

# Smart Grid Evolution – 2010 and Beyond

## Carrier's Perspective – Sprint Nextel

- Evolving landscape of the digital “Utility of the Future” and “Smart Grid” initiatives is resulting in the intersection of utility application needs and the Telecom Industry’s network services and products
- Network “Performance and Reliability” *Highest Priority* for any carrier in meeting utility automation needs of the future
- Federal and state regulatory environment providing catalyst to Smart Grid initiatives as never before in history of electric industry... *Energy Act 05, EISA 2007, ARRA Stimulus 2009*
- Carriers proactively engaged in federal regulatory environment... DOE, FERC, FCC, EPA... impact of current & future energy industry
- There are multiple communications technologies to support “Smart Grid” and other utility automation initiatives... *Cellular Represents one Option!*
- 3G/4G wireless technologies such as CDMA/GSM and WiMAX/LTE are evolving at a pace un-paralleled historically and will have dramatic impact in transforming utilities in both *“Mobility and Automation”*

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- Carrier's involvement in Smart Grid standards... *NERC, NIST, SGIP...*
- Evolving emphasis on open based standard solutions will result in multiple layered communications solutions... *Real-time Connectivity of Enterprise and Intelligent Remote Sensing*
- Expectations of a Telecom Provider
  - Enabling wireless and wireline technologies
  - Network reliability, coverage, and availability... *Secure VPN connectivity options*
  - Flexible technology & architecture to meet enterprise wide application needs
  - Scalable "IP" centric communication solutions... *Convergence of IP and Wireless*
  - Developers' programs to facilitate ecosystem of Smart Grid hardware & applications
  - Utility industry focus & flexible business models.... *CapEx vs. OpEx*
- AMI, Smart Grid & other "Utility of the Future" initiatives are at the forefront of discussions between the commercial carriers and utility customers
- Carriers positioning themselves as a trusted partner in developing "*Integrated Communication Solutions*" to support enterprise application needs... *Smart Grid*