

**EME IS AN INNOVATIVE INDEPENDENT SUPPLIER OF ELECTRO-MECHANICAL EQUIPMENT ENGINEERING, PARTS, MAINTENANCE, REPAIR AND SERVICES.**

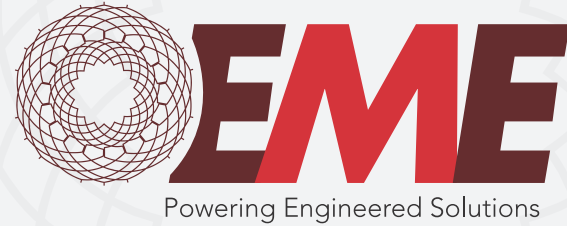
Since 1982, our growing base of engineering and electromechanical technology experts and shop and field delivery capabilities have successfully completed over 3000 projects for the power generation industry, government agencies, industrial operators and the leading OEM and Non-OEM service organizations.

The engineering-driven pedigree makes each of our full spectrum of products, repairs and services unique. We solve the most challenging and costly problems, the first time, through proven engineering principles applied by highly experienced engineers, project managers, service and repair craft.



We pride ourselves in being fully capable of applying our customized design improvements or repairs to your equipment in either our facilities or yours with responsive and reliable schedules and real-time customer communication and support.

We also excel at delivering complex specialty projects, leveraging our engineering and service abilities to manage delivery of individualized solutions for our customers' most challenging issues. Our approaches are so innovative they have led to EME patents such as our novel, lower cost concept for converting multiple cross compound generators to synchronous condensers. Whether your needs are for design and analysis, complete turn-key servicing of your electric generator, or project development for resolution of a challenging issue – EME has the engineering based service capabilities to support your rotating equipment.



**GENERATOR SUBJECT MATTER CONSULTING (SME)  
DESIGN & ANALYTICAL ENGINEERING**

Mechanical Uprate | Electrical Uprate  
Stress, FEA, Fracture Mechanics & Fatigue Analysis

**TURN-KEY ENGINEERED SOLUTIONS TO COMPLEX ISSUES**  
Design / Analyze / Install / Commission

**412.351.0290**



**[emeassociates.com](http://emeassociates.com)**

# WHAT CAN **EME** DO FOR ME?

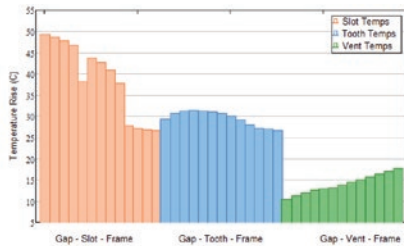
Whether your need is for Generator engineering subject matter expertise, a Root Cause Analysis (RCA), or designing and implementing a modification to address a degraded condition in your generator – **EME can support.**

Request a Case Study:  
info@emeassociates.com

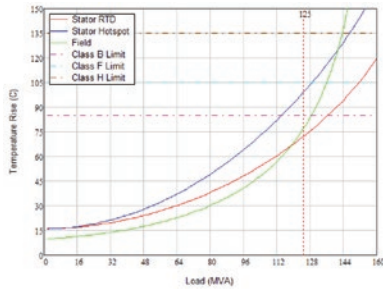


**CORE RESTACK  
NOISE ABATEMENT**

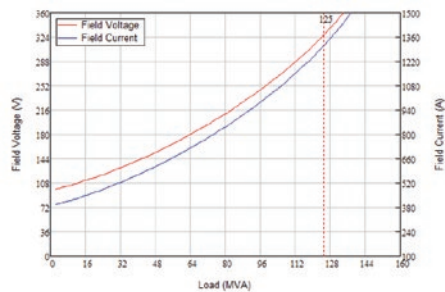
## GENERATOR ELECTRICAL UPRATE ANALYSIS



**Thermal Modeling**



**Thermal Modeling**



**Field Voltage & Current as a function of load**

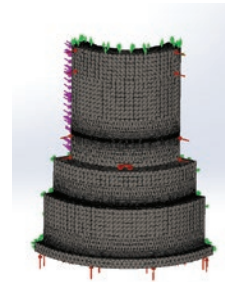
## GENERATOR MECHANICAL UPRATE ANALYSIS



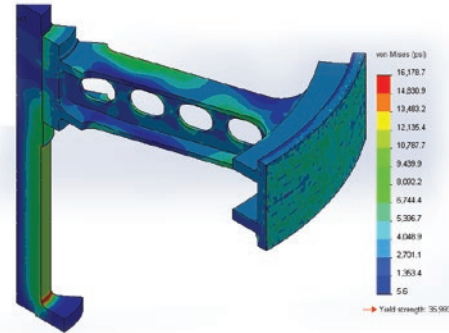
**Pole Analysis**



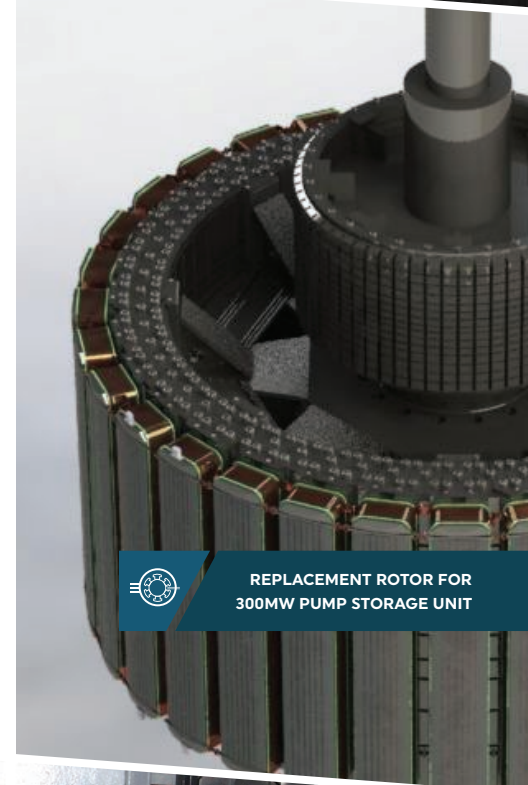
**Pole & Shaft Analysis**



**Thrust Collar Analysis**



**SPIDER ARM FEA**



**REPLACEMENT ROTOR FOR  
300MW PUMP STORAGE UNIT**



**STATOR CORE DYNAMIC  
VIBRATION ABSORBER**