



Università di Bologna

AVVISO DI SEMINARIO

Smarter Grid for Sustainable and Affordable Energy Future

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**17 novembre 2011, ore 16:00 – Aula 5-6, Facoltà di Ingegneria
Viale Risorgimento 2 - Bologna**

The power industry is undergoing transformation to develop energy infrastructure that can meet emerging needs. The network must become smarter to enable customers to actively participate in their energy choices, accommodate all generation and storage options, provide power quality and reliability demanded by a digital economy, optimize the use of assets by operating them more efficiently, and enable distributed logic for self-healing, condition response, and system resiliency. This presentation discusses how the trends for power usage are pointing to this transformation. The presentation discusses technical challenges that emerge with the smart grid transformation along with a framework to address these challenges by enabling necessary communications and intelligence into existing power systems. Experiences from real projects are also highlighted.



Wanda Reder is the Vice President of the Power Systems Services Division at S&C Electric Company offering engineering, field service, and project management capabilities to utilities, developers and industrial customers through the US and Canada. She oversees technical activity associated with analyzing, engineering and constructing the most advanced smart grid technologies available including large scale batteries, micro grids, and renewable installations. Prior to S&C, Wanda has held numerous leadership positions at Exelon and Northern States Power (now Xcel) where she has had responsibility for asset investment strategy, standards, engineering, system planning, reliability and work management, unregulated business start-ups, distribution automation, automated meter reading and development of conservation and load management initiatives. She has been active in smart grid activity before the term was used and continues to provide leadership for the deployment of leading edge grid technology. Wanda is the Immediate Past-President for IEEE Power & Energy Society and has served on the IEEE PES Governing Board since 2002. During her term, she re-positioned the Society to address the emerging technologies, introduced two new transactions and numerous conferences while increasing membership of all ages throughout the world. Wanda is leading a \$10M philanthropic campaign to double the pipeline of power and energy engineers by awarding scholarships and career experiences. Wanda is now the Chairperson for IEEE's Smart Grid efforts and is on the IEEE Women In Engineering Governing Committee. In 2010 Wanda was appointed by Secretary Chu as a member of the Electricity Advisory Committee (EAC) to advise the DOE Office of Electricity Delivery and Energy Reliability.