IGTC Purpose

Assignment:

Communicate the motivating reasons and needs to create the International Generator Technical Community to the reader. Secondly, create a tone that elicits personal involvement and contribution to a community supported and maintained by volunteers.

Context:

National Electric Coil, the worlds largest independent electrical generator and repair company, wanted to extend its reach to the technical community by creating an online forum that served the power generating electrical generator industry. The primary purpose was to provide a conduit for engineers who are unable to acquire access to specific knowledge and solutions, either because of geographic location or economic hardship.

Deliverable:

This written copy introduces the reader to the International Generator Technical Community, its purpose and to set the tone for a community based on the spirit of mutual cooperation and contribution.

Format:

Website

Technical Writing

Power Generation Benefits

Power, in its many forms has raised our standard of living. The mechanical energy from natural resources such as water, steam and fossil fuels, have generated tremendous gains in farming, industry, transportation, health care and provided capabilities that were otherwise unachievable.

Throughout history, the ability to provide a steady and reliable power source has enabled communities, industries and livelihoods to flourish.

The production of electricity by generators and its transmission over wires is recognized as a landmark event in the power revolution, since it enabled deployment to areas that otherwise might not have access to a reliable power source.

However, just as power generation has the potential to propel development, it can also act as one of the greatest barriers. Relatively small amounts of power can satisfy the basic needs of rural populations and have a dramatic impact on the quality of life. Despite this, half the world's population is without access to electricity. It is only with a reliable power source that communities have access to the most basic of necessities: clean water, modern health care and communication.

Historically, a reliable power source has been necessary for modern development, but more importantly, the essential foundation for a higher standard of living

Power generation has achieved undreamed of accomplishments, and yet still has not fulfilled even the basic of needs. We have a challenge in achieving the unfulfilled potential of equal access to a steady and reliable power source.

Power Generation Challenges

Over the coming decades, the power generation industry faces a daunting challenge in meeting global energy needs. By 2030, electricity use will double globally and triple in developing countries.

The need for reliable power generation has never been greater. One of the biggest barriers to reliable power generation is the ability to maintain complex power plant equipment.

Maintenance is critically reliant on access to industry specific knowledge. For many reasons access is not occurring. There are three distinct components that have created incomplete knowledge transfer.

1. Mentoring and inter-generational knowledge transfer is not occurring in all work environments and has created a disparity of experience. Older experienced engineers have been retiring, taking institutional knowledge with them. Sufficient mid-level engineers have not replaced them. Entry-level engineers, though digitally savvy, lack the machine operating experiences needed to troubleshoot problems specific to an aging fleet of machines.

2. Economic pressures have compromised training budgets and diminished opportunities for Continuing Education. Additionally, time constraints and workforce down-sizing, have minimized work time available for generator maintenance research.

3. Disparate resources provided by manufacturers, suppliers and consultants make the diagnosis of generator issues difficult. Smaller power producers may not have access to the same technical resources as large producers or receive the same support. Remote geographic locations often make responsive technical advice difficult if not impossible.

In summary, the long term life-cycle and reliability of electrical generators is dependent on plant engineers' access to detailed, relevant and timely information - complete knowledge transfer.

The IGTC Solution

Our solution: what is needed is a worldwide industry resource to improve worldwide networking and communication within the Power Plant community.

National Electric Coil recognizes the unique challenges facing our industry and responded with founding the International Generator Technical Community or IGTC.

The IGTC was created to pool and disseminate detailed technical information about power plants and assist industry professionals leverage opportunities to maintain and improve the reliability of high voltage generators and the successful maintenance and operation of power plants.

After only two years, the IGTC Forum on Generators grew into a worldwide network of over 1,000 members in 66 countries.

IGTC volunteers have now expanded the forum site to include all areas of power plant technologies. Together we are enriching the knowledge base for all professionals working in our industry - one that will benefit all members of the power plant community regardless of their geographic location, financial means, operational budgets or industry experience.

As an industry, so much of what we have, we often take for granted. As individuals, we need to join together and provide equal access to solutions for the distinct challenges facing our industry. Solutions begin with the transfer of technical knowledge, and when a knowledge base is organized, it can become a worldwide resource for all to share.

We are entering a New World of communication with the world wide web, and with the creation of the IGTC, a new opportunity has been created for all of us to build a power plant technical community without borders.

Solving the power demands of the future starts with access to technical knowledge, it starts here, powered by a community - the International Generator Technical Community.