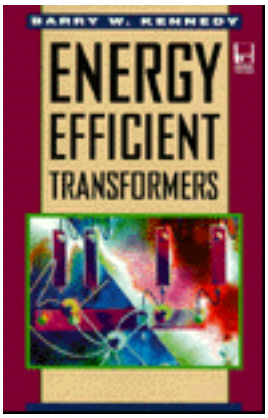

ENERGY EFFICIENT TRANSFORMERS
by
Barry W. Kennedy

Save money, resources-and guesswork-with this valuable reference that can help you evaluate and improve substation and distribution transformer efficiency in electrical power systems. The author clearly explains: (1) the typical cause of poor efficiency in transformer load and no-load losses, (2) traditional efficiency improvement methods, such as the use of larger conductors and properly sizing transformers, and (3) effective new solutions, including the use of amorphous steel and cryogenics, laser etched silicon steel, and advanced design transformers.

A diskette is included with the book containing the Environmental Protection Agency's *Distribution Transformer Cost Evaluation Model* (DTCEM), version 1.1. This program helps engineers perform the complex economic analyses needed to accurately determine the cost-effectiveness and emission reduction potential of energy efficient transformers. Its also provides the information necessary for facilities to weigh purchases of energy efficient distribution transformers against competing resource options.

Sure to be of ongoing benefit to any cost-conscious utility engineer or commercial and industrial engineer manager, this timely book plus computer program not only highlights a potentially significant savings opportunity, it also provides a sensible framework for evaluating losses and making more intelligent purchasing decisions. It provides the utility or facility energy manager the tools to make cost-effective decisions in the purchase of power transformers and reduce the effect of greenhouse gases on the environment as well.