

Efficiency Standard Comparison –
 NEMA TP-1 2002 vs.& DOE 10 CFR Part 431 – 10/12/2007

Efficiency Levels¹ for Liquid-Filled Distribution Transformers

| kVA | NEMA TP-1 Efficiency (%) | DOE 10 CFR Part 431 Efficiency (%) |
|-------|-----------------------------|---------------------------------------|
| 15 | 98.1 | 98.36 |
| 30 | 98.4 | 98.62 |
| 45 | 98.6 | 98.76 |
| 75 | 98.7 | 98.91 |
| 112.5 | 98.8 | 99.01 |
| 150 | 98.9 | 99.08 |
| 225 | 99.0 | 99.17 |
| 300 | 99.0 | 99.23 |
| 500 | 99.1 | 99.25 |
| 750 | 99.2 | 99.32 |
| 1000 | 99.2 | 99.36 |
| 1500 | 99.3 | 99.42 |
| 2000 | 99.4 | 99.46 |
| 2500 | 99.4 | 99.49 |

¹All efficiency values are at 50 percent of nameplate-rated load