GIS at ATC

The who, what, and why we use maps and data at ATC

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Other GIS Staff

Brian McGee - Team Leader, Pewaukee
Eric Fowler - Pewaukee
Andrea Fagan – Madison
Currently, ATC owns or operates transmission facilities in Wisconsin, Illinois, Minnesota, and the Upper Peninsula of Michigan.

Facilities include:

* Approximately 9440 miles of transmission lines
* 96 wholly owned substations
* 419 jointly owned substations
* ATC offices in Madison, Cottage Grove, Pewaukee, DePere, and Kingsford, MI
GIS Services to ATC Departments

Regulatory
Local Relations
Environmental
Asset Management and Projects
Real Estate
ATC GIS Departmental Support

Regulatory

Pre-Application
  Data collection, routing and siting analysis

Application
  Project area, zoning, existing landuse, tax parcels, orthophotography, wetland, floodplain

Post-Application
  Minor Route Adjustments (MRAs)
  Additional data requests
Routing and Siting Process
PSCW – Application Maps
ATC GIS Departmental Support
Local Relations

Property owner mailing lists
Project area maps
Open house support
  Map Books
  Individual Property Owner Maps
News letter and pamphlet maps
Parcel maps for meetings with locally elected officials
ATC GIS Departmental Support

Environmental

Existing Support

Green Tier (WDNR T&E Data)
Environmental-only GIS data access
Coordinate external environmental mapping support

Data Set Creation

Karner Blue Butterfly
Sensitivity mapping support
Conservation easement ID

Environmental Access Plan Maps
CA/CPCN application data table calculations
ATC GIS Departmental Support

Environmental

*Future Support*

Lead Database to track possible lead painted structures
- Link to detailed map via the web to see where the structure is located

Data management of project specific data
- Delineated Wetlands
- Access Routes
- Other sensitive resources that may be needed for future reference
Environmental Access Plans
ATC GIS Departmental Support
Asset Management and Projects

Single circuit map series
Helicopter Patrols
Patrol area map books
CASCADE data integration
LIDAR data input
Distribution underbuild and crossings
EMF mapping support
DSD overview maps
CAD Plan & Profile data conversion and mapping support
Mobile GIS Mapping/GPS
Diggers Hotline / MISSDIG
Single circuit map series
Patrol area mapbooks
ATC GIS Departmental Support
Real Estate

BASIS integration
Lay-down area and site mapping
Parcel mapping
Aerial mapping and surveying support
WDOT mapping support
Ad-hoc support
Tracking Tool for Real Estate ROW Acquisition Progress
Real Estate Tracking Tool – Database & Maps
ATC GIS Departmental Support

Other Departments

Customer Relations
Corporate Communications
Legal
Planning
Operations
Corporate IT
Specialized Map Examples

Project Re-Route Options for PSCW Review
Specialized Map Examples

Vegetation Management – Determine Actual Cutting Area Required
SnapMap – Major Projects
# Transmission Emergency Response Plan (TERP)

## ATC TERP General Status

<table>
<thead>
<tr>
<th>Outage ID</th>
<th>Control Center</th>
<th>Assessment Priority</th>
<th>Restore Priority</th>
<th>Line/Sub Designation</th>
<th>Voltage Class</th>
<th>Outage Boundary</th>
<th>Occurred (Date/Time)</th>
<th>Affected Customers</th>
<th>Restored to Service (Date/Time)</th>
<th>Region</th>
<th>ETR</th>
<th>Repair % Complete</th>
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<tr>
<td>1</td>
<td>CG</td>
<td>Critical</td>
<td>High</td>
<td>Padlock-Weslaco(5.9k)</td>
<td>345kV</td>
<td>Padlock-Weslaco</td>
<td>1/11/08 8:00 PM</td>
<td>TBD</td>
<td>TBD</td>
<td>2</td>
<td>TBD</td>
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<tr>
<td>2</td>
<td>PWN</td>
<td>High</td>
<td>TBD</td>
<td>Oak Creek-Bluecord(67k)</td>
<td>230kV</td>
<td>Oak Creek-Bluecord</td>
<td>9/07/07 11:13 AM</td>
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<td>PWN</td>
<td>High</td>
<td>High</td>
<td>Point Beach-Sheboygan</td>
<td>345kV</td>
<td>Point Beach-Sheboygan</td>
<td>9/07/07 11:12 AM</td>
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<tr>
<td>4</td>
<td>PWN</td>
<td>High</td>
<td>High</td>
<td>Morgan Plains(35k)</td>
<td>345kV</td>
<td>Morgan Plains</td>
<td>9/07/07 11:15 AM</td>
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<td>5</td>
<td>CG</td>
<td>Critical</td>
<td>TBD</td>
<td>Edgewater-South Fond du lac</td>
<td>345kV</td>
<td>Edgewater-South Fond du lac</td>
<td>9/07/07 11:20 AM</td>
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<tr>
<td>6</td>
<td>CG</td>
<td>Medium</td>
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<td>Blount-Facemore (138kV)</td>
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<td>9/07/07 11:25 AM</td>
<td>TBD</td>
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<td>7</td>
<td>CG</td>
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<td>TBD</td>
<td>St. German-Cranberry (115k)</td>
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<td>9/07/07 11:26 AM</td>
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<td>TBD</td>
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</table>
Zone Maps
Using GIS Data and Maps at ATC

GIS “Power Users”

ArcReader (Citrix)
  ATC System Viewer
  Environmental NHI Database

ATC GIS Data Viewers
  Web App (GeoCortex)

Major Projects
  Project Specific Mapping Sites

ATC Facilities Maps
  System Map and Planning Zone PDFs
  One-line PDFs
  Patrol Area Map Books
Where does our data come from?

Counties
Cities and Villages
Regional Planning Commissions (RPC)
State agencies
Federal agencies
Commercial sources
ATC staff
Thank you