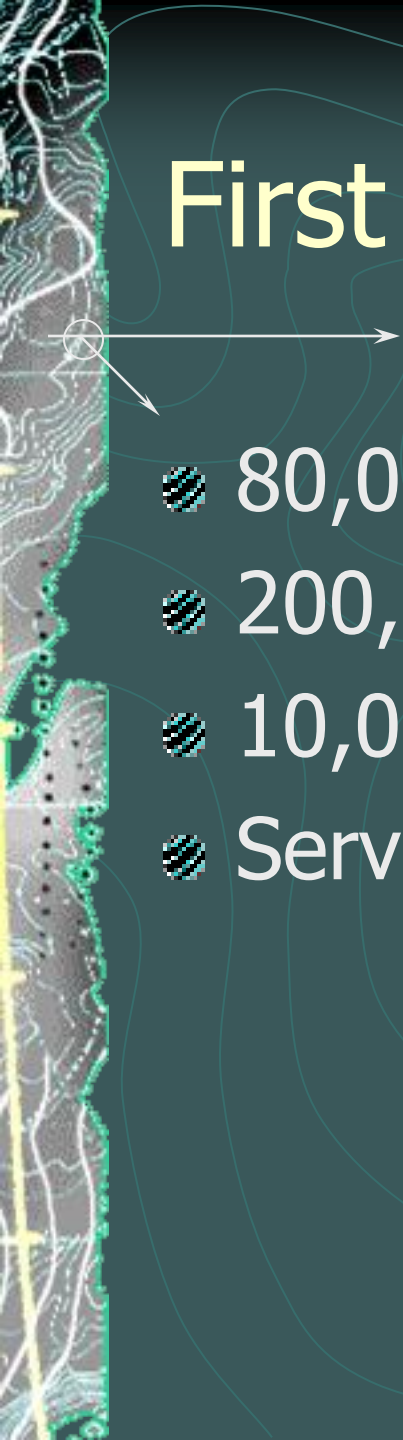# Integration Technology Case Study

Automating The Staking To Mapping Process In An Electrical Utility

by
Randy Everett
GIS Supervisor
First Electric Cooperative
Jacksonville, AR
randy.everett@firstelectric.coop

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 (contiued)

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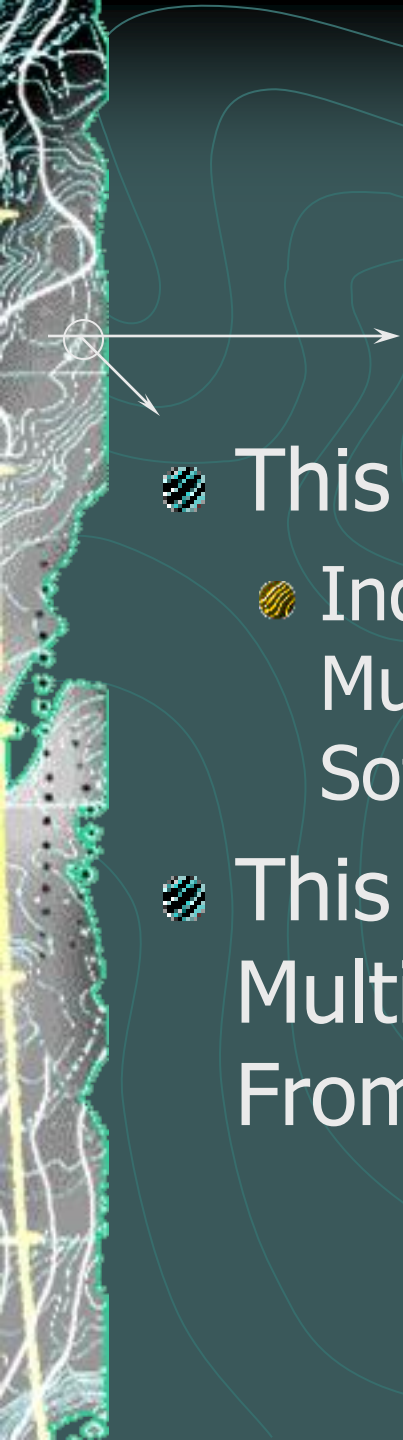
- Partner Staking Application
  - Started Developing a MultiSpeak Staking To GIS Interface in 2003
  - Later In 2003 Partner Implemented That Interface With Origin Geosystems
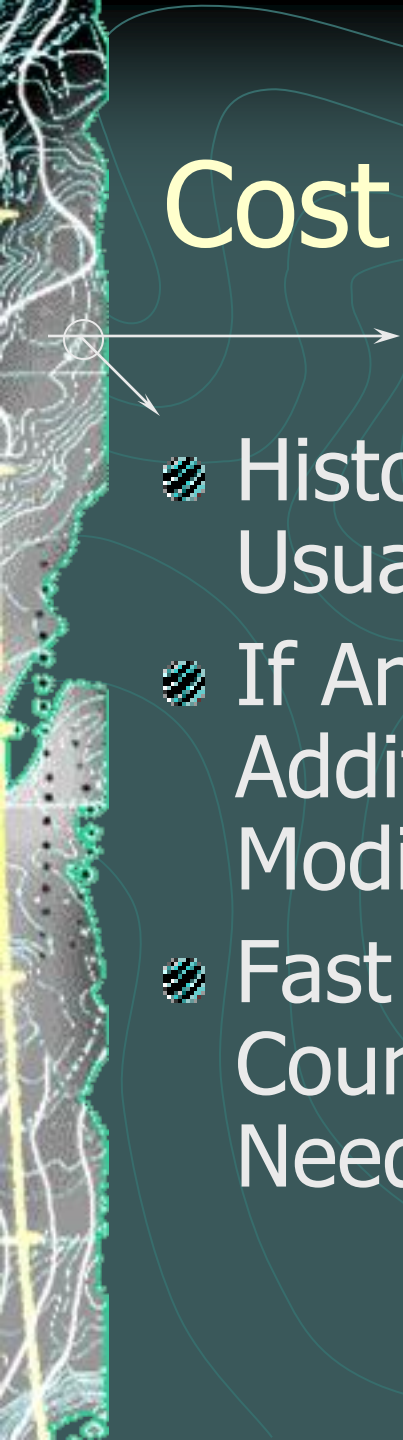 - Multiple GIS Systems Are Now Supported Including ArcFM and WindMilMap

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

- 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

- 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??

Randy Everett

GIS Supervisor

First Electric Cooperative

Jacksonville, AR 72076

501-985-4534

randy.everett@firstelectric.coop