Since the electrical cost to operate a motor over its lifetime is many times greater than its original purchase price, even a small decrease in motor efficiency can cause a significant increase in operating costs.

The first step to avoid unnecessary operating costs is to establish efficiency as a priority in your purchasing, maintenance and repair decisions. When it comes to rewinding motors, work with your motor service provider to ensure best-practice repairs are done following the ANSI/EASA AR 100 standard[1] that defines the process to rewind motors to preserve efficiency. Record this repair policy and other repair-replace, maintenance and purchase considerations in a motor management plan. Take a look at two success stories on how prioritizing motor repair and planning can lead to cost savings.

Repair Specifications Save Money and Energy—Kennewick Wastewater Treatment Plant
When faced with the threat of rising energy prices and possible brownouts, the Kennewick Wastewater Treatment Plant took action to increase efficiency plant-wide. After developing a motor inventory and identifying opportunities to make cost-effective equipment upgrades, the operations also established a motor-repair spec with detailed best-practice procedures to be followed in rewinding eight motors, ranging in size from 40 hp to 150 hp. It's estimated this repair specification alone generated approximately $4500 in annual cost savings, totaling an estimated $25,000 over the motor life.[2]

Weyerhaeuser Saves $2.5 Million by Developing Motor Plan
Weyerhaeuser, one of North America's largest forest product companies, runs 57,000 motors in its plants across the U.S. and Canada. It had become clear that increasing motor efficiency and planning for repair-replace decisions was key in optimizing production and reliability. A cross-functional team of engineers was formed to investigate opportunities to lower motor

operating costs. The team identified best-practice motor rewinds as an important strategy and developed a specification that standardized repair across all operational motors. Focusing on motor repair and management strategies ultimately produced $2.5 million in savings.[3]

Making best-practice repair specifications a priority has a demonstrated ability to generate cost savings. Get started today by checking out the following helpful resources:

ANSI/EASA AR 100 (www.easa.com/energy) available through the Electrical Apparatus Service Association (EASA), defines recommended practices for the repair of rotating electrical equipment.

MDM Motor Planning Kit (www.motorsmatter.org/tools/mpk.html) is a free booklet that provides a comprehensive overview of motor management. It describes how to pursue a variety of plans ranging from generic purchasing policies to total motor inventory.
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1. ANSI/EASA AR 100 Recommended Practice for the Repair of Rotating Electrical Apparatus, 2010, www.easa.com/energy

2.Repair Specifications Save Money and Energy— Kennewick Wastewater Treatment Plant, 2001, www.motorsmatter.org/case_studies/Kennewick.pdf

3.Weyerhaeuser, Weyerhaeuser Saves $2.5 Million by Developing Motor Plan, 2002, www.motorsmatter.org/case_studies/Weyer.pdf