

October 21, 2005

C57.19.01-2000
IEEE Standard Performance Characteristics and Dimensions for Outdoor Apparatus
Bushings
Reaffirmation Ballot Status
As of October 21, 2005 10:00 AM Pacific Daylight Time
Fred Elliott Bushing Subcommittee Chair

The recirculation period for this ballot closes on October 23, 2005. The results of this ballot at the present time are as follows:

RESPONSE RATE

This ballot has met the 75% returned ballot requirement.

79 eligible people in this ballot group.

59 affirmative votes

4 negative votes with comments

0 negative votes without comments

1 abstention votes

64 votes received = 81 % returned 2 % abstention

APPROVAL RATE

The 75% affirmation requirement is being met.

59 affirmative votes

4 negative votes with comments

63 votes = 94% affirmative

The comments received during the reaffirmation process are listed on the following pages.

Thomas W. LaRose (Negative Ballot)

Sub-clause: 1. Scope

Comment: It is improper to reference an obsolete standard in a standard, as follows:
"For information on ratings not covered by this standard and for replacement bushings for oil circuit breakers, refer to IEEE Std C57.19.01-1991." IEEE C57.19.01 - 1991 was made obsolete by the approval of C57.19.01-2000. If the information in C57.19.01-1991 is still valid and is important to keep in circulation, either include it in this standard, or create a new standard with the information. Do not refer to information in an obsolete standard. If the information was no longer current, then it should not be included. As a user, it is my choice whether or not to look back at an obsolete standard for information which applies to an in-service piece of equipment, but which is no longer 'standard'.

Proposed Include the information on non-standard and replacement bushings for
Change: ratings no longer in C57.19.01 in an Appendix and change the reference from C57.19.01-1991 to the Appendix.

Response to Comment: Thank you for your comment regarding this standard. Since this is a reaffirmation ballot, the entire standard must be acted on "as-is" with no changes allowed.

Reply From Commentor: None

Steven D. Brown (Negative Ballot)

Comment: The effort to create fewer bushing ratings, standardize designs, and reduce the need for large bushing inventories in the 2000 revision to this standard is commendable, but bushings are needed for the standard voltage levels for transformers as listed in C57.12.00. The elimination of certain voltage ratings such as 25 kV, 115 kV, and 161 kV will cause utilities with these voltage levels to stock more ratings of bushings, not less, and could possibly increase the cost of new transformers with such voltage ratings if bushings with significantly higher voltage and BIL ratings than the transformer windings have to be utilized. Regretfully, for the above reasons, I must vote “Disapprove” on this reaffirmation.

Proposed Change: Add 25 kV, 115 kV and 161 kV bushings to preferred ratings.

Response to Comment: Thank you for your comment regarding this standard. Since this is a reaffirmation ballot, the entire standard must be acted on "as-is" with no changes allowed.

Reply From Commentor: None

Roland E. Youngberg (Negative Ballot)

Page: 3

Comment: Table 1 of the 2000 revision does not list bushings for 161 kV or 115 kV. To force entities using these voltages to use bushings listed in Table A-1 does a great disservice to them. This will in the long run drive up their costs and lengthen deliveries of bushings. Table 1 gives those with 161 kV as a system voltage no real alternative. My company typically uses one step reduced insulation for power transformers (650 kV BIL, but the line-to-ground voltage listed in Table 1 is for 88 kV and this is not sufficient for 161 kV.

This standard should return bushings for the omitted voltages to Table 1 and not force the use of "obsolete" bushing references. It should not be acceptable to refer users to a 1991 standard which is out of print and has likely been removed from the users library.

Proposed Change: Add 161 (750 kV BIL or 650 kV BIL with a 102 kV L-G rating) and 115 kV (450 kV BIL) to Table 1.

Response to Comment: Thank you for your comment regarding this standard. Since this is a reaffirmation ballot, the entire standard must be acted on "as-is" with no changes allowed.

Reply From Commentor: I agree that the standard reaffirmation does not allow for changes. I had voted against reaffirmation on the basis that bushings for 161 kV are listed in Table A.1 (replacement bushings) and are not listed in either Table 1 or Table 3. I realize that it would require a revision to this standard to include 161 kV bushings (and 115 kV bushings for the same issue), but this standard relegates the bushings that we need for transformers to replacement designation with the associated higher costs and longer delivery times. We use 138 kV bushings with a 102 kV line to ground rating. I understand that the standard can be reaffirmed over my objections, but for the record, my objections to reaffirmation vs. a revision that would return 161 and 115 kV bushings to the mainstream are still valid.

David J. Wallach (Negative Ballot)

Sub-clause: Tables 1, 2, 4, A.1

Comment: This standard does not fully reflect state-of-the-art needs by users. The 25 kV class bushing needs to be restored to Tables 1, 2, 4 and removed from Table A.1. The 34.5 kV voltage class used in 15 kV or 25 kV class applications cannot be shipped installed in the transformer from the transformer manufacturer's factory or customer's stock location in most applications without removal due to dimensional shipping constraints. Removal requires additional cost and time to handle oil and install. The additional time becomes unreasonable when deploying a transformer from emergency stock to replace a failed transformer. Duke Power Company will continue to purchase 25 kV class bushings for this reason. I have spoken with many transformer manufacturers and other users and I have heard similar comments to mine. If the multitude of users will continue to require a 25 kV class bushing then it should be restored to the tables.

Proposed Change: Restore the 25 kV class bushing to Tables 1, 2, 4 and remove from Table A.1.

Response to Comment: Thank you for your comment regarding this standard. Since this is a reaffirmation ballot, the entire standard must be acted on "as-is" with no changes allowed.

Reply From Commentor: Thank you for your feedback. I am still learning this balloting process and terminology. Taking an excerpt from section 9 of the operations manual for my own sake:

"Approve (Affirmative). This means, in the opinion of the voter, that the standard contains no significant obsolete or erroneous information and is useful in its current form. This vote may be accompanied by comments suggesting corrections and improvements. Action on such comments is left to the discretion of the Sponsor in future revisions. "

I am willing to change my vote to "approve" and would like to submit my comments included with my prior vote to the sponsor (you) for future revision consideration.

Jeffrey Nelson (Negative Ballot on Recirculation)

Sub-clause: Ratings Tables

Comment: I am in agreement with Mr. Brown, Mr. Youngberg and Mr. Wallach about the removal of ratings that are commonly used at 25kV, 115kV and 161kV, and therefore submit a negative vote in support of those comments. I know that a reaffirmation can not include changes and it looks like it will probably pass over these negatives. But, comments from the reaffirmation ballot can be used to initiate changes and agreement by the Sponsor Committee to initiate a PAR to address the comments can be the basis of removing a negative on a reaffirmation.

Proposed Change: Initiate a revision to revise the documents to add back the previous ratings that were removed.

Response to Comment:

Reply From Commentor:

Boyd R. Leuenberger (Affirmative Ballot)

Sub-clause: 1 Scope

Line #: 5

Comment: "For information on ratings not covered by this standard and for replacement bushings for oil circuit breakers, refer to IEEE Std C57.19.01-1991"

It is not appropriate to reference a previous version of this standard which is not available. I tried the IEEE standards web site and you can not order an old version. We should not reference something which is not available to the average user.

Proposed Change: Add to annex A the additional information on the ratings which were a part of the 1991 version but not a part of the 2000 version. Such as the dimensions for the 15kV and 23/25kV bushings

Response to Comment: Thank you for your comment regarding this standard. Since this is a reaffirmation ballot, the entire standard must be acted on "as-is" with no changes allowed.

Reply From Commentor: None

Don Platts (Affirmative, Comment directly to Bushing Subcommittee Chair on Recirculation)

Sub-clause: 1 Scope

Line #: 5

Comment: I will not change my vote to negative due to the recirculation -- because I know the problems that it would create for you. However, I do agree Mr. LaRose and Mr. Leuenberger. We can not refer to the outdated version of C57.19.01 in the current document. Furthermore, I do believe that this is too important to wait on. The document should be revised now.

Proposed Like Mr. Wallach has said, we too are continuing to purchase 25Kv

Change: bushings with no intention of changing that practice. I would ask that you also accept his proposed changes.

Response to Comment:

Reply From Commentor: