



# Integration Technology Case Study

Automating The Staking To Mapping Process  
In An Electrical Utility

by  
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# First Electric Cooperative

- 80,000 Members
- 200,000 Poles
- 10,000 Miles Of Line
- Serve Members In 17 Counties



# First Electric Cooperative

- 3688 Square Miles
- 5 Offices
- 238 Employees



# Issues Involved In Automation

- Large Database
- Limited Bandwidth Between Offices
- 40 Stakers
- Timely Map Updates
  - Subdivision Plats
  - As Built Facilities Added To Map
  - Daily Updates For All Offices




# Issues (continued)



● Connectivity

● Existing Assemblies

# Software Utilized By FECC


- 
- Partner Staking Software
  - NISC (Mapping-ESRI-SDE-Oracle)
  - NISC (CIS & Financial)
  - Milsoft (OMS, IVR, EA)
  - Cooperative Response Center (CRC)
  - ACLARA (AMR System) Formerly TWACS
  - Electrical Systems Consultants ESC

# Development Of Staking To GIS



## Partner Staking Application


- Started Developing a MultiSpeak Staking To GIS Interface in 2003
- Later In 2003 Partner Implemented That Interface With Origin Geosystems
- Multiple GIS Systems Are Now Supported Including ArcFM and WindMilMap



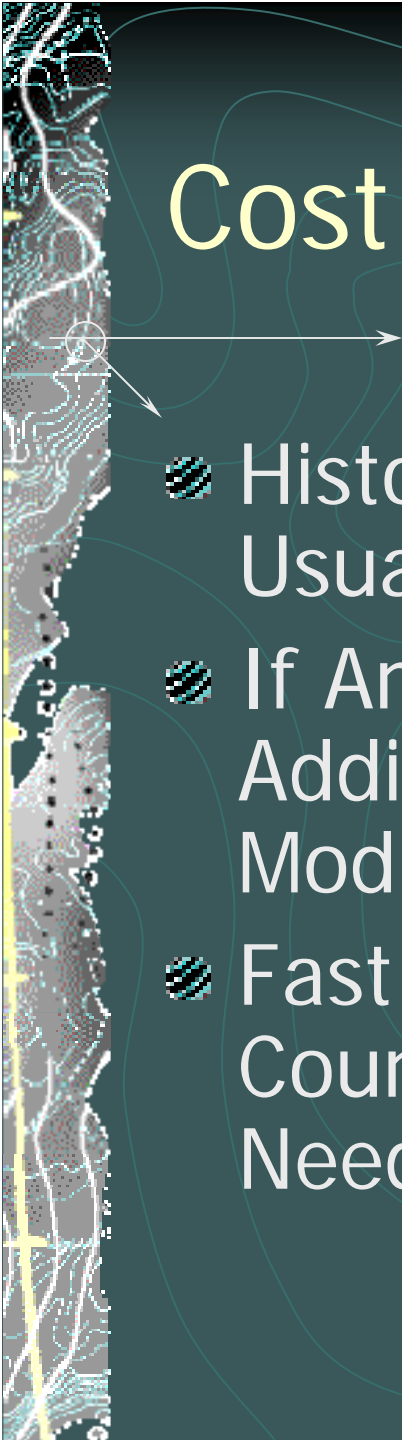
# Development Of Staking To GIS

- 2007 FECC Purchased Partner Staking
  - Partner Adapted Their Staking Application To Interact With The NISC Data Model
  - Partner Invited ESC To Develop A MultiSpeak Add-On To ESRI
- 2008 FECC Implemented Partner Staking Solution With Staking To GIS MultiSpeak Compatibility

# Integration Points

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- This Was A Very Unusual Integration
    - Independent ESRI Partner Developing A MultiSpeak Interface For Two Separate Software Packages
  - This Opens The Door For Other MultiSpeak Integrations Independent From The Software Provider

# Cost Savings Scenario

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- Historically Software Interfaces Were Usually Around \$5000.00
  - If Any Part Of The Software Changed Additional Costs Were Incurred For Modifying The Interface
  - Fast Forward To Today's World And Count The Number Of Application That Need To Interface With Each Other



# Cost Savings Scenario (continued)


- Savings In Interface Development Alone Could Be In The Thousands \$\$\$\$\$
- In House Personnel Can Devote Time & Resources To Other Projects



# Cost Scenario Without MultiSpeak

- GIS Technician avg. \$18.00\hr
- Avg. of 15 minutes per job without MultiSpeak interface
- 6.5 hours per day of actual work time
- 26 jobs entered per day
- 130 jobs entered per week
- 520 jobs entered per month

# Cost Scenario With MultiSpeak

- 
- Avg. 7 minutes per job
  - Time savings of 8 minutes per job
  - Productivity doubles to 55 jobs per day
  - 275 jobs per week
  - 1100 jobs per month



# Cost Scenario With MultiSpeak

- Difference of 29 jobs per day
- 3.8 hours savings X \$18.00 = \$68.40 per day
- \$342.00 per week or \$17,784.00 per year for 1 employee
- Staking to GIS interface automates detailed processes at no extra time



# Closing Remarks

- Integration Does Not Have To Come At The Cost Of A One Stop Shop
- Take Time To Fully Understand The MultiSpeak File Structure
- MultiSpeak is a viable alternative to custom interfaces



# Questions??

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