

Table 1a

Base Case 2 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | 1.66 | 1.58 | 2.10 | 1.89 |
| 40 | 1.65 | None | 1.91 | 1.74 |
| 50 | None | None | 1.70 | None |
| 70 | 1.70 | None | None | 1.64 |

Case 5-EQ1-C2 Base + Future Caps - 2 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | 1.64 | None | 1.97 | 1.70 |
| 40 | None | None | 1.88 | None |
| 50 | None | None | 1.64 | None |
| 70 | None | None | None | None |

Case 5-EQ1-C2-AL Base + Future Caps, Alternate Load - 2 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | 1.76 | 2.04 | 1.84 |
| 40 | None | 1.64 | 1.94 | 1.70 |
| 50 | None | 1.65 | 1.72 | None |
| 70 | None | None | None | None |

Case 5-EQ9 90% Source Strength - 2 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | 1.62 | None | 1.97 | 1.75 |
| 40 | None | None | 1.82 | 1.68 |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Case 5-EQ9-AL 90% Source Strength, Alternate Load - 2 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | 1.62 | 1.62 | 2.03 | 1.90 |
| 40 | None | None | 1.88 | 1.77 |
| 50 | None | None | 1.80 | 1.66 |
| 70 | None | None | 1.62 | 1.63 |

Case 5-EQ9-C2 90% Source + Future Caps - 2 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | 1.62 | None | 1.97 | 1.75 |
| 40 | None | None | 1.82 | 1.68 |
| 50 | None | None | 1.63 | None |
| 70 | None | None | None | None |

Case 5-EQ9-C2-AL 90% Source + Future Caps, Alternate Load - 2 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | 1.72 | 2.03 | 1.90 |
| 40 | None | 1.68 | 1.88 | 1.77 |
| 50 | None | 1.67 | 1.69 | 1.61 |
| 70 | None | None | None | None |

Case 5-EQ8 80% Source - 2 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | 1.66 | 2.02 | 1.75 |
| 40 | None | None | 1.92 | None |
| 50 | None | None | 1.69 | None |
| 70 | 1.64 | None | None | None |

Case 5-EQ8-C2 80% Source + Future Caps - 2 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | 1.61 | 1.91 | 2.02 | 1.74 |
| 40 | None | 1.78 | 1.92 | 1.63 |
| 50 | None | None | 1.69 | None |
| 70 | None | None | None | None |

Case 5-EQ8-C2-AL 80% Source + Future Caps, Alternat Load - 2 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | 1.61 | None | 2.08 | 1.86 |
| 40 | None | None | 1.88 | 1.75 |
| 50 | None | None | 1.76 | 1.66 |
| 70 | None | 1.68 | None | None |

Case 5-F2 Suc. 0 fault 3.5 Cycle Open - 2 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | 2.08 | 2.04 | 1.88 |
| 40 | 1.66 | 1.93 | 1.91 | 1.80 |
| 50 | None | 1.64 | 1.67 | 1.64 |
| 70 | None | None | None | None |

Case 5-F3 Suc. 0 fault 4 Cycle Open - 2 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | 1.68 | 2.07 | 2.00 | 1.94 |
| 40 | None | 1.95 | 1.86 | 1.84 |
| 50 | None | 1.70 | 1.64 | 1.66 |
| 70 | None | None | None | None |

Table 1b

Base Case 6 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | None | 1.82 | None |
| 40 | None | None | 1.67 | None |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Case 5-EQ1-C2 Base + Future Caps - 6 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | None | 1.70 | None |
| 40 | None | None | 1.63 | None |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Case 5-EQ1-C2-AL Base + Future Caps, Alternate Load - 6 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | None | 1.65 | None |
| 40 | None | None | None | None |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Case 5-EQ9 90% Source Strength - 6 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | None | 1.66 | None |
| 40 | None | None | None | None |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Case 5-EQ9-AL 90% Source Strength, Alternate Load - 6 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | 1.62 | None | 1.58 | None |
| 40 | None | None | None | None |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Case 5-EQ9-C2 90% Source + Future Caps - 6 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | None | 1.66 | None |
| 40 | None | None | None | None |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Case 5-EQ9-C2-AL 90% Source + Future Caps, Alternate Load - 6 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | None | 1.58 | None |
| 40 | None | None | None | None |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Case 5-EQ8 80% Source - 6 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | 1.56 | 1.69 | None |
| 40 | None | None | 1.61 | None |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Case 5-EQ8-C2 80% Source + Future Caps- 6 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | 1.66 | 1.69 | None |
| 40 | None | 1.58 | 1.61 | None |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Case 5-EQ8-C2-AL 80% Source + Future Caps, Alternat Load - 6 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | None | 1.60 | 1.55 |
| 40 | None | None | None | None |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Case 5-F2 Suc. 0 fault 3.5 Cycle Open - 6 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | 1.55 | None | None |
| 40 | None | None | None | None |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Case 5-F3 Suc. 0 fault 4 Cycle Open - 6 Cycle Max TOV

| Load Level (%) | Case 5 (+0 Miles) | Case 5B (+5 Miles) | Case 5C (+10 Miles) | Case 5A (+20 Miles) |
|----------------|----------------------|-----------------------|------------------------|------------------------|
| 30 | None | 1.59 | 1.58 | None |
| 40 | None | None | None | None |
| 50 | None | None | None | None |
| 70 | None | None | None | None |

Table 1c

Base Case Max TOV By Case and Load Level

| Load Level (%) | Case 5 (+0 Miles) | | Case 5B (+5 Miles) | | Case 5C (+10 Miles) | | Case 5A (+20 Miles) | |
|----------------|-------------------|------|--------------------|-----|---------------------|------|---------------------|------|
| | 2C | 6C | 2C | 6C | 2C | 6C | 2C | 6C |
| 30 | 1.66 | 1.44 | None | N/A | 2.10 | 1.82 | 1.89 | 1.34 |
| 40 | None | N/A | None | N/A | 1.91 | 1.67 | None | N/A |
| 50 | 1.65 | 1.48 | None | N/A | 1.70 | 1.51 | 1.74 | 1.31 |
| 70 | 1.70 | 1.40 | None | N/A | None | N/A | 1.64 | 1.44 |

Case 5-EQ1-C2 Base + Future Caps

| Load Level (%) | Case 5 (+0 Miles) | | Case 5B (+5 Miles) | | Case 5C (+10 Miles) | | Case 5A (+20 Miles) | |
|----------------|-------------------|------|--------------------|-----|---------------------|------|---------------------|------|
| | 2C | 6C | 2C | 6C | 2C | 6C | 2C | 6C |
| 30 | 1.64 | 1.42 | None | N/A | 1.97 | 1.70 | 1.70 | 1.22 |
| 40 | None | N/A | None | N/A | 1.88 | 1.63 | None | N/A |
| 50 | None | N/A | None | N/A | 1.64 | 1.41 | None | N/A |
| 70 | None | N/A | None | N/A | None | N/A | None | N/A |

Case 5-EQ1-C2-AL Base + Future Caps, Alternate Load

| Load Level (%) | Case 5 (+0 Miles) | | Case 5B (+5 Miles) | | Case 5C (+10 Miles) | | Case 5A (+20 Miles) | |
|----------------|-------------------|-----|--------------------|------|---------------------|------|---------------------|------|
| | 2C | 6C | 2C | 6C | 2C | 6C | 2C | 6C |
| 30 | None | N/A | 1.76 | 1.54 | 2.04 | 1.65 | 1.84 | 1.33 |
| 40 | None | N/A | 1.64 | 1.48 | 1.94 | 1.52 | 1.70 | 1.28 |
| 50 | None | N/A | 1.65 | 1.48 | 1.72 | 1.38 | None | N/A |
| 70 | None | N/A | None | N/A | None | N/A | None | N/A |

Case 5-EQ9 90% Source Strength

| Load Level (%) | Case 5 (+0 Miles) | | Case 5B (+5 Miles) | | Case 5C (+10 Miles) | | Case 5A (+20 Miles) | |
|----------------|-------------------|------|--------------------|-----|---------------------|------|---------------------|------|
| | 2C | 6C | 2C | 6C | 2C | 6C | 2C | 6C |
| 30 | 1.62 | 1.44 | None | N/A | 1.97 | 1.66 | 1.75 | 1.32 |
| 40 | None | N/A | None | N/A | 1.82 | 1.52 | 1.68 | 1.28 |
| 50 | None | N/A | None | N/A | None | N/A | None | N/A |
| 70 | None | N/A | None | N/A | None | N/A | None | N/A |

Case 5-EQ9-AL 90% Source Strength, Alternate Load

| Load Level (%) | Case 5 (+0 Miles) | | Case 5B (+5 Miles) | | Case 5C (+10 Miles) | | Case 5A (+20 Miles) | |
|----------------|-------------------|------|--------------------|------|---------------------|------|---------------------|------|
| | 2C | 6C | 2C | 6C | 2C | 6C | 2C | 6C |
| 30 | 1.62 | 1.44 | 1.72 | 1.51 | 2.03 | 1.58 | 1.90 | 1.46 |
| 40 | None | N/A | 1.68 | 1.50 | 1.88 | 1.46 | 1.77 | 1.35 |
| 50 | None | N/A | None | N/A | 1.80 | 1.42 | 1.66 | 1.42 |
| 70 | None | N/A | None | N/A | 1.62 | 1.46 | 1.63 | 1.50 |

Case 5-EQ9-C2 90% Source + Future Caps

| Load Level (%) | Case 5 (+0 Miles) | | Case 5B (+5 Miles) | | Case 5C (+10 Miles) | | Case 5A (+20 Miles) | |
|----------------|-------------------|------|--------------------|-----|---------------------|------|---------------------|------|
| | 2C | 6C | 2C | 6C | 2C | 6C | 2C | 6C |
| 30 | 1.62 | 1.44 | None | N/A | 1.97 | 1.66 | 1.75 | 1.32 |
| 40 | None | N/A | None | N/A | 1.82 | 1.52 | 1.68 | 1.28 |
| 50 | None | N/A | None | N/A | 1.63 | 1.40 | None | N/A |
| 70 | None | N/A | None | N/A | None | N/A | None | N/A |

Case 5-EQ9-C2-AL 90% Source + Future Caps, Alternate Loac

| Load Level (%) | Case 5 (+0 Miles) | | Case 5B (+5 Miles) | | Case 5C (+10 Miles) | | Case 5A (+20 Miles) | |
|----------------|-------------------|-----|--------------------|------|---------------------|------|---------------------|------|
| | 2C | 6C | 2C | 6C | 2C | 6C | 2C | 6C |
| 30 | None | N/A | 1.72 | 1.51 | 2.03 | 1.58 | 1.90 | 1.46 |
| 40 | None | N/A | 1.68 | 1.50 | 1.88 | 1.46 | 1.77 | 1.35 |
| 50 | None | N/A | 1.67 | 1.49 | 1.69 | 1.34 | 1.61 | 1.48 |
| 70 | None | N/A | None | N/A | None | N/A | None | N/A |

Case 5-EQ8 80% Source

| Load Level (%) | Case 5 (+0 Miles) | | Case 5B (+5 Miles) | | Case 5C (+10 Miles) | | Case 5A (+20 Miles) | |
|----------------|-------------------|------|--------------------|------|---------------------|------|---------------------|------|
| | 2C | 6C | 2C | 6C | 2C | 6C | 2C | 6C |
| 30 | 1.61 | 1.42 | 1.66 | 1.56 | 2.02 | 1.69 | 1.75 | 1.32 |
| 40 | None | N/A | None | N/A | 1.92 | 1.61 | 1.63 | 1.30 |
| 50 | None | N/A | None | N/A | 1.69 | 1.45 | None | N/A |
| 70 | 1.64 | 1.38 | None | N/A | None | N/A | None | N/A |

Case 5-EQ8-C2 80% Source + Future Caps

| Load Level (%) | Case 5 (+0 Miles) | | Case 5B (+5 Miles) | | Case 5C (+10 Miles) | | Case 5A (+20 Miles) | |
|----------------|-------------------|------|--------------------|------|---------------------|------|---------------------|------|
| | 2C | 6C | 2C | 6C | 2C | 6C | 2C | 6C |
| 30 | 1.61 | 1.42 | 1.91 | 1.66 | 2.02 | 1.69 | 1.74 | 1.32 |
| 40 | None | N/A | 1.78 | 1.58 | 1.92 | 1.61 | 1.63 | 1.30 |
| 50 | None | N/A | None | N/A | 1.69 | 1.46 | None | N/A |
| 70 | None | N/A | None | N/A | None | N/A | None | N/A |

Case 5-EQ8-C2-AL 80% Source + Future Caps, Alternat Loac

| Load Level (%) | Case 5 (+0 Miles) | | Case 5B (+5 Miles) | | Case 5C (+10 Miles) | | Case 5A (+20 Miles) | |
|----------------|-------------------|------|--------------------|------|---------------------|------|---------------------|------|
| | 2C | 6C | 2C | 6C | 2C | 6C | 2C | 6C |
| 30 | 1.61 | 1.34 | 1.91 | 1.66 | 2.08 | 1.60 | 1.86 | 1.39 |
| 40 | None | N/A | 1.78 | 1.58 | 1.88 | 1.45 | 1.75 | 1.37 |
| 50 | None | N/A | 1.68 | 1.50 | 1.76 | 1.38 | 1.66 | 1.49 |
| 70 | None | N/A | None | N/A | None | N/A | None | N/A |

Case 5-F2 Suc. 0 fault 3.5 Cycle Open

| Load Level (%) | Case 5 (+0 Miles) | | Case 5B (+5 Miles) | | Case 5C (+10 Miles) | | Case 5A (+20 Miles) | |
|----------------|-------------------|------|--------------------|------|---------------------|------|---------------------|------|
| | 2C | 6C | 2C | 6C | 2C | 6C | 2C | 6C |
| 30 | None | N/A | 2.08 | 1.50 | 2.04 | 1.43 | 1.88 | 1.21 |
| 40 | 1.66 | 1.20 | 1.93 | 1.40 | 1.91 | 1.36 | 1.80 | 1.20 |
| 50 | None | N/A | 1.64 | 1.28 | 1.67 | 1.25 | 1.64 | 1.16 |
| 70 | None | N/A | None | N/A | None | N/A | None | N/A |

Case 5-F3 Suc. 0 fault 4 Cycle Open

| Load Level (%) | Case 5 (+0 Miles) | | Case 5B (+5 Miles) | | Case 5C (+10 Miles) | | Case 5A (+20 Miles) | |
|----------------|-------------------|------|--------------------|------|---------------------|------|---------------------|------|
| | 2C | 6C | 2C | 6C | 2C | 6C | 2C | 6C |
| 30 | 1.68 | 1.18 | 2.07 | 1.59 | 2.00 | 1.58 | 1.94 | 1.20 |
| 40 | None | N/A | 1.95 | 1.51 | 1.64 | 1.32 | 1.84 | 1.19 |
| 50 | None | N/A | 1.70 | 1.33 | None | N/A | 1.66 | 1.18 |
| 70 | None | N/A | None | N/A | None | N/A | None | N/A |

| File | SWITCHING EVENT | | SYSTEM CONDITIONS | | | | MAXIMUM TOV | | TOV | | | | | | | | | |
|-----------------------------|-----------------|------------------|-------------------|------|-------------|-------------|-------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | TYPE | LOCATION | LOAD LEVEL | CAPS | SHUNT REACS | LINE OUT | 2C | LOCATION | PT345 | PT115 | NW345 | NW115 | ED345 | BK345 | ESHOR | FB115 | STONY | ROCKY |
| | | | | | | | | | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C |
| Case5_F4.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | | | 1.64 | NW345 | | | | | 1.64 | | | | |
| Case5_F5_lo1.atp | 3 Phase | Singer | 30 | 0 | 500 | PT345-LM345 | 1.64 | PT345 | 1.64 | | | | | 1.61 | | | | |
| Case5_F4_lo4.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | LM345-PLVAL | 1.63 | NW345 | | | | | | 1.63 | | | | |
| Case5_F5_lo4.atp | 3 Phase | Singer | 30 | 0 | 500 | LM345-PLVAL | 1.66 | ED345 | | | | | 1.66 | 1.65 | | | | |
| Case5-EQ1-C2_F4.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | | 1.63 | NW345 | | | | | | 1.63 | | | | |
| Case5-EQ1-C2_F5_lo1.atp | 3 Phase | Singer | 30 | 0 | 500 | PT345-LM345 | 1.62 | PT345 | 1.62 | | | | | | | | | |
| Case5-EQ1-C2_F4_lo4.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | LM345-PLVAL | 1.61 | NW345 | | | | | | 1.61 | | | | |
| Case5-EQ1-C2_F5_lo4.atp | 3 Phase | Singer | 30 | 0 | 500 | LM345-PLVAL | 1.64 | ED345 | | | | | | 1.63 | | | | |
| Case5-EQ8_F4.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | | 1.61 | NW345 | | | | | | 1.61 | | | | |
| Case5-EQ8-C2_F4.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | | 1.61 | NW345 | | | | | | 1.61 | | | | |
| Case5-EQ8-C2-AL_F5.atp | 3 Phase | Singer | 30 | 0 | 500 | | 1.61 | ESHOR | | | | | | 1.61 | | | | |
| Case5-EQ9_F4.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | | 1.62 | NW345 | | | | | | 1.62 | | | | |
| Case5-EQ9_F5_lo4.atp | 3 Phase | Singer | 30 | 0 | 500 | LM345-PLVAL | 1.62 | ED345 | | | | | | 1.61 | | | | |
| Case5-EQ9-AL_F4.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | | 1.62 | NW345 | | | | | | 1.62 | | | | |
| Case5-EQ9-AL_F5_lo4.atp | 3 Phase | Singer | 30 | 0 | 500 | LM345-PLVAL | 1.62 | ED345 | | | | | | 1.61 | | | | |
| Case5-eq9-c2_F4.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | | 1.62 | NW345 | | | | | | 1.62 | | | | |
| Case5-eq9-c2_F5_lo4.atp | 3 Phase | Singer | 30 | 0 | 500 | LM345-PLVAL | 1.62 | ED345 | | | | | | 1.61 | | | | |
| Case5-F3_F6_lo1.atp | 3 Phase | Norwalk 345 | 30 | 0 | 500 | PT345-LM345 | 1.68 | PT345 | 1.68 | | | | | 1.65 | | | | |
| Case5B-EQ1-C2-AL_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 920 | PT345-LM345 | 1.74 | NW345 | 1.70 | 1.60 | | | 1.74 | 1.73 | | | | |
| Case5B-EQ1-C2-AL_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 920 | BK345-ED345 | 1.68 | ED345 | 1.62 | | | | 1.68 | 1.68 | | | | |
| Case5B-EQ1-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.76 | NW345 | | | | | 1.76 | 1.72 | | | | |
| Case5B-EQ8_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 500 | PT345-LM345 | 1.66 | NW345 | | | | | 1.66 | | | | | |
| Case5B-EQ8_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 500 | BK345-ED345 | 1.63 | ED345 | | | | | | | | | | |
| Case5B-EQ8_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 1.66 | ED345 | | | | | 1.65 | 1.66 | | | | |
| Case5B-EQ8-c2_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 500 | PT345-LM345 | 1.84 | NW345 | 1.77 | 1.70 | | | 1.84 | 1.83 | | | 1.68 | 1.63 |
| Case5B-EQ8-c2_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 500 | BK345-ED345 | 1.75 | NW345 | 1.70 | 1.68 | | | 1.75 | 1.74 | | | 1.69 | |
| Case5B-EQ8-c2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 1.91 | NW345 | | | | | 1.91 | 1.63 | 1.88 | | | |
| Case5B-EQ8-c2_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 500 | LM345-PLVAL | 1.65 | ESHOR | | | | | | 1.65 | | | | |
| Case5B-EQ8-C2-AL_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 500 | PT345-LM345 | 1.84 | NW345 | 1.77 | 1.70 | | | 1.84 | 1.83 | | | 1.68 | 1.63 |
| Case5B-EQ8-C2-AL_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 500 | BK345-ED345 | 1.75 | NW345 | 1.70 | 1.68 | | | 1.75 | 1.74 | | | 1.69 | |
| Case5B-EQ8-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 1.91 | NW345 | | | | | 1.91 | 1.63 | 1.88 | | | |
| Case5B-EQ8-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 500 | LM345-PLVAL | 1.65 | ESHOR | | | | | | 1.65 | | | | |
| Case5B-EQ9-AL_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 650 | PT345-LM345 | 1.68 | NW345 | 1.63 | | | | 1.68 | 1.68 | | | | |
| Case5B-EQ9-AL_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 650 | BK345-ED345 | 1.62 | NW345 | | | | | 1.62 | | | | | |
| Case5B-EQ9-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 1.72 | NW345 | | | | | 1.72 | 1.69 | | | | |
| Case5B-EQ9-C2-AL_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 920 | PT345-LM345 | 1.68 | NW345 | 1.63 | | | | 1.68 | 1.68 | | | | |
| Case5B-EQ9-C2-AL_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 920 | BK345-ED345 | 1.62 | NW345 | | | | | 1.62 | | | | | |
| Case5B-EQ9-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.72 | NW345 | | | | | 1.72 | 1.69 | | | | |
| Case5B-F2_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 500 | PT345-LM345 | 1.82 | PT345 | 1.82 | 1.77 | | | 1.78 | 1.78 | | | 1.70 | |
| Case5B-F2_F3_lo1.atp | 1 Phase | East Devon | 30 | 0 | 500 | PT345-LM345 | 1.72 | ED345 | 1.67 | | | | 1.69 | 1.72 | | | | |
| Case5B-F2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 2.08 | ED345 | | | | | 2.07 | 1.62 | 2.08 | | | |
| Case5B-F2_F3_lo4.atp | 1 Phase | East Devon | 30 | 0 | 500 | LM345-PLVAL | 1.61 | ED345 | | | | | | 1.61 | | | | |
| Case5B-F3_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 500 | PT345-LM345 | 1.82 | PT345 | 1.82 | 1.76 | | | 1.78 | 1.80 | | | 1.74 | 1.62 |
| Case5B-F3_F3_lo1.atp | 1 Phase | East Devon | 30 | 0 | 500 | PT345-LM345 | 1.71 | ED345 | 1.67 | | | | 1.68 | 1.71 | | | | |
| Case5B-F3_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 500 | BK345-ED345 | 1.60 | ED345 | | | | | | 1.60 | | | | |
| Case5B-F3_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 2.07 | ED345 | | | | | 2.02 | 2.07 | | | | |
| Case5B-F3_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 500 | LM345-PLVAL | 1.63 | ED345 | | | | | 1.61 | 1.63 | | | | |
| Case5C_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 650 | PT345-LM345 | 1.77 | ED345 | 1.73 | 1.67 | | | 1.76 | 1.77 | | | 1.63 | |
| Case5C_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 650 | BK345-ED345 | 1.70 | ED345 | 1.65 | | | | 1.67 | 1.70 | | | | |

Table 2 - 2C Violations

| File | SWITCHING EVENT | | SYSTEM CONDITIONS | | | | MAXIMUM TOV | | TOV | | | | | | | | | |
|-----------------------------|-----------------|------------------|-------------------|------|-------------|-------------|-------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | LOAD LEVEL | CAPS | SHUNT REACS | LINE OUT | 2C | LOCATION | PT345 | PT115 | NW345 | NW115 | ED345 | BK345 | ESHOR | FB115 | STONY | ROCKY |
| | | | | | | | | | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C |
| Case5C_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 2.10 | NW345 | | | 2.10 | 1.70 | 2.09 | | | | | |
| Case5C_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 650 | LM345-PLVAL | 1.68 | NW345 | | | 1.68 | | 1.65 | | | | | |
| Case5C-EQ1-C2_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 920 | PT345-LM345 | 1.65 | NW345 | 1.63 | | 1.65 | | 1.65 | | | | | |
| Case5C-EQ1-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.97 | NW345 | | | 1.97 | 1.62 | 1.96 | | | | | |
| Case5C-EQ1-C2-AL_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 920 | PT345-LM345 | 1.76 | ED345 | 1.69 | | 1.69 | | 1.76 | | | | | |
| Case5C-EQ1-C2-AL_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 920 | BK345-ED345 | 1.61 | STONY | | | | | | | | | 1.61 | |
| Case5C-EQ1-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 2.04 | ED345 | | | 2.01 | | 2.04 | | | | | |
| Case5C-EQ1-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 920 | LM345-PLVAL | 1.85 | ED345 | 1.64 | | 1.81 | | 1.85 | 1.63 | | | | |
| Case5C-EQ8_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 650 | PT345-LM345 | 1.69 | ED345 | 1.65 | | 1.68 | | 1.69 | | | | | |
| Case5C-EQ8_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 650 | BK345-ED345 | 1.62 | ED345 | | | | | 1.62 | | | | | |
| Case5C-EQ8_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 2.02 | NW345 | | | 2.02 | 1.66 | 2.00 | | | | | |
| Case5C-EQ8_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 650 | LM345-PLVAL | 1.66 | NW345 | | | 1.66 | | 1.64 | | | | | |
| Case5C-EQ8-C2_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 650 | PT345-LM345 | 1.69 | ED345 | 1.65 | | 1.68 | | 1.69 | | | | | |
| Case5C-EQ8-C2_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 650 | BK345-ED345 | 1.62 | ED345 | | | | | 1.62 | | | | | |
| Case5C-EQ8-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 2.02 | NW345 | | | 2.02 | 1.66 | 2.00 | | | | | |
| Case5C-EQ8-C2_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 650 | LM345-PLVAL | 1.66 | NW345 | | | 1.66 | | 1.64 | | | | | |
| Case5C-EQ8-C2-AL_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 650 | PT345-LM345 | 1.75 | ED345 | 1.74 | | 1.70 | | 1.75 | | | | | |
| Case5C-EQ8-C2-AL_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 650 | BK345-ED345 | 1.67 | STONY | | | | | 1.61 | | | | 1.67 | 1.66 |
| Case5C-EQ8-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 2.08 | NW345 | | | 2.08 | 1.64 | 2.07 | | | | | |
| Case5C-EQ8-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 650 | LM345-PLVAL | 1.90 | ED345 | 1.71 | 1.63 | 1.86 | | 1.90 | 1.69 | | | | |
| Case5C-EQ9_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 650 | PT345-LM345 | 1.64 | NW345 | 1.61 | | 1.64 | | 1.63 | | | | | |
| Case5C-EQ9_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 1.97 | NW345 | | | 1.97 | 1.63 | 1.95 | | | | | |
| Case5C-EQ9-AL_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 650 | PT345-LM345 | 1.73 | ED345 | 1.68 | | 1.68 | | 1.73 | | | | | |
| Case5C-EQ9-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 2.03 | ED345 | | | 2.01 | | 2.03 | | | | | |
| Case5C-EQ9-AL_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 650 | LM345-PLVAL | 1.84 | ED345 | 1.65 | | 1.80 | | 1.84 | 1.65 | | | | |
| Case5C-EQ9-C2_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 920 | PT345-LM345 | 1.64 | NW345 | 1.61 | | 1.64 | | 1.63 | | | | | |
| Case5C-EQ9-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.97 | NW345 | | | 1.97 | 1.63 | 1.95 | | | | | |
| Case5C-EQ9-C2-AL_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 920 | PT345-LM345 | 1.73 | ED345 | 1.68 | | 1.68 | | 1.73 | | | | | |
| Case5C-EQ9-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 2.03 | ED345 | | | 2.01 | | 2.03 | | | | | |
| Case5C-EQ9-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 920 | LM345-PLVAL | 1.84 | ED345 | 1.65 | | 1.80 | | 1.84 | 1.65 | | | | |
| Case5C-F2_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 500 | PT345-LM345 | 1.67 | ED345 | 1.65 | | 1.66 | | 1.67 | | | | | |
| Case5C-F2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 2.04 | ED345 | | | 2.04 | 1.60 | 2.04 | | | | | |
| Case5C-F3_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 500 | PT345-LM345 | 1.65 | ED345 | 1.61 | | 1.63 | | 1.65 | | | | | |
| Case5C-F3_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 2.00 | ED345 | | | 1.98 | | 2.00 | | | | | |
| Case5A_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 500 | PT345-LM345 | 1.64 | STONY | | | | | | | | | 1.64 | |
| Case5A_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 500 | BK345-ED345 | 1.67 | PT345 | 1.67 | 1.65 | | | | | | | 1.66 | |
| Case5A_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 1.89 | NW345 | | | 1.62 | 1.89 | 1.88 | | | | 1.69 | 1.76 |
| Case5A_F4_lo3.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | NE138-NO138 | 1.63 | NW345 | | | | 1.63 | | | | | | |
| Case5A_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 500 | LM345-PLVAL | 1.84 | ED345 | 1.67 | 1.61 | 1.78 | | 1.84 | | | | | |
| Case5A-EQ1-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.70 | ED345 | | | 1.64 | | 1.70 | | | | | |
| Case5A-EQ1-C2_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 920 | LM345-PLVAL | 1.61 | ED345 | | | | | 1.61 | | | | | |
| Case5A-EQ1-C2-AL_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 920 | PT345-LM345 | 1.84 | ESHOR | | | | | | 1.84 | | | | |
| Case5A-EQ1-C2-AL_F2_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.77 | ED345 | | | 1.71 | | 1.77 | | | | | 1.63 |
| Case5A-EQ1-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 920 | LM345-PLVAL | 1.80 | ESHOR | | | 1.65 | | 1.74 | 1.80 | | | | |
| Case5A-EQ8_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.75 | ED345 | | | 1.62 | 1.70 | 1.75 | | | | 1.65 | 1.68 |
| Case5A-EQ8_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 920 | LM345-PLVAL | 1.70 | ED345 | | | | 1.65 | 1.70 | | | | | |
| Case5A-EQ8-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.74 | ED345 | | | 1.62 | 1.70 | 1.74 | | | | 1.65 | 1.68 |
| Case5A-EQ8-C2_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 920 | LM345-PLVAL | 1.69 | ED345 | | | 1.64 | | 1.69 | | | | | |
| Case5A-EQ8-C2-AL_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 920 | PT345-LM345 | 1.84 | ESHOR | | | | | | 1.84 | | | | |

Table 2 - 2C Violations

| File | SWITCHING EVENT | | SYSTEM CONDITIONS | | | | MAXIMUM TOV | | TOV | | | | | | | | | |
|-----------------------------|-----------------|------------------|-------------------|------|-------------|-------------|-------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | TYPE | LOCATION | LOAD LEVEL | CAPS | SHUNT REACS | LINE OUT | 2C | LOCATION | PT345 | PT115 | NW345 | NW115 | ED345 | BK345 | ESHOR | FB115 | STONY | ROCKY |
| | | | | | | | | | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C |
| Case5A-EQ8-C2-AL_F4_lo1.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | PT345-LM345 | 1.61 | ROCKY | | | | | | | | | | 1.61 |
| Case5A-EQ8-C2-AL_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 920 | BK345-ED345 | 1.61 | STONY | | | | | | | | | 1.61 | |
| Case5A-EQ8-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.86 | ED345 | | | 1.79 | | 1.86 | | | | 1.63 | 1.83 |
| Case5A-EQ8-C2-AL_F6_lo2.atp | 3 Phase Bt | Norwalk 345 | 30 | 0 | 920 | BK345-ED345 | 1.63 | NW345 | | | 1.63 | | 1.62 | | | | | |
| Case5A-EQ8-C2-AL_F7_lo2.atp | 3 Phase Bt | Plumtree 345 | 30 | 0 | 920 | BK345-ED345 | 1.66 | ED345 | | | 1.66 | | 1.66 | | | | | |
| Case5A-EQ8-C2-AL_F1_lo4.atp | 3 Phase | Plumtree | 30 | 0 | 920 | LM345-PLVAL | 1.73 | ROCKY | 1.71 | | 1.72 | | 1.68 | | | | | 1.73 |
| Case5A-EQ8-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 920 | LM345-PLVAL | 1.82 | ESHOR | | | 1.69 | | 1.77 | 1.82 | | | | 1.68 |
| Case5A-EQ8-C2-AL_F4_lo4.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | LM345-PLVAL | 1.66 | ED345 | | | 1.65 | | 1.66 | | | | | 1.62 |
| Case5A-EQ8-C2-AL_F6_lo4.atp | 3 Phase Bt | Norwalk 345 | 30 | 0 | 920 | LM345-PLVAL | 1.68 | ED345 | | | 1.68 | | 1.68 | | | | | |
| Case5A-EQ8-C2-AL_F7_lo4.atp | 3 Phase Bt | Plumtree 345 | 30 | 0 | 920 | LM345-PLVAL | 1.65 | ROCKY | | | 1.64 | | 1.62 | | | | | 1.65 |
| Case5A-EQ9_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 1.75 | ED345 | | | 1.69 | | 1.75 | | | 1.60 | | 1.68 |
| Case5A-EQ9_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 650 | LM345-PLVAL | 1.71 | ED345 | | | 1.67 | | 1.71 | | | | | |
| Case5A-EQ9_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 650 | PT345-LM345 | 1.90 | ESHOR | | | | | | 1.90 | | | | |
| Case5A-EQ9_F4_lo1.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | PT345-LM345 | 1.61 | ROCKY | | | | | | | | | | 1.61 |
| Case5A-EQ9_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 650 | BK345-ED345 | 1.61 | PT115 | 1.61 | | | | | | | | | |
| Case5A-EQ9_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 1.87 | ED345 | | | 1.80 | | 1.87 | | | | | 1.78 |
| Case5A-EQ9_F6_lo2.atp | 3 Phase Bt | Norwalk 345 | 30 | 0 | 650 | BK345-ED345 | 1.61 | ED345 | | | | | 1.61 | | | | | |
| Case5A-EQ9_F7_lo2.atp | 3 Phase Bt | Plumtree 345 | 30 | 0 | 650 | BK345-ED345 | 1.64 | NW345 | | | 1.64 | | 1.63 | | | | | |
| Case5A-EQ9_F1_lo4.atp | 3 Phase | Plumtree | 30 | 0 | 650 | LM345-PLVAL | 1.68 | PT345 | 1.68 | | 1.68 | | 1.66 | | | | | 1.64 |
| Case5A-EQ9_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 650 | LM345-PLVAL | 1.86 | ESHOR | | | 1.74 | | 1.84 | 1.86 | | 1.60 | | 1.67 |
| Case5A-EQ9_F6_lo4.atp | 3 Phase Bt | Norwalk 345 | 30 | 0 | 650 | LM345-PLVAL | 1.63 | NW345 | | | 1.63 | | 1.63 | | | | | |
| Case5A-EQ9-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.75 | ED345 | | | 1.69 | | 1.75 | | | 1.60 | | 1.68 |
| Case5A-EQ9-C2_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 920 | LM345-PLVAL | 1.71 | ED345 | | | 1.67 | | 1.71 | | | | | |
| Case5A-EQ9-C2-AL_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 920 | PT345-LM345 | 1.90 | ESHOR | | | | | | 1.90 | | | | |
| Case5A-EQ9-C2-AL_F4_lo1.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | PT345-LM345 | 1.61 | ROCKY | | | | | | | | | | 1.61 |
| Case5A-EQ9-C2-AL_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 920 | BK345-ED345 | 1.61 | PT115 | 1.61 | | | | | | | | | |
| Case5A-EQ9-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.87 | ED345 | | | 1.80 | | 1.87 | | | | | 1.78 |
| Case5A-EQ9-C2-AL_F6_lo2.atp | 3 Phase Bt | Norwalk 345 | 30 | 0 | 920 | BK345-ED345 | 1.61 | ED345 | | | | | 1.61 | | | | | |
| Case5A-EQ9-C2-AL_F7_lo2.atp | 3 Phase Bt | Plumtree 345 | 30 | 0 | 920 | BK345-ED345 | 1.64 | NW345 | | | 1.64 | | 1.63 | | | | | |
| Case5A-EQ9-C2-AL_F1_lo4.atp | 3 Phase | Plumtree | 30 | 0 | 920 | LM345-PLVAL | 1.68 | PT345 | 1.68 | | 1.68 | | 1.66 | | | | | 1.64 |
| Case5A-EQ9-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 920 | LM345-PLVAL | 1.86 | ESHOR | | | 1.74 | | 1.84 | 1.86 | | 1.60 | | 1.67 |
| Case5A-EQ9-C2-AL_F6_lo4.atp | 3 Phase Bt | Norwalk 345 | 30 | 0 | 920 | LM345-PLVAL | 1.63 | NW345 | | | 1.63 | | 1.63 | | | | | |
| Case5A-F2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 1.88 | ED345 | | | 1.86 | | 1.88 | | | | | |
| Case5A-F3_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 1.94 | ED345 | | | 1.90 | | 1.94 | | | | | |
| Case5_F4.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | | 1.61 | NW345 | | | | | 1.61 | | | | | |
| Case5_F5_lo1.atp | 3 Phase | Singer | 40 | 0 | 500 | PT345-LM345 | 1.64 | ED345 | 1.62 | | | | 1.64 | | | | | |
| Case5_F5_lo2.atp | 3 Phase | Singer | 40 | 0 | 500 | BK345-ED345 | 1.60 | NW345 | | | | | 1.60 | | | | | |
| Case5_F5_lo4.atp | 3 Phase | Singer | 40 | 0 | 500 | LM345-PLVAL | 1.65 | ED345 | | | | | 1.64 | | | | | |
| Case5-F2_F4_lo3.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | NE138-NO138 | 1.66 | NW345 | | | | | 1.66 | | | | | |
| Case5B-EQ1-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.64 | NW345 | | | | | 1.64 | | | | | |
| Case5B-EQ8-c2_F2_lo1.atp | 3 Phase | East Devon | 40 | 0 | 500 | PT345-LM345 | 1.63 | ED345 | | | | | 1.60 | | | | | |
| Case5B-EQ8-c2_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | BK345-ED345 | 1.78 | NW345 | | | | | 1.78 | | | | | 1.74 |
| Case5B-EQ8-C2-AL_F2_lo1.atp | 3 Phase | East Devon | 40 | 0 | 500 | PT345-LM345 | 1.63 | ED345 | | | | | 1.60 | | | | | 1.63 |
| Case5B-EQ8-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | BK345-ED345 | 1.78 | NW345 | | | | | 1.78 | | | | | 1.74 |
| Case5B-EQ9-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 650 | BK345-ED345 | 1.68 | NW345 | | | | | 1.68 | | | | | 1.65 |
| Case5B-EQ9-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.68 | NW345 | | | | | 1.68 | | | | | 1.65 |
| Case5B-F2_F2_lo1.atp | 3 Phase | East Devon | 40 | 0 | 500 | PT345-LM345 | 1.68 | PT345 | 1.68 | | 1.65 | | 1.65 | | | | | |
| Case5B-F2_F3_lo1.atp | 1 Phase | East Devon | 40 | 0 | 500 | PT345-LM345 | 1.60 | ED345 | | | | | 1.60 | | | | | |
| Case5B-F2_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | BK345-ED345 | 1.93 | ED345 | | | 1.92 | | 1.93 | | | | | |

Table 2 - 2C Violations

| File | SWITCHING EVENT | | SYSTEM CONDITIONS | | | | MAXIMUM TOV | | TOV | | | | | | | | | |
|-----------------------------|-----------------|------------------|-------------------|------|-------------|-------------|-------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | TYPE | LOCATION | LOAD LEVEL | CAPS | SHUNT REACS | LINE OUT | 2C | LOCATION | PT345 | PT115 | NW345 | NW115 | ED345 | BK345 | ESHOR | FB115 | STONY | ROCKY |
| | | | | | | | | | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C |
| Case5B-F3_F2_lo1.atp | 3 Phase | East Devon | 40 | 0 | 500 | PT345-LM345 | 1.70 | PT345 | 1.70 | 1.66 | 1.68 | | 1.68 | | | | 1.62 | |
| Case5B-F3_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | BK345-ED345 | 1.95 | ED345 | | | 1.90 | | 1.95 | | | | | |
| Case5C_F2_lo1.atp | 3 Phase | East Devon | 40 | 0 | 650 | PT345-LM345 | 1.61 | ED345 | | | 1.60 | | 1.61 | | | | | |
| Case5C_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 650 | BK345-ED345 | 1.91 | ED345 | | | 1.91 | | 1.91 | | | | | |
| Case5C-EQ1-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.88 | NW345 | | | 1.88 | | 1.87 | | | | | |
| Case5C-EQ1-C2-AL_F2_lo1.atp | 3 Phase | East Devon | 40 | 0 | 920 | PT345-LM345 | 1.61 | NW345 | | | 1.61 | | 1.60 | | | | | |
| Case5C-EQ1-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.94 | NW345 | | | 1.94 | | 1.91 | | | | | |
| Case5C-EQ1-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 40 | 0 | 920 | LM345-PLVAL | 1.64 | ED345 | | | 1.63 | | 1.64 | | | | | |
| Case5C-EQ8_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 650 | BK345-ED345 | 1.92 | NW345 | | | 1.92 | | 1.88 | | | | | |
| Case5C-EQ8-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 650 | BK345-ED345 | 1.92 | NW345 | | | 1.92 | | 1.88 | | | | | |
| Case5C-EQ8-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 650 | BK345-ED345 | 1.88 | NW345 | | | 1.88 | | 1.88 | | | | | |
| Case5C-EQ8-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 40 | 0 | 650 | LM345-PLVAL | 1.67 | ED345 | | | 1.65 | | 1.67 | | | | | |
| Case5C-EQ9_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 650 | BK345-ED345 | 1.82 | NW345 | | | 1.82 | | 1.78 | | | | | |
| Case5C-EQ9-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 650 | BK345-ED345 | 1.88 | NW345 | | | 1.88 | | 1.87 | | | | | |
| Case5C-EQ9-AL_F2_lo4.atp | 3 Phase | East Devon | 40 | 0 | 650 | LM345-PLVAL | 1.64 | ED345 | | | 1.64 | | 1.64 | | | | | |
| Case5C-EQ9-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.82 | NW345 | | | 1.82 | | 1.78 | | | | | |
| Case5C-EQ9-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.88 | NW345 | | | 1.88 | | 1.87 | | | | | |
| Case5C-EQ9-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 40 | 0 | 920 | LM345-PLVAL | 1.64 | ED345 | | | 1.64 | | 1.64 | | | | | |
| Case5C-F2_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | BK345-ED345 | 1.91 | ED345 | | | 1.89 | | 1.91 | | | | | |
| Case5C-F3_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | BK345-ED345 | 1.86 | ED345 | | | 1.85 | | 1.86 | | | | | |
| Case5A_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | BK345-ED345 | 1.74 | NW345 | | | 1.74 | | 1.72 | | | | | 1.64 |
| Case5A_F2_lo4.atp | 3 Phase | East Devon | 40 | 0 | 500 | LM345-PLVAL | 1.66 | ED345 | | | 1.64 | | 1.66 | | | | | |
| Case5A-EQ1-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.70 | ED345 | | | 1.68 | | 1.70 | | | | | |
| Case5A-EQ8_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.63 | NW345 | | | 1.63 | | 1.62 | | | | | |
| Case5A-EQ8-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.63 | NW345 | | | 1.63 | | 1.62 | | | | | |
| Case5A-EQ8-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.75 | ED345 | | | 1.70 | | 1.75 | | | | | |
| Case5A-EQ9_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 650 | BK345-ED345 | 1.68 | ED345 | | | 1.63 | | 1.68 | | | | | |
| Case5A-EQ9_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 650 | BK345-ED345 | 1.77 | ED345 | | | 1.71 | | 1.77 | | | | | 1.61 |
| Case5A-EQ9_F2_lo4.atp | 3 Phase | East Devon | 40 | 0 | 650 | LM345-PLVAL | 1.61 | ED345 | | | 1.61 | | 1.61 | | | | | |
| Case5A-EQ9-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.68 | ED345 | | | 1.63 | | 1.68 | | | | | |
| Case5A-EQ9-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.77 | ED345 | | | 1.71 | | 1.77 | | | | | 1.61 |
| Case5A-EQ9-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 40 | 0 | 920 | LM345-PLVAL | 1.61 | ED345 | | | 1.61 | | 1.61 | | | | | |
| Case5A-F2_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | BK345-ED345 | 1.80 | ED345 | | | 1.79 | | 1.80 | | | | | |
| Case5A-F3_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | BK345-ED345 | 1.84 | ED345 | | | 1.81 | | 1.84 | | | | | |
| Case5B-EQ1-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 434 | 1110 | BK345-ED345 | 1.65 | ED345 | | | 1.63 | | 1.68 | | | | | |
| Case5B-EQ8-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 434 | 690 | BK345-ED345 | 1.68 | ED345 | | | 1.65 | | 1.68 | | | | | |
| Case5B-EQ9-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 434 | 1110 | BK345-ED345 | 1.67 | ED345 | | | 1.63 | | 1.67 | | | | | |
| Case5B-F2_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 302 | 690 | BK345-ED345 | 1.64 | ED345 | | | 1.64 | | 1.64 | | | | | |
| Case5B-F3_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 302 | 690 | BK345-ED345 | 1.70 | ED345 | | | 1.66 | | 1.70 | | | | | |
| Case5C_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 302 | 840 | BK345-ED345 | 1.70 | NW345 | | | 1.70 | | 1.69 | | | | | |
| Case5C-EQ1-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 434 | 1110 | BK345-ED345 | 1.64 | NW345 | | | 1.64 | | 1.64 | | | | | |
| Case5C-EQ1-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 434 | 1110 | BK345-ED345 | 1.72 | ED345 | | | 1.71 | | 1.72 | | | | | |
| Case5C-EQ8_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 302 | 840 | BK345-ED345 | 1.69 | ED345 | | | 1.67 | | 1.69 | | | | | |
| Case5C-EQ8-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 434 | 840 | BK345-ED345 | 1.69 | ED345 | | | 1.68 | | 1.69 | | | | | |
| Case5C-EQ8-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 434 | 840 | BK345-ED345 | 1.76 | ED345 | | | 1.73 | | 1.76 | | | | | |
| Case5C-EQ9-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 302 | 840 | BK345-ED345 | 1.80 | ED345 | | | 1.79 | | 1.80 | | | | | |
| Case5C-EQ9-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 434 | 1110 | BK345-ED345 | 1.63 | NW345 | | | 1.63 | | 1.63 | | | | | |
| Case5C-EQ9-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 434 | 1110 | BK345-ED345 | 1.69 | ED345 | | | 1.68 | | 1.69 | | | | | |
| Case5C-F2_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 302 | 690 | BK345-ED345 | 1.67 | ED345 | | | 1.62 | | 1.67 | | | | | |

Table 2 - 2C Violations

| File | SWITCHING EVENT | | SYSTEM CONDITIONS | | | | MAXIMUM TOV | | TOV | | | | | | | | | |
|-----------------------------|-----------------|------------------|-------------------|------|-------|-------------|-------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | LOAD | CAPS | SHUNT | LINE | 2C | LOCATION | PT345 | PT115 | NW345 | NW115 | ED345 | BK345 | ESHOR | FB115 | STONY | ROCKY |
| | LEVEL | REACS | OUT | | 2C | 2C | | | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | 2C | |
| Case5C-F3_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 302 | 690 | BK345-ED345 | 1.64 | ED345 | | | 1.62 | | 1.64 | | | | | |
| Case5A-EQ8-C2-AL_F4_lo4.atp | 3 Phase | Norwalk Junction | 50 | 434 | 1110 | LM345-PLVAL | 1.66 | ROCKY | | | | | | | | | | 1.66 |
| Case5A-EQ9_F4_lo4.atp | 3 Phase | Norwalk Junction | 50 | 302 | 840 | LM345-PLVAL | 1.66 | STONY | | | | | | | | | 1.66 | 1.63 |
| Case5A-EQ9-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 434 | 1110 | BK345-ED345 | 1.60 | ED345 | | | | | 1.60 | | | | | |
| Case5A-EQ9-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 50 | 434 | 1110 | LM345-PLVAL | 1.61 | ESHOR | | | | | | 1.61 | | | | |
| Case5A-EQ9-C2-AL_F4_lo4.atp | 3 Phase | Norwalk Junction | 50 | 434 | 1110 | LM345-PLVAL | 1.61 | ROCKY | | | | | | | | | | 1.61 |
| Case5A-F2_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 302 | 690 | BK345-ED345 | 1.64 | NW345 | | | 1.64 | | 1.63 | | | | | |
| Case5A-F3_F4_lo2.atp | 3 Phase | Norwalk Junction | 50 | 302 | 690 | BK345-ED345 | 1.66 | ED345 | | | 1.63 | | 1.66 | | | | | |
| Case5_F4_lo1.atp | 3 Phase | Norwalk Junction | 70 | 1249 | 900 | PT345-LM345 | 1.70 | ROCKY | | | | | | | | | | 1.70 |
| Case5-EQ8_F4_lo1.atp | 3 Phase | Norwalk Junction | 70 | 1275 | 900 | PT345-LM345 | 1.64 | ROCKY | | | | | | | | | | 1.64 |
| Case5C-EQ9-AL_F4_lo4.atp | 3 Phase | Norwalk Junction | 70 | 1275 | 1050 | LM345-PLVAL | 1.62 | ROCKY | | | | | | | | | | 1.62 |
| Case5A_F4_lo1.atp | 3 Phase | Norwalk Junction | 70 | 1249 | 900 | PT345-LM345 | 1.64 | ROCKY | | | | | | | | | | 1.64 |
| Case5A-EQ9_F4_lo4.atp | 3 Phase | Norwalk Junction | 70 | 1275 | 1050 | LM345-PLVAL | 1.63 | ROCKY | | | | | | | | | | 1.63 |

No. of TOVs: 40 17 170 11 157 0 16 0 22 35

Table 2 - 2C Violations

| File | SWITCHING EVENT | | SYSTEM CONDITIONS | | | | MAXIMUM TOV | | TOV | | | | | | | | | |
|-----------------------------|-----------------|------------------|-------------------|------|-------------|-------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | TYPE | LOCATION | LOAD LEVEL | CAPS | SHUNT REACS | LINE OUT | 6C | LOCATION | PT345 6C | PT115 6C | NW345 6C | NW115 6C | ED345 6C | BK345 6C | ESHOR 6C | FB115 6C | STONY 6C | ROCKY 6C |
| Case5B-EQ8_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 1.56 | ED345 | | | 1.56 | | 1.56 | | | | | |
| Case5B-EQ8-c2_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 500 | PT345-LM345 | 1.58 | NW345 | 1.56 | | 1.57 | | 1.58 | | | | | |
| Case5B-EQ8-c2_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 500 | BK345-ED345 | 1.56 | NW345 | | | 1.56 | | 1.56 | | | | | |
| Case5B-EQ8-c2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 1.66 | NW345 | | | 1.66 | | 1.66 | | | | | |
| Case5B-EQ8-C2-AL_F2_lo1.atp | 3 Phase | East Devon | 30 | 0 | 500 | PT345-LM345 | 1.58 | NW345 | 1.56 | | 1.57 | | 1.58 | | | | | |
| Case5B-EQ8-C2-AL_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 500 | BK345-ED345 | 1.56 | NW345 | | | 1.56 | | 1.56 | | | | | |
| Case5B-EQ8-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 1.66 | NW345 | | | 1.66 | | 1.66 | | | | | |
| Case5B-F3_F1_lo2.atp | 3 Phase | Plumtree | 30 | 0 | 500 | BK345-ED345 | 1.56 | ED345 | 1.56 | | | | | | | | | |
| Case5B-F3_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 1.59 | ED345 | | | 1.59 | | 1.59 | | | | | |
| Case5C_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 1.82 | NW345 | | | 1.82 | | 1.78 | | | | | |
| Case5C-EQ1-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.70 | NW345 | 1.56 | | 1.70 | | 1.65 | | | | | |
| Case5C-EQ1-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.65 | ED345 | | | 1.62 | | 1.65 | | | | | |
| Case5C-EQ1-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 920 | LM345-PLVAL | 1.56 | ED345 | | | | | 1.56 | | | | | |
| Case5C-EQ8_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 1.69 | NW345 | | | 1.69 | | 1.67 | | | | | |
| Case5C-EQ8-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 1.69 | NW345 | | | 1.69 | | 1.67 | | | | | |
| Case5C-EQ8-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 1.60 | NW345 | | | 1.56 | | 1.60 | | | | | |
| Case5C-EQ8-C2-AL_F2_lo4.atp | 3 Phase | East Devon | 30 | 0 | 650 | LM345-PLVAL | 1.59 | ED345 | | | 1.55 | | 1.59 | | | | | |
| Case5C-EQ9_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 1.66 | NW345 | | | 1.66 | | 1.63 | | | | | |
| Case5C-EQ9-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 650 | BK345-ED345 | 1.58 | ED345 | | | 1.56 | | 1.58 | | | | | |
| Case5C-EQ9-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.66 | NW345 | | | 1.66 | | 1.63 | | | | | |
| Case5C-EQ9-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 920 | BK345-ED345 | 1.58 | ED345 | | | 1.56 | | 1.58 | | | | | |
| Case5C-F3_F4_lo2.atp | 3 Phase | Norwalk Junction | 30 | 0 | 500 | BK345-ED345 | 1.58 | ED345 | | | 1.57 | | 1.58 | | | | | |
| Case5B-EQ8-c2_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | BK345-ED345 | 1.58 | NW345 | | | 1.58 | | 1.57 | | | | | |
| Case5B-EQ8-C2-AL_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 500 | BK345-ED345 | 1.58 | NW345 | | | 1.58 | | 1.57 | | | | | |
| Case5C_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 650 | BK345-ED345 | 1.67 | ED345 | | | 1.67 | | 1.64 | | | | | |
| Case5C-EQ1-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 920 | BK345-ED345 | 1.63 | NW345 | | | 1.63 | | 1.61 | | | | | |
| Case5C-EQ8_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 650 | BK345-ED345 | 1.61 | NW345 | | | 1.61 | | 1.60 | | | | | |
| Case5C-EQ8-C2_F4_lo2.atp | 3 Phase | Norwalk Junction | 40 | 0 | 650 | BK345-ED345 | 1.61 | NW345 | | | 1.61 | | 1.60 | | | | | |

No. of TOVs: 0 3 26 0 27 0 0 0 0 0

Table 3 - 6C Violations