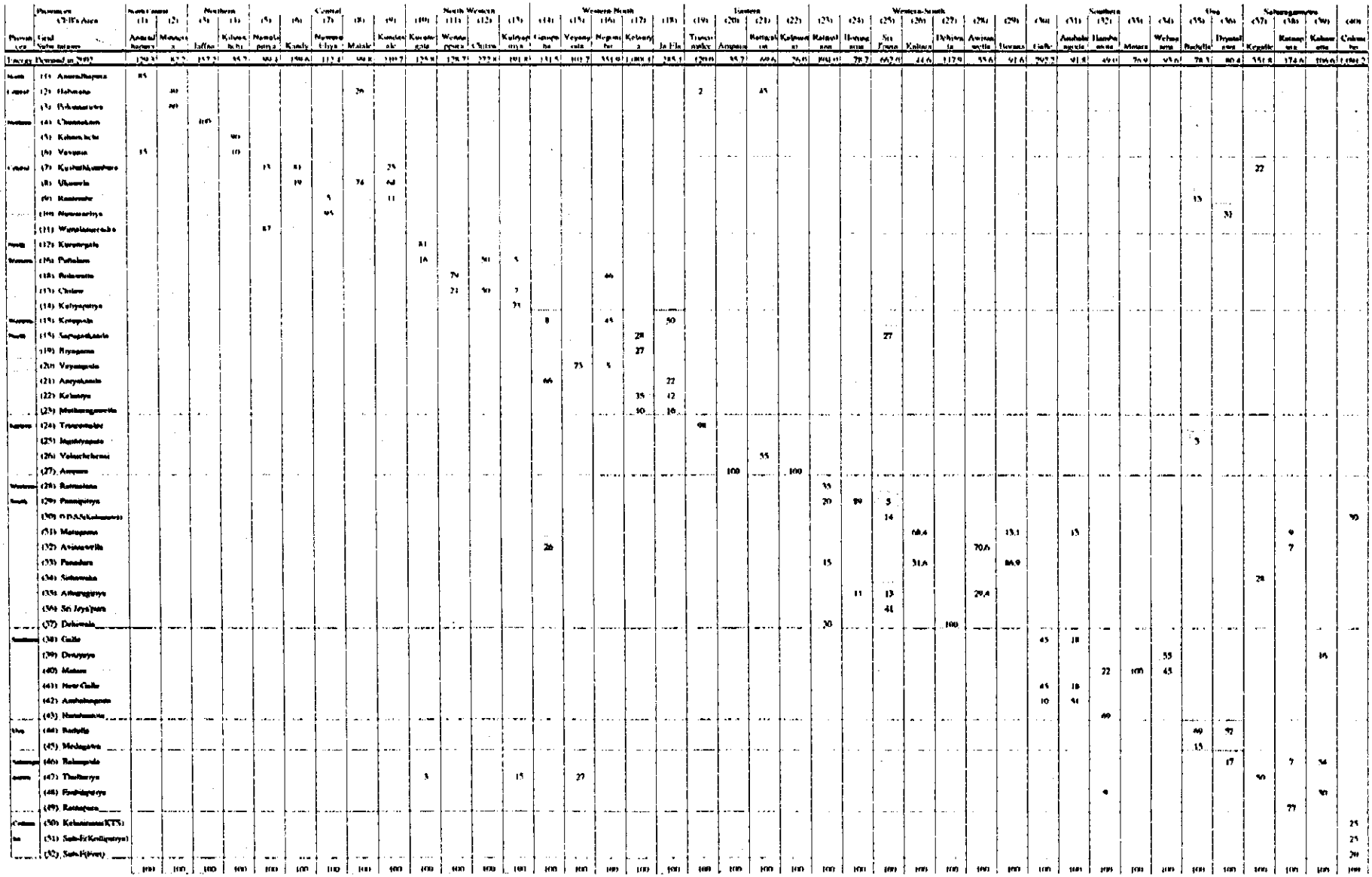

## Table A6.3 - 1 Power Supply Matrix of CEB's Areas - Grid Substations after Feeders' Rearrangement and Substation Addition in The Year 2000

| Province | Grid Sub-station / CEB's Area | North Central (1) Anuradhapura | (2) Monaragala | Northern (3) Jaffna | (4) Kilinochchi | Central (5) Nawalapitiya | (6) Kandy | (7) Nuwara Eliya | (8) Matale | (9) Kandalama | North Western (10) Kurunegala | (11) Wayamba | (12) Chilaw | (13) Kalutara | Western-North (14) Colombo North | (15) Biyagama | (16) Negombo | (17) Kelaniya | (18) Sapugaskanda | Eastern (19) Trincomalee | (20) Batticaloa | (21) Kalmunai | (22) Kalmunai | Western-South (23) Ratmalana | (24) Homagama | (25) Pannipitiya | (26) Kahathuduwa | (27) Dehiwala | (28) Avissawella | (29) Horana | Southern (30) Galle | (31) Ambalangoda | (32) Hambantota | (33) Matara | (34) Weligama | Uva (35) Badulla | (36) Wellassa | Sabaragamuwa (37) Kegalle | (38) Ratnapura | (39) Kalutara | (40) Colombo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy Demand in 2000 | | 109.7 | 70.0 | 110.0 | 26.3 | 91.7 | 147.1 | 103.9 | 84.8 | 94.8 | 108.0 | 106.9 | 79.0 | 148.3 | 144.0 | 89.4 | 313.7 | 361.3 | 242.6 | 107.6 | 32.9 | 61.7 | 24.1 | 663.6 | 72.7 | 557.6 | 41.7 | 109.0 | 49.5 | 77.5 | 242.2 | 78.9 | 45.3 | 69.1 | 78.9 | 70.4 | 70.6 | 283.7 | 135.0 | 98.3 | 491.3 |
| North Central | (1) Anuradhapura | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | (2) Polonnaruwa | | 100 | | | | | | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Northern | (3) Chunnakam | | | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | (4) Kilinochchi | | | | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Central | (5) Kothmalehenpura | | | | | 13 | 81 | | | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 22 | | | |
| | (6) Dunumala | | | | | | 19 | | 74 | 64 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | (7) Ramboda | | | | | | | 5 | | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | 25 | | | | |
| | (8) Nuwara Eliya | | | | | | | 95 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 25 | | | | |
| | (9) Wimalasurendra | | | | | 87 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| North Western | (10) Kurunegala | | | | | | | | | | 100 | | | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | (11) Puttalam | | | | | | | | | | | | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | (12) Bulumina | | | | | | | | | | | 95 | | | | | 46 | | | | | | | | | | | | | | | | | | | | | | | | |
| | (13) Chilaw | | | | | | | | | | | 5 | 50 | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Western-North | (14) Kotugoda | | | | | | | | | | | | | | | | 45 | | 56 | | | | | | | | | | | | | | | | | | | | | | |
| | (15) Sapugaskanda | | | | | | | | | | | | | | 8 | | | 31 | 10 | | | | | | | 23 | | | | | | | | | | | | | | | |
| | (16) Biyagama | | | | | | | | | | | | | | | | | 29 | | | | | | | | | | | | | | | | | | | | | | | |
| | (17) Veyangoda | | | | | | | | | | | | | | | 73 | 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| | (18) Aniyakanda | | | | | | | | | | | | | | 63 | | | | 22 | | | | | | | | | | | | | | | | | | | | | | |
| | (19) Wewelduwa | | | | | | | | | | | | | | | | | 40 | 12 | | | | | | | | | | | | | | | | | | | | | | |
| Eastern | (20) Trincomalee | | | | | | | | | | | | | | | | | | | 100 | | | | | | | | | | | | | | | | | | | | | |
| | (21) Inginiyagala | | | | | | | | | | | | | | | | | | | | 10 | | | | | | | | | | | | | | | | | | 5 | | | |
| | (22) Vaanchiyarmai | | | | | | | | | | | | | | | | | | | | | 100 | 10 | | | | | | | | | | | | | | | | | | |
| | (23) Ampara | | | | | | | | | | | | | | | | | | | | 90 | | 90 | | | | | | | | | | | | | | | | | | |
| Western-South | (24) Ratmalana | | | | | | | | | | | | | | | | | | | | | | | 45.2 | | | | | | | | | | | | | | | | | | |
| | (25) Pannipitiya | | | | | | | | | | | | | | | | | | | | | | | 22.1 | 85 | 15 | | | | | | | | | | | | | | | | |
| | (26) Kahathuduwa | | | | | | | | | | | | | | | | | | | | | | | | | 11 | | | | | | | | | | | | | | | 30 |
| | (27) Mahagama | | | | | | | | | | | | | | | | | | | | | | | | | | 68.4 | | | 13.1 | | 26 | | | | | | 9 | | | |
| | (28) Avissawella | | | | | | | | | | | | | | 29 | | | | | | | | | | | | | | 70.6 | | | | | | | | | | 7 | | | |
| | (29) Padukka | | | | | | | | | | | | | | | | | | | | | | | 7.7 | | | 31.6 | | | 86.9 | | | | | | | | | | | |
| Southern | (30) Galle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 | 37 | | | | | | 28 | | | |
| | (31) Ambalangoda | | | | | | | | | | | | | | | | | | | | | | | | 15 | 15 | | | 29.4 | | | | | | | | | | | | |
| | (32) Hambantota | | | | | | | | | | | | | | | | | | | | | | | | | 36 | | | | | | | 9 | | 51 | | | | | 16 | |
| | (33) Matara | | | | | | | | | | | | | | | | | | | | | | | 25 | | | | 100 | | | | | 20 | 100 | 49 | | | | | | |
| | (34) Weligama | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 | 37 | | | | | | | | | |
| Uva | (35) Badulla | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 70 | 60 | | | | |
| | (36) Wellassa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 15 | | | | |
| Sabaragamuwa | (37) Kegalle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 | 7 | 54 | |
| | (38) Ratnapura | | | | | | | | | | | | | 60 | | 27 | | | | | | | | | | | | | | | | | 71 | | | | | | | 30 | | |
| | (39) Kalutara | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 77 | | | |
| Colombo | (40) Kolonnawa/KTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 25 |
| | (41) Sub-Kolonnawa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 25 |
| | (42) Sub-Athurugiriya | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 20 |
| | | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

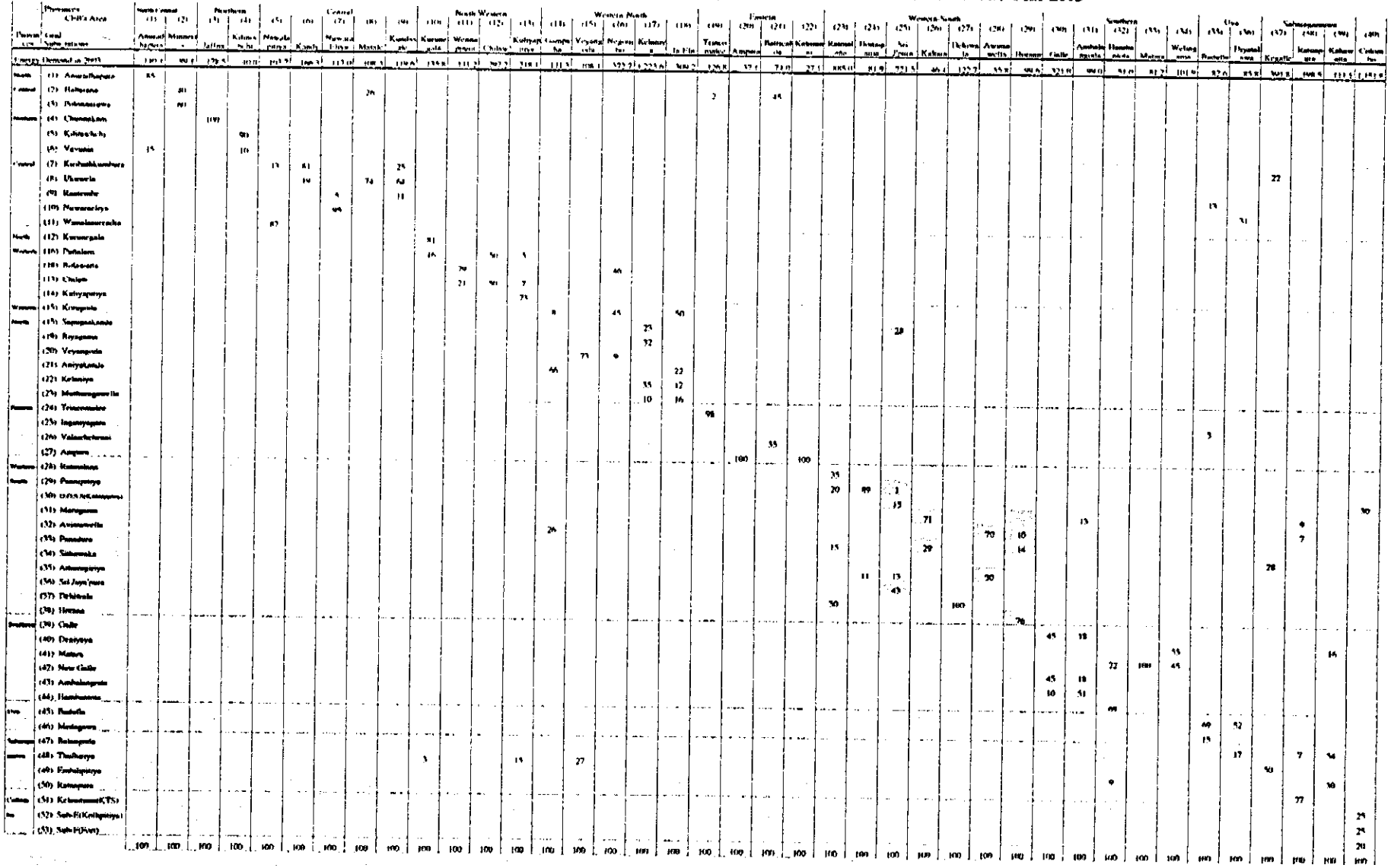
## Table A6.3 - 2 Power Supply Matrix of CEB's Areas - Grid Substations after Feeders' Rearrangement and Substation Addition in The Year 2001



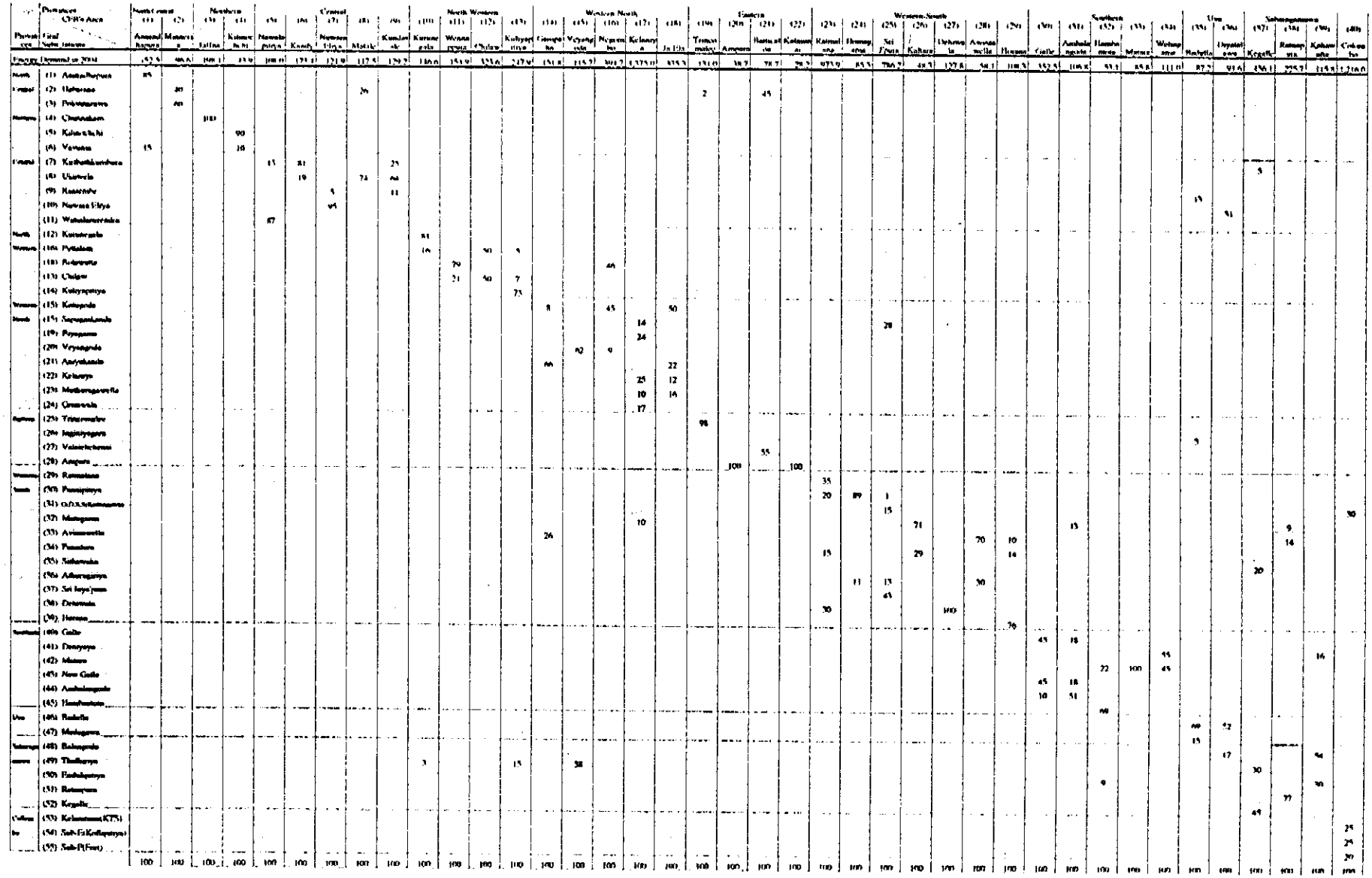
## Table A6.3 - 3 Power Supply Matrix of CEB's Areas - Grid Substations after Feeders' Rearrangement and Substation Addition in The Year 2002



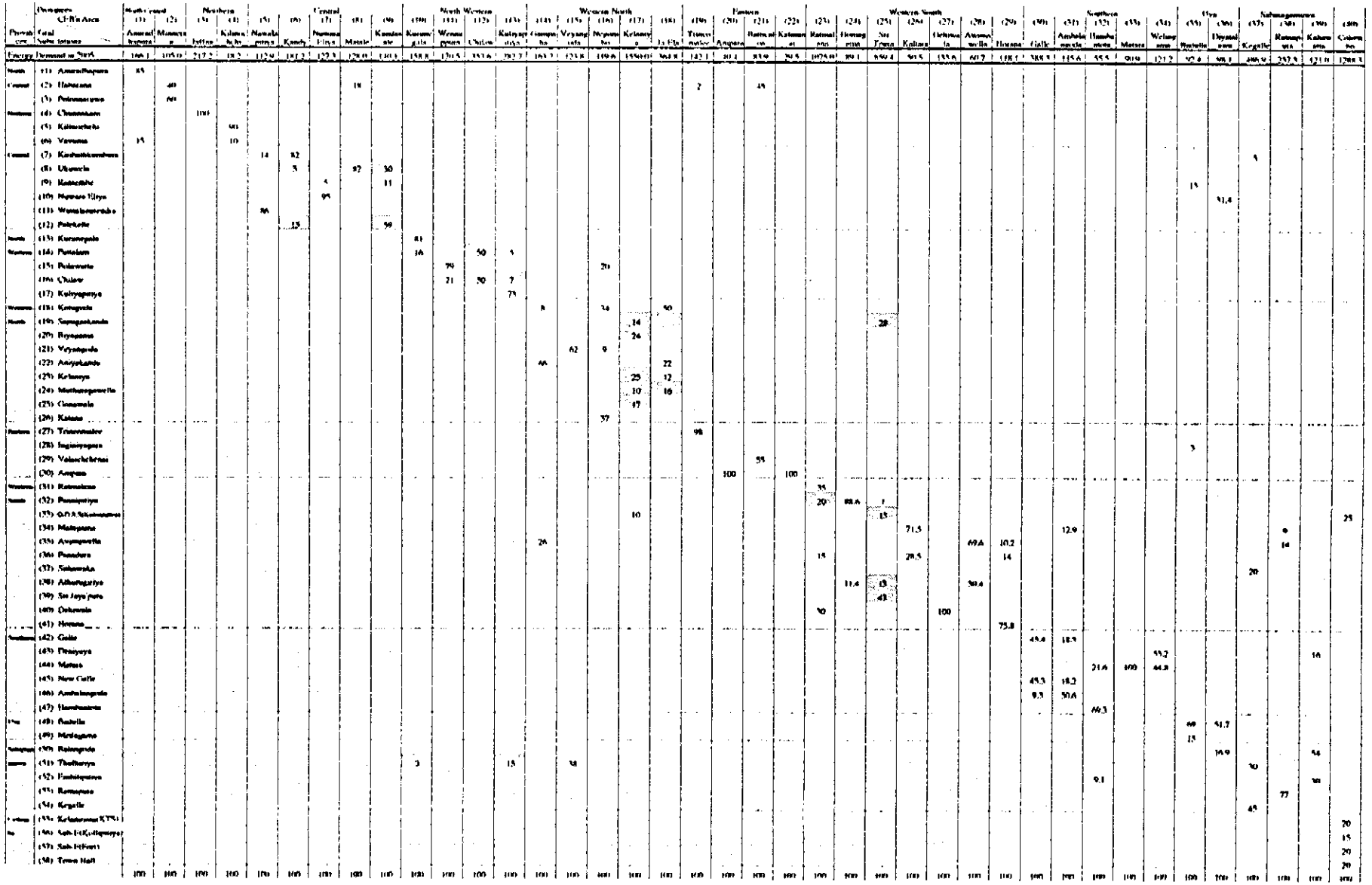
## Table A6.3 - 4 Power Supply Matrix of CEB's Areas - Grid Substations after Feeders' Rearrangement and Substation Addition in The Year 2003



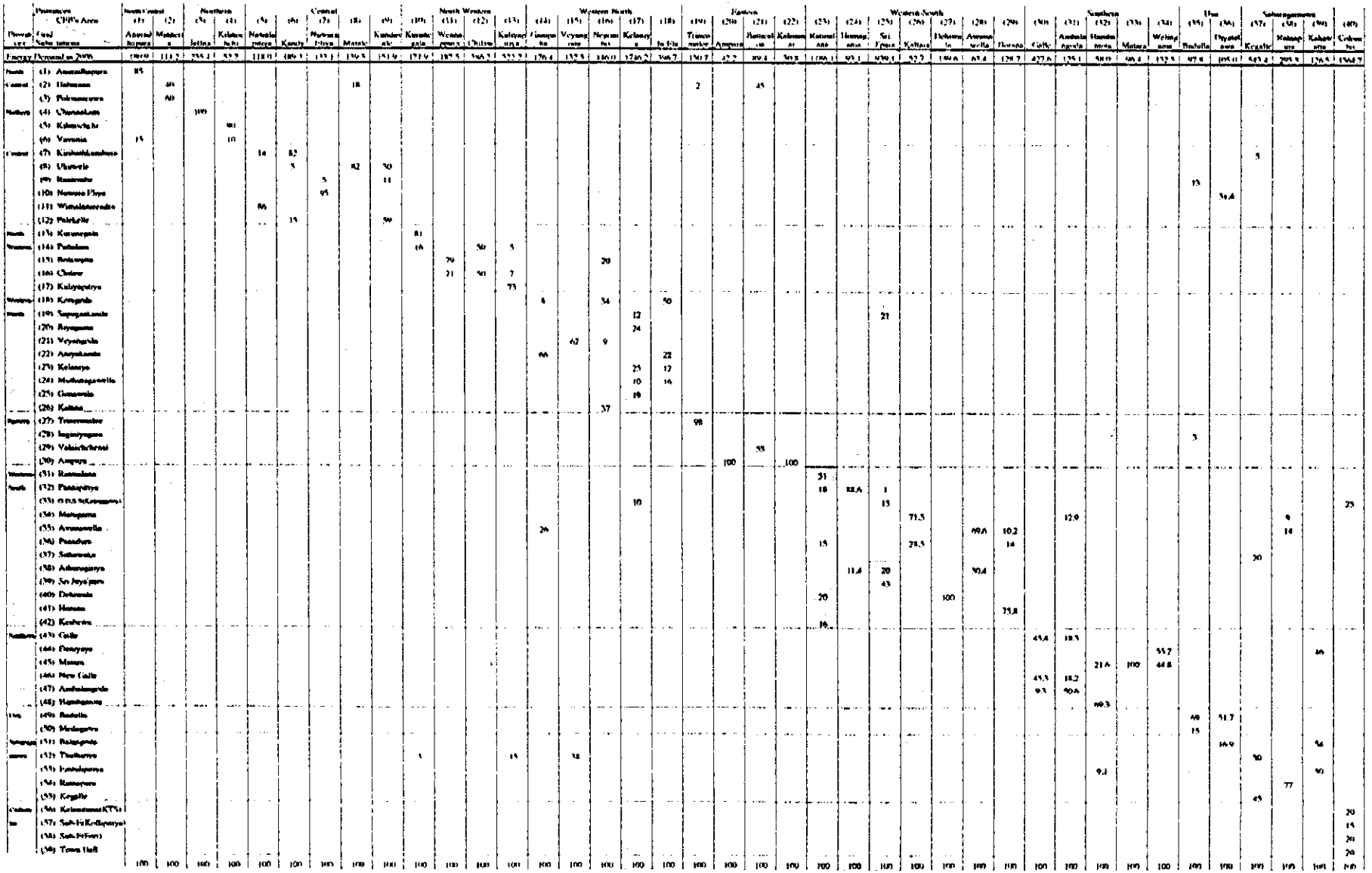
## Table A6.3 - 5 Power Supply Matrix of CEB's Areas - Grid Substations after Feeders' Rearrangement and Substation Addition in The Year 2004



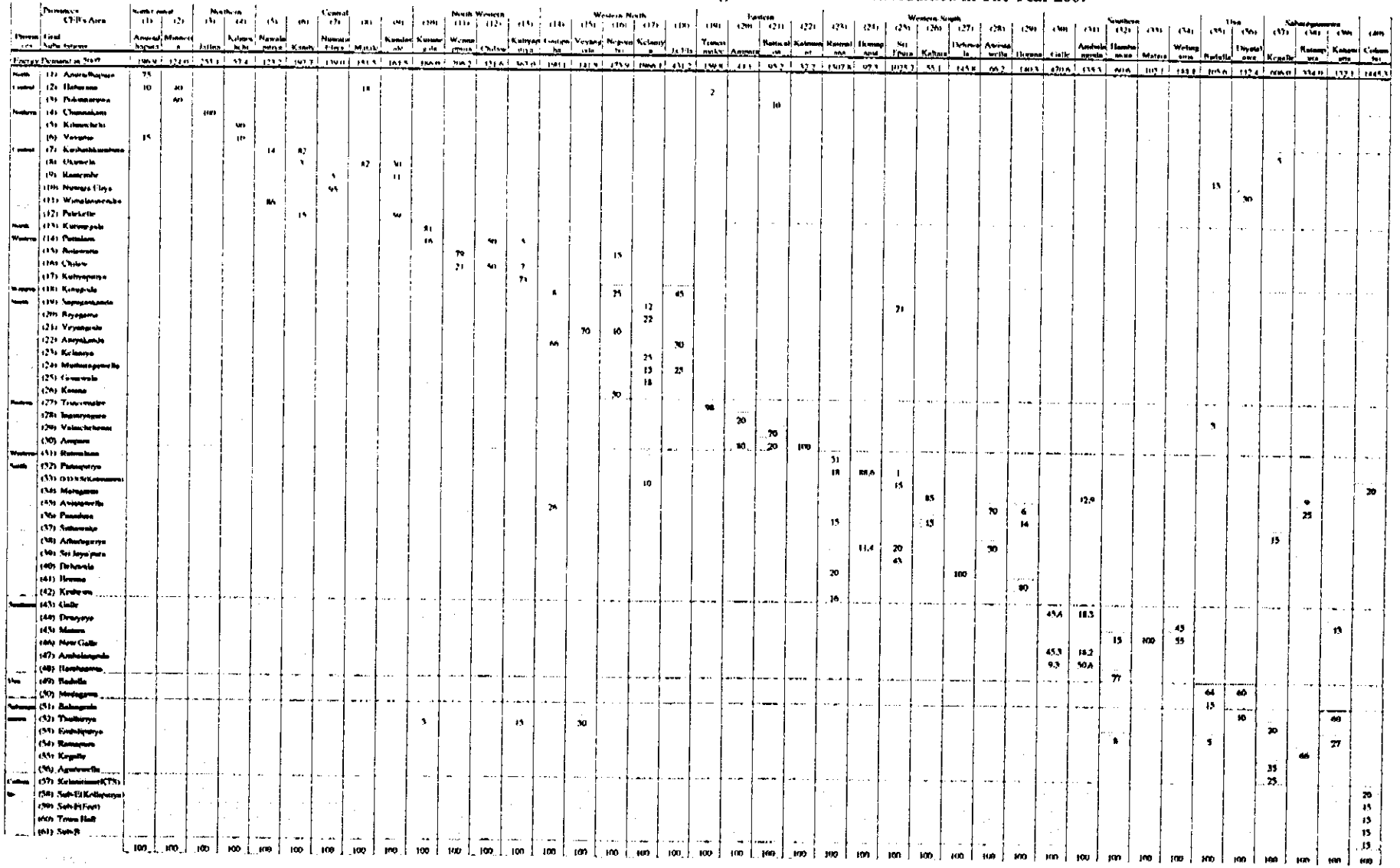
## Table A6.3 - 6 Power Supply Matrix of CEB's Areas - Grid Substations after Feeders' Rearrangement and Substation Addition in The Year 2005



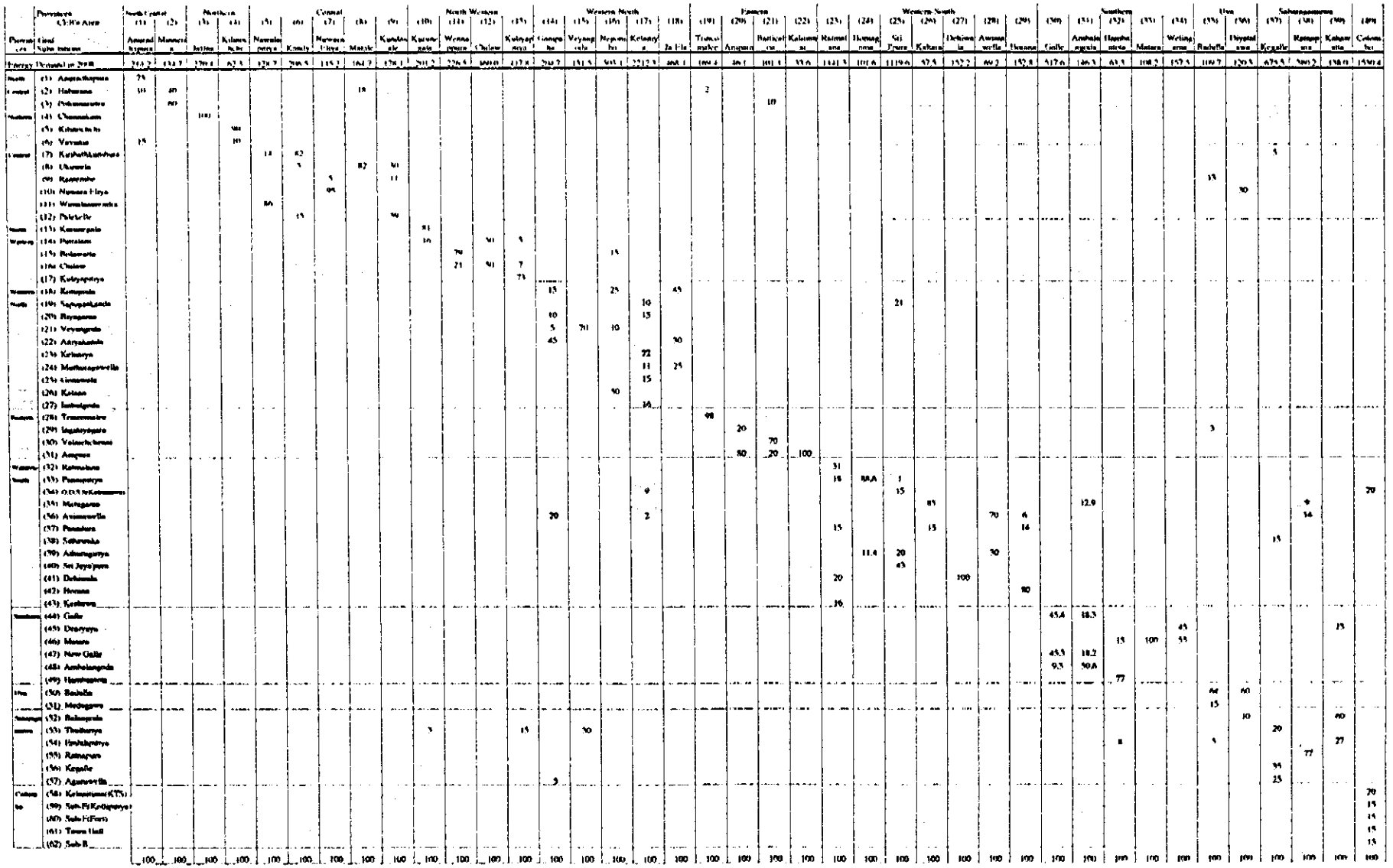
## Table A6.3 - 7 Power Supply Matrix of CEB's Areas - Grid Substations after Feeders' Rearrangement and Substation Addition in The Year 2006



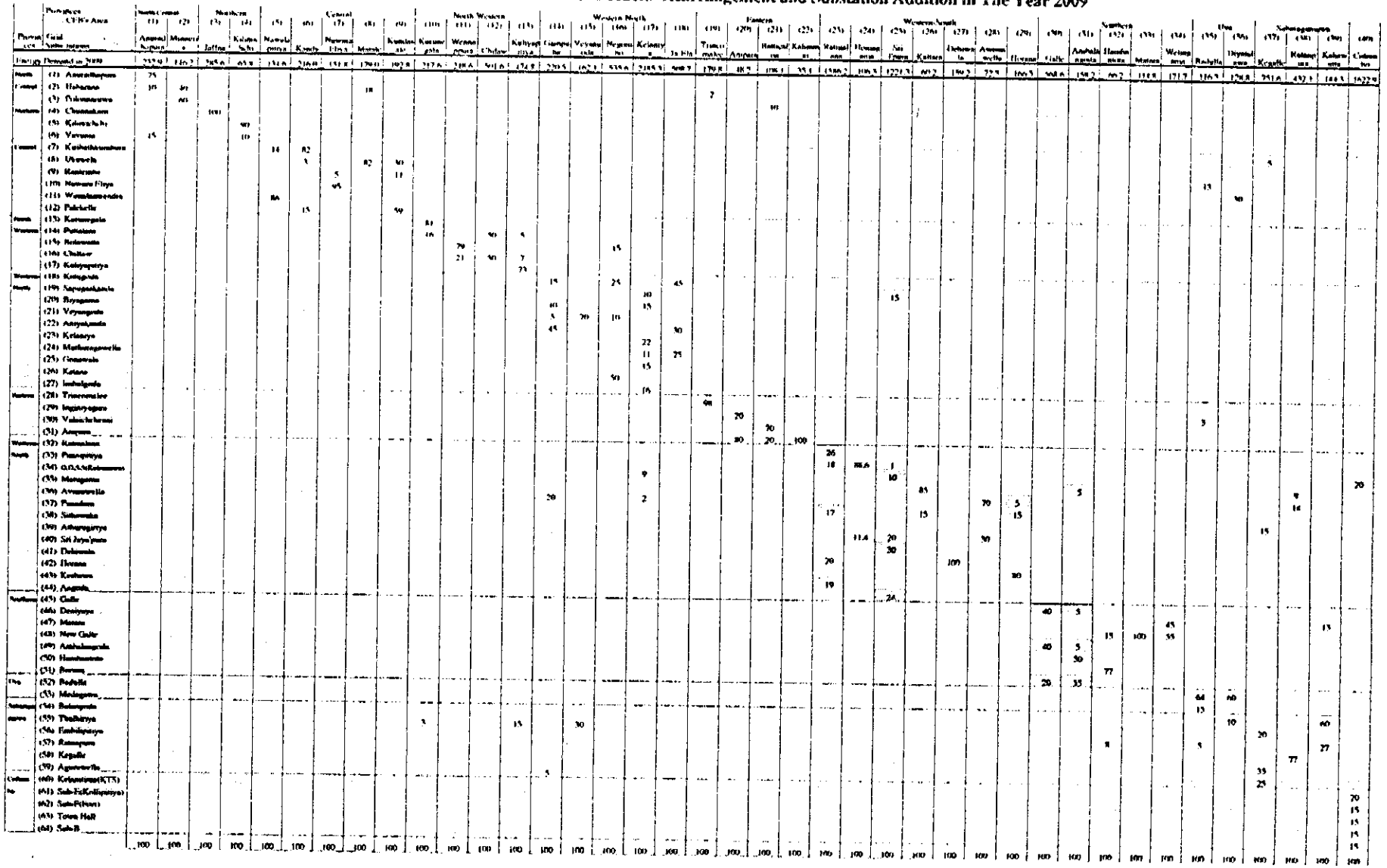
## Table A6.3 - 8 Power Supply Matrix of CEB's Areas - Grid Substations after Feeders' Rearrangement and Substation Addition in The Year 2007



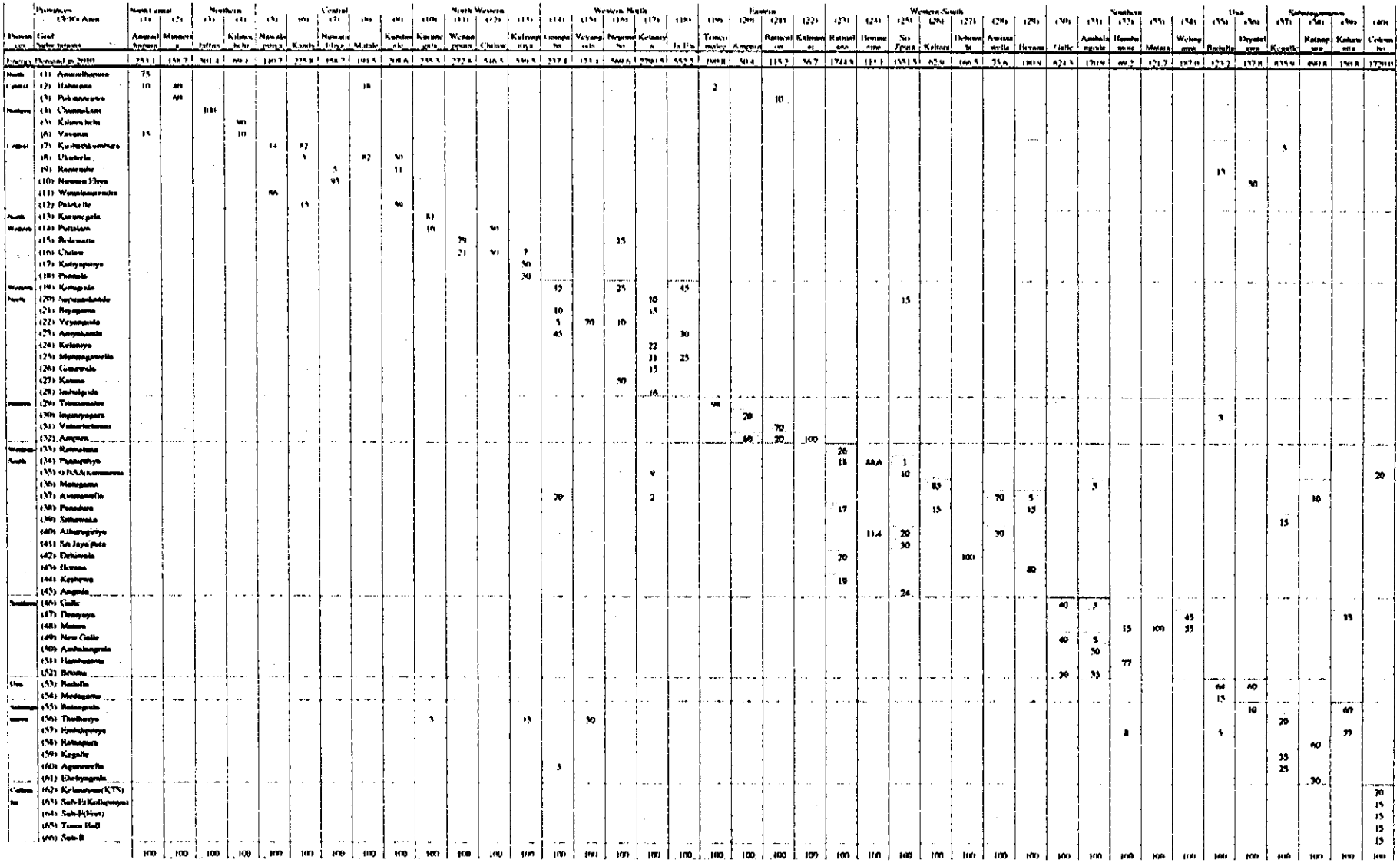
## Table A6.3 - 9 Power Supply Matrix of CEB's Areas - Grid Substations after Feeders' Rearrangement and Substation Addition in The Year 2008



## Table A6.3 - 10 Power Supply Matrix of CEB's Areas - Grid Substations after Feeders' Rearrangement and Substation Addition in The Year 2009



## Table A6.3 - 11 Power Supply Matrix of CEB's Areas - Grid Substations after Feeder's Rearrangement and Substation Additio in The Year 2010



## Table A6.3 - 12 Power Supply Matrix of CEB's Areas - Grid Substations after Feeder's Rearrangement and Substation Additio in The Year 2015