

Top 10 IT Skills for Moving Toward the Smart Grid

2009 Technology Conference

At any conference you should:

- Network
- Learn what's on the Horizon
- Discover Actionable Information you take home and execute

The take away from this session should be:

- I am on the right track
- I am on the wrong track
- I don't have a clue

The Panel

- Ajaz Sadiq – V.P. Development & Operations, TSE Services
- Gary D. Cripps CFO/V.P. Finance & Technology, Delaware Electric Cooperative
- Sarah Kiely – Principal Analyst, IT Community Support, NRECA

Session Format

- A topic will be presented
- The panel will be briefly queried
- Comments and issues from the floor
- When we run out of time or interest we will move to the next one
- Don't count the bullets (there won't be 10)

Smart Grid

- We may not agree on what it means but we can agree that things are changing:
- In our Country
- In our Industry
- In our field
- In our Cooperative



Growing Issues & Concerns

- AMI / AMR
- Extending networks
- Reliable High Speed Communications
- Security
- Compliance
- Mountains of data to be managed & analyzed
- Sharing data

How well equipped is your IT shop?

- The truth is that the skills required to support the Smart Grid are not unique to it
- If you are up to date on modern, core, I.T. skills you should be OK
- But do you have the up to date skills?

Which list best identifies your skills?

- This one?
 - Windows 95
 - 56 kbs modems
 - Pentium II processor
 - 10 mbps Lan
 - T1 Circuits
 - NT Server 3.51

Or this one?

- MPLS
- Server 2008
- Windows 7
- SharePoint
- RSS
- 802.11 n
- LAMP
- Virtualization

What are IT's Core Functions?

- Provide a stable and reliable infrastructure for business critical applications
 - (network, servers, workstations, switches)
- Secure the enterprise from all threats, internal and external
- Data Management
 - (Turn data into information Integrate with other systems and organizations)

Infrastructure

- System Administration
- Server
- Operating System
- Networking – Switch Level
- DNS & Active Directory
- IIS
- SharePoint
- Data Storage (SAN & NAS)
- Virtualization

Security

- Perimeter
- End Points
- Antivirus & Anti Spyware
- Firewall
- Router
- IDS/IPS
- PCI
- NERC, SIP
- Red Flag

Data Management

- Care and feeding of databases
- Reporting
- Scripts
- Queries
- Integration

Databases

- Oracle
- MS SQL
- MYSQL
- DB2
- Access

Large Relational Databases are

- A. Magic
- B. Just need to be rebooted once a month
- C. Will tell me when something is going wrong
- D. Require Care and Feeding
- E. I never think about my Databases

Databases continued

- They don't just contain data, they contain important information about your business
- They need routine maintenance
 - Logs
 - Indexing
 - Tuning
- Even if you outsource support for it you need some basic skills

Reporting

- Systems must produce actionable information
- To achieve this they must produce reports
 - Custom
 - Crystal
 - Discover
 - Other

Being the Alpha Geek is not enough

- Soft Skills required for IT in the 21st Century
- Business Acumen
- Communication skills
 - Written
 - Verbal
 - Interpersonal
- Time Management
- Project Management

The most important IT concept I ever learned

"Every I.T. Project should do 1 of 3 things: Maintain the current business, Grow the business, or transform the business. If doesn't do 1 of the 3, don't do it"



Questions?