IEEE Standards Interpretations for IEEE Std C37.20™ Series (IEEE Std C37.20.1™-2002, IEEE Std C37.20.2™-1999, and IEEE Std C37.20.3™-2001)

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Interpretation Request #1
Topic: Clarification of metal thickness requirements

Modem steel mills no longer reference MSG numbers but roll thickness with a guaranteed minimum (reL ASTM A 1011/ A). UL has published for its inspectors a table, which allows a greater range for steel metal thickness with the minimums being: uncoated II-gauge of 0.108 inch and uncoated 14-gauge of 0.067.

The IEEE C37.20 series of standards give references to the metal thickness for barriers and covers as nominal MSG gage number, and each relates an equivalent millimeter thickness. One of the three standards list the nominal values for MSG of 11 gauge as 0.1196 inch with 3mm (0.1181 inch) and 14 gauge as 0.0747 inch with 1.9mm (0.0748 inch). There is not a reference standard for steel given in the C37.20 series. Webster's dictionary defines nominal as "existing or relating to a theoretical size that may vary from the actual".

Large purchasers of steel buy steel as a commodity and use the ton as the purchase unit thus the thickness determines the yield (number of square feet per ton). The thickness determination represents $XOO,OOO.OO dollars to a large manufacture per year and thus is a very important issue.

What is needed is a minimum thickness, or a reference to another standard or Standards Body that will list the steel thickness ranges " Automotive Engineers", "Steel Institute", etc.

Interpretation Response
The letter requests that a minimum thickness, or a reference to another standard or Standards Body be provided in the IEEE Std C37.20.X series. The applicable clauses in IEEE Std C37.20.1-2002, IEEE Std C37.20.2-1999, and IEEE Std C37.20.3-2001 specify the trade size (MSG No. 11 and MSG No. 14) and give a nominal thickness. However, they do not provide either a minimum thickness or a reference to another standard to establish a minimum thickness. Hence, the IEEE Std C37.20.X series of standards do not speak to this issue.

Accordingly, the issue will be held over for consideration when the IEEE Std C37.20.X series of documents is next revised. At this time, there are no active projects (PARs) for IEEE Std C37.20.1, IEEE Std C37.20.2 or IEEE Std C37.20.3.