

Distribution Transformer Subcommittee Task force / Working Group Report

TF on Department of Energy Activity on Energy Efficiency of Transformers

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TF on DOE Energy Efficiency Activity

Chair: Phil Hopkinson Vice-Chair:

Secretary: Steve Griffith

PAR Date: NA PAR Expiration Date: NA

PAR Status: NA

Current Draft Being Worked On: NA Dated: NA

Meeting Date: October 22nd, 2013 Time: 1:45 – 3:00pm

Attendance:	Members	<u>24</u>
	Guests	<u>81</u>
	Guests Requesting Membership	<u>0</u>
	Total	<u>105</u>

The Task Force on DOE Energy Efficiency of Transformers was called to order at 1:45 PM on October 23rd, 2012. The secretary was introduced. The guest speaker Mr. Paul Jarman the IEC TC14 Chairman, was introduced

The chairman reviewed briefly the contents of the March 19th, 2013, meeting in Munich, Germany. A motion was made and seconded to approve the minutes; the motion was approved.

The chairman remarked that this will be the last meeting of the IEEE Task Force as the DOE has issued its final rule. He mentioned that this meeting will include a presentation from the IEC TC14 chairman on a proposed new CENELEC standard for energy efficiency for large transformers based on a draft of a new European Regulation. He also mentioned that he received a proposal from one of the Working Group Convenors for IEC TC14 for a possible new IEC standard on energy efficiency for large transformers beyond 100 MVA. It was shared with NEMA staff and discussed during the NEMA transformer meetings that occurred on Sunday Oct 20th, 2013. The NEMA section agreed to look at this proposal and respond back within 30 days on their decision. Depending on the outcome, there may be future work with a combined IEEE/NEMA task force to address this.

The chairman walked thru a power point slides presentation that summarized the following: a summary of the final rule, definitions in the final rule, the liquid filled final rule, the low-voltage final rule, the medium-voltage dry final rule, life cycle cost and paybacks in the final rule, assumptions, considerations in the final rule, cautions (by utilities, manufacturers, and core steel makers), key issues to establishing new standards, and reference materials. He remarked that the entire presentation has been posted on the IEEE website.

Mr. Jarman gave a presentation on a proposed CENELEC standard for energy efficiency of large transformers up to 100MVA. In addition to no load & load losses, and power factor efficiency, energy performance is calculated via a Peak Efficiency Index (PEI). PEI is based on the transmitted apparent power of the transformer. He then briefly went thru the proposed European Regulation, and then went thru some slides that spoke to the need for using PEI to calculate energy performance.

The chairman remarked again that he has received a proposal from an IEC TC14 Working Group Convenor to for a proposed new IEC standard on energy efficiency for large transformers beyond 100 MVA that will be shared with the NEMA transformer section. Depending on the outcome, there may be future work with a combined IEEE/NEMA task force to address this.

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John Caskey from NEMA gave some final remarks on the DOE negotiate rulemaking process. There were many members of the working group who stepped forward with needed technical data that helped discover DOE errors. The end result was more palatable to NEMA manufacturers.

Members expressed concerns that small transformer manufacturers may no longer be able to compete in the market once the new rule goes into effect. Also depending on future DOE proposed efficiency regulations this group may need to start activities again sooner in the process perhaps as a combined IEEE/NEMA task force.

The chairman thanked all members for their work, and recommended that this task force disband. There are no future meetings planned.

The meeting was adjourned at 4:00 PM

Submitted By:	<u>Steve Griffith</u>
Date:	<u>10/22/2013</u>