

# HILINE NATION COMPANY, SERVICES & TECHNOLOGY INFORMATION





## ABOUT HILINE NATION

NATIVE AMERICAN OWNED

HiLine Nation, LLC was founded in 2013 by Mr. Lee Pope, who has been working on transmission line projects for over 20 years. He has worked with several respected companies, including APS, SRP, Edison, Bonneville and SDGE. He has gained a great deal of experience over the years, and has held positions including Crew Master Chief and Journeyman Lineman. Mr. Pope has become well-known in the utility community, and is highly respected for his commitment to quality workmanship, great work ethics, and always practicing safety. He has also held highly responsible Clearance roles for Edison, SDGE and most recently on a 500KV line for Bonneville.

Mr. Pope is also known for his innovative use of advanced tools and technology, which prove to be much more accurate compared to traditional methods of measuring sag and more. His methods of measuring sag are not only more accurate, but also more efficient and absolutely safer than the old methods still widely used today. He has been praised for his techniques in using the Topcon Total Station and Carlson SurvCE software, so much so that several companies have sought his training for their own crews.

HiLine Nation employs only the best in the business. All inspectors posses a great deal of experience, are qualified Journeyman Linemen and are fully trained and certified. HiLine Nation has also invested in the development of a powerful and flexible data recording and reporting application that allows inspectors to enter many different data points, upload files, and create reports. Clients also have access to a web-based portal where the recorded data, files, and reports are easily accessible.

# CERTIFICATIONS, MEMBERSHIPS & AFFILIATIONS

- Journeyman Lineman Certification
- CPR / First Aid / AED Certification
- Rough Terrain Forklift Operators Certification
- NCCCO TSS / STC Operator Certification
- OSHA 30 Construction Safety & Health
- Helicopter Qualification Skid Transfer / HEC
- Fall Protection Training Certification
- NPL Leadership Institute Certification
- CESCL Certification

- Arizona Registrar of Contractors
- CPUC Certified MBE
- IBEW Honoree
- US Department Of The Interior
  Bureau Of Indian Affairs Certificate







HiLine Nation requires all Inspectors to be fully trained and certified to ensure complete safety, and have the necessary skills and experience to provide the highest possible quality of service.



# **COMPANY PROFILE**

HiLine Nation has grown quickly since startup. We are experiencing consistent and manageable growth, with next year looking even better. As a company and a team, we are prepared to continue the growth trend. In fact, several more Journeyman Lineman / qualified professionals have expressed their interest in joining the team.



#### RECENT PROJECTS

#### **Tucson Electric Power (TEP)**

Pinal Central to Tortolita 500KV

#### **Michels Power**

- Monroe Snohomish No 1 and No 2, 230 KV Substation Getaways
- John Day 500KV Lines No 1 and No 4
  Held Clearance
- Alvey-Fairview No 1 230KV Transmission Rebuild Project
- Keeler-Forest Grove No1 115Kv & ForestGrove-Tillamook No 2 115KV Line Replacement Projects
- Desert Stateline Solar EPC

# **NEWS & EVENTS**



HiLine Nation received its MBE certification from Supplier Clearinghouse, and is now registered with the CPUC as a minority owned business. This is great news for us, and also for clients with DBE spend requirements.



HiLine Nation was contracted by Tucson Electric Power to provide Conductor Sagging and QA/QC services on the Pinal Central to Tortolita 500kv project. We quickly mobilized an inspector to the site along with a Topcon Total Station, and we are happy to now report client satisfaction on a job done.





# **QUALITY ASSURANCE & INSPECTIONS**

Utility companies that choose HiLine Nation to perform quality assurance, inspections, and safety management do so to get accurate data, reporting, and assure their projects are completed with the highest quality and in the safest manner possible.

#### **INSPECTOR SERVICES INCLUDE**

- Complete Monitoring & Reporting
- Project Safety Management
- Counterpoise Testing Verification
- Torque Inspection
- Lattice Assembly Inspection
- Conductor Hardware Inspection
- Conductor/OHGW/OPGW Usage Verification
- TSP Compression Tracking and Reporting
- Crane Inspections
- Conductor Sagging Verification / Corrections
- Contractor Labor Qualification Verification
- Clearance of Conductor Ground Verification
- Pulling Equipment Capability Verification

#### **INSPECTOR TRAINING & QUALIFICATION**

- IBEW Journeyman Lineman
- OSHA 30
- First AID/CPR/AED
- NCCCO
- Fall Protection
- Leadership
- Rope Access
- Carlson Survey
- Equal Potential Ground
- CESCL

#### **INSPECTOR GUARANTEE**

We guarantee client satisfaction, but we will always aim to exceed. We take pride in our services, and feel confident that we can deliver solutions that our clients can rely on today and tomorrow.



✓ High Quality

✓ Strong Experience

Attention to Detail

Professionalism

Our inspectors come prepared with all of the necessary tools and training required to perform their duties, while meeting high standards set by HiLine Nation in the best interest of our clients.





## **CONDUCTOR SAGGING**

Proper sagging starts with accurate measurements, and that is what we do very well. Our innovative use of advanced tools and software allows us to provide highly accurate measurements, which are also unmatched in safety and efficiency. The days of unsafe and error-prone methods of sagging have passed.



# **TOPCON**

The Topcon Total Station allows us to capture spatial targets with high accuracy, and set geospatial points with on-board software. Those points are then measured on the device.

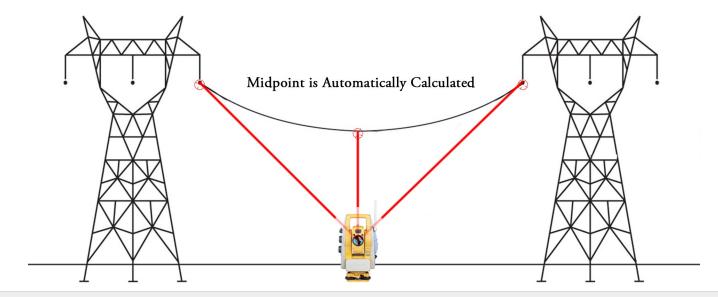


# **Carlson**

Carlson SurvCE is the software that we use on the Total Station to set and store the geospatial points.



The power of the combined tools allow us to set and measure virtually unlimited spatial points from one location, and also target distances of up to 2000 meters with very high accuracy.







## SPECIFICS OF CONDUCTOR SAG MEASUREMENTS

The Topcon tool allows us to define a scan area grid that tracks all axis, and the touch screen enables us to tap "points" on live images. The tool then "locks" these points to their exact position on the image, and is retained even when the tool is rotated.

Once all points to be measured are chosen, the tool performs a reflector-less measurement of each point. And with a simple tap, the tool will automatically rotate to the mid span that is created, and that allows us to determine an accurate conductor sag.

- Sags are computed from engineer provided sag tension tables for both conductor and OPGW / OHGW
- Span lengths and elevation differences are verified with the Topcon measuring device
- Temperature is verified from conductor thermometer
- All angles in excess of 5 degrees shall be changed to individual sheaves if conductors are bundled
- All sag tails shall be removed to prevent excess conductor weights
- All data collected is reported on an in-sheave sag report for each individual sag span, then re-checked and clipped in conductor reports
- Inspector / sag man shall work closely with conductor dead end crew to verify insulator and hardware measurements along with dead end body growth to maintain the correct conductor sag













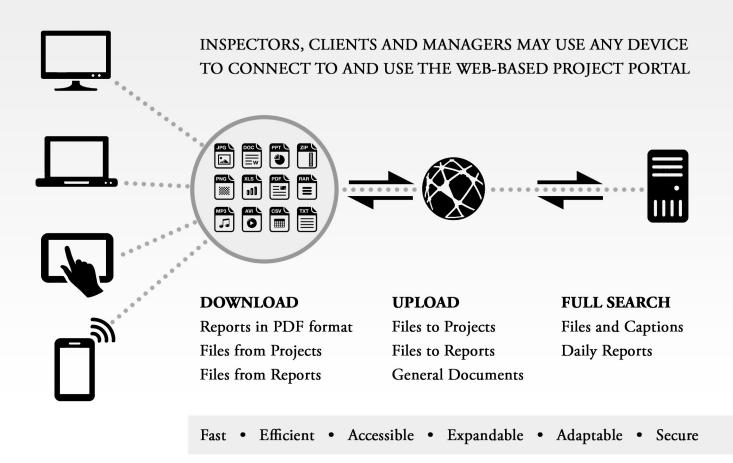


## DATA COLLECTION & REPORTING

HiLine Nation understands that data is very important. Data reveals issues, is the basis for decisions, and is also a protection for us and our clients. For these reasons, our policy is to collect as much data as possible. To maximize our abilities to efficiently collect and store data, we have developed our own web-based application and databases. This technology also allows us the flexibility of easily adding new data to our collection processes to accommodate our client needs, and produce calculated results.

# PROJECT PORTAL 🗞

Throughout each work day, our inspectors use several devices to capture photos and/or videos, upload files to the project portal, and utilize the many tools and forms in the portal to input and submit the required project forms. We aim make the input process as fast and convenient as possible so that our inspectors can stay focused on safety and inspections.

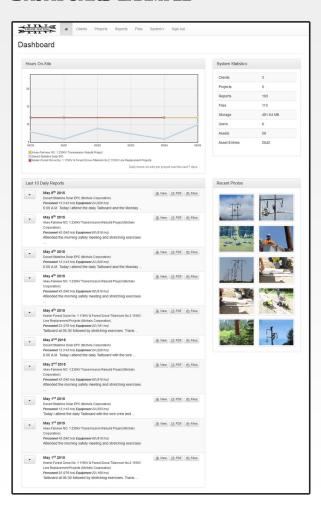




# PROJECT PORTAL DATA & ACCESS

As our inspectors create reports and upload files, most or all of the data is then available to the client. We provide user accounts for client's project managers, who can then use virtually any web connected device with a browser to view and download reports, files, and have access other features. Inspectors also email daily reports to the client designated project manager on a daily basis for convenience.

#### DASHBOARD EXAMPLE



### **CUSTOM FORM ADDITIONS**

For clients who require collection of specific data not already collected, we are capable of adding custom forms to our very flexible portal system to accommodate their needs.

#### DAILY REPORT EXAMPLE







Project data and files can also be placed on discs or programmatic-ally accessed. We work with clients to provide custom API result-sets.