MGM TRANSFORMER COMPANY

DID YOU KNOW ?

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... you can still sell TP-1 stock units even if customers ask for DOE2016?

MGM's TP-1 inventory has been manufactured within the DOE's specified limits and as such are 100% acceptable by the DOE.

Dry type transformers are subject to the Department of Energy's (DOE) efficiency standards. Transformers are highly efficient machines to begin with (with efficiency ranges greater than 98%), however, the federal government required an even higher efficiency due to CO2 Emissions and global warming concerns.

Efficiency comparison between DOE TP-1 and DOE 2016 Levels:

kVA	DOE TP-1	DOE 2016
15	97.00	97.89
30	97.50	98.23
45	97.70	98.40
75	98.00	98.60
112.5	98.20	98.74
150	98.30	98.83
225	98.50	98.94
300	98.60	99.02
500	98.80	99.14

It's clear to see that efficiency levels have increased from DOE TP-1 to DOE 2016. For those not familiar with transformer designs, these values hardly make a lot of difference. For example, a 75 kVA TP-1 is 98% efficient versus 98.6% for DOE 2016. What does 0.6 really mean in dollars though?

0.6% as illustrated below results in a weekly savings of $1.45 or a yearly savings of $75. It certainly saves a little money but considering that the base price of a 75kVA DOE-16 unit is nearly 50% more than its TP-1 counterpart the payback period can be as high as 10 years!

kVA	TP-1 η	DOE η	Loss TP-1 Watts	Loss DOE Watts	Energy for 8 Hour usage TP-1 kWHr	Energy for 8 Hour usage DOE kWHr	$ Spent per day (TP-1)	$ Spent Per day (DOE)	$ Saved Per day	Savings per week
75	98%	98.60%	1500	1050	12	8.4	$0.96	$0.67	$0.29	$1.45