



Nova Energy Specialists, LLC

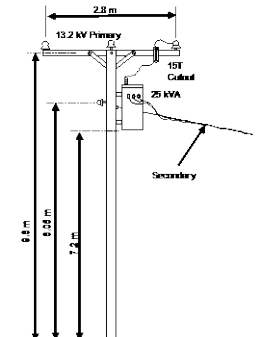
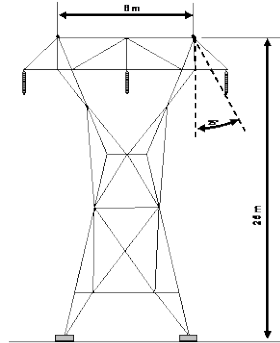
Providing Innovative Energy Consulting, Analysis, and Training Services

Nova Overview

Nova Energy Specialists, LLC provides consulting services for the electric power industry and energy research sector. You can put Nova to work to solve technical problems, optimize power system designs, develop strategies for new technologies, and train your staff in the latest practices and technologies.

Nova is independent of any manufacturer so we offer unbiased consulting focused on the client's best interest. Nova staff has 30 years' experience in the electric power industry and considerable experience in energy-technology related research and development. Our staff has been responsible for leading research in the fields of power quality, power system lightning protection, and distributed generation. In addition, Nova staff has extensive experience in the training of utility engineers, offering many courses in these areas. The Nova staff has worked with domestic electric utilities, nationally recognized R&D organizations, universities, and overseas clients.

Nova networks with other power industry consultants and has affiliations with internationally recognized scientists in the areas of dielectrics, materials, thermodynamics and other disciplines. We can assemble a multi-faceted team of experts to successfully blend scientific and engineering expertise into a full spectrum of energy consulting and technology development capabilities.



Power System Consulting Services:

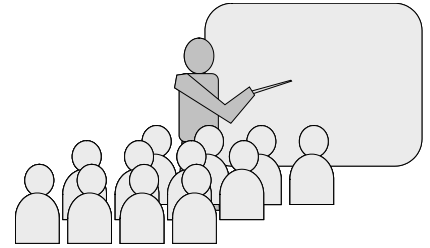
Our power system services are intended for customers that desire focused analysis and practical problem solving on issues related to power system operation and design. Some of our key focus areas include:

- Power Quality and Reliability (measurement, diagnosis, and mitigation)
- Voltage Regulation Analysis
- Modeling and Simulation with EMTP-RV
- Power System Lightning Protection and Transient Overvoltages
- Assessments of Ferroresonance and Ground Fault Overvoltages
- Equipment Applications (regulators, capacitors, transformers, overcurrent protection)
- Application of Premium Power Devices and Power System Configurations
- Distributed Generation and Distributed Energy Storage Interface and System Impact Analysis

Our consulting is built upon experience gained in measuring, analyzing and simulating the operation of power distribution systems. Depending on client needs, consulting support can range from quick assessments up to comprehensive research studies involving major measurements, extensive power system modeling, and detailed reports.

Training Courses:

Nova staff has trained over 1500 utility professionals in topics related to power distribution and distributed generation. Our courses address relevant issues in today's rapidly changing energy industry and insure that engineers have access to up-to-date knowledge, technical standards, and the best new practices. Nova offers courses on traditional technologies as well as new technology topics that are relevant in today's world. Our Courses include:



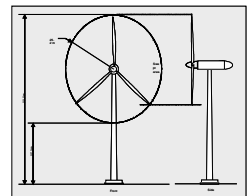
- Power Distribution Systems (4 days or 4.5 days)
- Power System Lightning Protection (1 and 2 day courses available)
- Distributed Generation and Energy Storage (1, 2 and 3 day courses available)
- Power Quality and Reliability (1 day)
- Application of Emerging Energy Technologies to Power Systems (1 and 2 day courses available)

Nova can custom tailor courses based upon client requirements. All courses are competitively priced and offer excellent value to the client. Usually classes are taught at client sites, but other locations can be arranged on request. Classes are taught in an interactive fashion with in-class problem solving and high quality visuals. For more detail on course offerings and prices please contact us or see our website for PDF file course brochures.

Research and Development:

Nova is active in power system research areas that include investigating new distribution system architectures, emerging power generation technologies, and new system control techniques. Nova applies creative thinking to implement ideas as working prototypes or new methodologies that improve power system reliability, cost, and efficiency. Some areas of Nova experience include:

- Emerging Distributed Generation (DG) Technologies and Applications
- Conceptual Designs of DG Microgrids, PQ Parks, Green Power Parks
- Renewable Energy Technologies (Photovoltaic systems, wind turbines, etc.)
- Evaluation of DG for Transmission and Distribution System Support
- Application of Energy Storage Concepts (batteries, flywheels, ultracapacitors, etc.)
- Power Distribution Control and Power Conditioning Methodologies
- Electrical and Thermal Energy Efficiency
- Combined Heat and Power Concepts
- Alternative Power Distribution Architectures (dc systems, microgrids, etc.)
- Distribution Automation Concepts
- Prototyping and Development of Specialized Energy Production, Instrumentation and Control Devices



Let Nova help your organization with energy related R&D projects. Whether you already have a creative idea that needs further refinement, or you wish for Nova to apply its R&D expertise to forging new ideas, or solving complex engineering issues faced by your company, we would be pleased to provide assistance in reaching your goals.

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