

## IEEE Standards Interpretations for IEEE Std C57.19.01™-2000 IEEE Standard Performance Characteristics and Dimensions for Outdoor Apparatus Bushings

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### Interpretation Request #1

**Relevant Clause:** Table 8; Footnote 2 Topic: C1 or C power factor **Clause, Subclause, Annex, Figure, or Table:** Table 6

IEEE Std C57.19.00™-2004 establishes in 7.4.2 regarding power factor tests: "Limits and tolerance of acceptable change are specified in Table 6 of IEEE Std C57.19.01." Table 6 specifies limits for C1 or C power factor for different types of construction -- the interpretation request is about the 0.5% power factor limit for Oil-impregnated, paper insulated type. Does this limit (and table) apply for new equipment only? Apparently, there is a conflict with IEEE Std 62-1995, which recommends in 6.2.4: "In practice, if the power factor of capacitance-graded bushings exceeds 1%, the user should seek further specialized help." Such statement implies that values of power factor below 1% are, at least, acceptable. Doesn't it?

### Interpretation Response

IEEE bushing standards -- IEEE Std C57.19.00-2004 and IEEE Std C57.19.01-2000 -- apply to new bushings. Other standards such as IEEE Std C57.19.100-1995 and IEEE Std 62™-1995 contain information addressing testing of in-service bushings and interpretation of the test results.