Authoritative Data Management and Sharing (at) SCE

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About SCE

• We provide power to:
  – Nearly 14 million people
  – 180 cities in 50,000 square miles of service area, encompassing 11 counties in central, coastal and Southern California
  – Commercial industrial and nonprofit customers, including:
    • 5,000 large businesses
    • 280,000 small businesses

• To deliver power, it takes:
  – 16 utility interconnections
  – 4,990 transmission and distribution circuits
  – 425 transmission and distribution crews
  – The days and nights of more than 15,500 employees
  – More than a century of experience
GIS at SCE
For today

• A look at Data Management for our Capital Project
  – Tehachapi Renewable Transmission Project (TRTP)
• Data flow process
  – Business needs
  – Technology used
• How data is secured
  – Shared efficiently
• How data is efficient
  – Up to date, current
  – Unrestrictive
  – Effective
Tehachapi Renewable Transmission Project (TRTP)

• Interconnect renewable wind energy to the existing electric system
• 33 percent of the electricity SCE delivers to customers be produced by renewable sources by 2020
• New wind farms in Tehachapi and Kern County areas

• TRTP Project
  • New 220 and 500 kV Transmission Lines
  • New Substations
  • ~5200 megawatts
    - **Segments 1-3** ~82.7 miles
      • Started in 2007
      • Completed 2009
    - **Segments 4-11** ~250 miles
      • Started 2007
      • Completion ~2015
TRTP Schema

- Organized around groups function and project data requirements
- All future projects now using same schema
- Metadata & field domain established

- The schema must support the business

Real properties
Environmental Archeology & Biology
Engineering
Civil
Construction
Telecom
Cultural
Data Authorities

- **IT Admin**
  - Support technology
    - ArcGIS Server
    - ArcSDE Geodatabase
    - Web Applications & Services
  - Grant / Revoke Access based upon Access Orders
  - Post / Rec Test to Default

- **Data Coordinator**
  - Manage data for project
  - Coordinate Data Leads
  - Post / Rec Data Lead Versions to Test

- **Data Lead**
  - Manage edits for their team/version
  - Manage disconnected edits
  - Post / Rec to their Version
Disconnected Editing

• Data Leads manage disconnected editing

• Version Created for disconnected edits
  – Sent to Contractor for edits

• Contractor returns data
  – QA/QC by Data Lead

• Data moves through Versioning Process
IT Admin - Role in Data Management

- Creates environment to securely share data
- ArcGIS Server provides services to meet business needs
  - Map Service for FLEX Viewer = TRTP Managers
  - KML Services = TRTP Google Earth Users
  - WFS Services = Autodesk Users
  - WMS Services = Autodesk Users and Web Applications
  - Image Services = All Applications and Users
Demo
We would like to

THANK YOU