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Mr. James Raba  
U.S. Department of Energy  
Office of Energy Efficiency and Renewable Energy  
Building Technologies Program  
1000 Independence Avenue SW  
Washington, DC 205585-0121

RE: Distribution Transformers Rulemaking  
Docket Number EE-2010-STD-0048 RIN 1904-AC04  
Submitted 4-10-12 via email

Mr. Raba,

I was planning to make the following closing comments at the DOE Public Meeting on February 23, 2012, but since the extended building evacuation caused the meeting to run well past the scheduled completion time I decided to submit my comments directly to you for the record.

Similar to the other committee members, I wish to applaud the DOE for establishing and administering the process of negotiated rulemaking. The quality of the proposed standards that were issued as the NOPR on February 10, 2012 is excellent and took full advantage of the hundreds of years of comprehensive transformer design and utility company expertise that was collectively represented on the committee.

Navigant did a commendable job in developing the first version of the Engineering Analysis, which was then greatly improved with input from the four multi-day meetings, numerous webinars, and countless phone calls with committee experts. This insured that the analysis was as accurate as possible for such a complicated subject. The committee came to a consensus for the MVDT superclass, but could not reach agreement on the LVDT and MVLT superclasses.

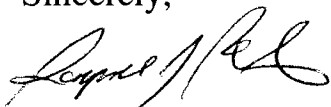
When the DOE issued the current final rule on transformer efficiency effective January 1, 2010 for pole and pad mounted MVLT, the mandatory efficiency levels were far in excess of what the industry experts proposed (TSL-2) and were even in

excess of the levels requested by the environmental advocates (TSL-4). The 2010 efficiency levels surprised all parties, but the DOE followed their charter and the engineering data and reached the correct conclusions. Transformer manufacturers have found the 2010 standard to be challenging to meet but they have adjusted their processes accordingly, and multiple design options and core materials continued to be available. During the initial part of the negotiated rulemaking process, the members of the committee representing manufacturers and end-users stated that the current 2010 MVLT DOE transformer efficiency standards should be kept unchanged, but moved off this position and developed the NEMA compromise as they worked to find middle ground in an effort to reach a negotiated settlement. The industry experts proposed and the DOE confirmed that approximately 5-10% increases over the stringent 2010 standard were still possible for most MVLT designs (excluding single-phase pole mounted units, as typified by design line 2). However, the environmental advocates, who got more than they requested in the 2010 ruling for liquid-filled single phase units, continued to lobby for higher efficiency levels. The final Navigant engineering analysis was very clear as presented in countless tables and charts that the NEMA proposed and DOE NOPR confirmed transformer efficiency levels were the proper levels to ensure M-3 and Amorphous are cost competitive core materials and thus the levels that will maximize LCC. There was no data presented in the Engineering analysis to support efficiency levels above the NOPR levels. Adopting the NEMA compromise as the Final Rule will allow the manufacturing members of the committee to continue to improve their products and processes, and when the standard automatically comes up for review five years after adoption, another detailed technical and market analysis can be performed to investigate the effects of the higher efficiency levels and to determine if further transformer efficiency increases are technically and commercially possible.

Efficiency levels in excess of the NEMA proposal will result in a situation where a tipping point for the MVLT market is reached, with cost-effective design options limited to a single choice of core material, sourced from a foreign-owned producer. This will cost US jobs, increase the risk of supply shortages and disruptions, and create a non-competitive market for new MVLT designs which will almost certainly eliminate any projected LCC savings.

Once again, thank you for the opportunity to be part of this important effort that has successfully permitted the DOE to cost-effectively increase transformer efficiencies.

Sincerely,



4-10-12

Raymond J. Polinski

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