

PROJECT NO.2026-160 CAPITOL CAMPUS ARC FLASH STUDY

DEPARTMENT OF ENTERPRISE SERVICES

ELECTRICAL SAFETY SPECIALISTS

OCTOBER 6, 2025



ESS

ELECTRICAL SAFETY SPECIALISTS

ARC FLASH

P R O P O S A L

2025





STATE OF WASHINGTON
DEPARTMENT OF ENTERPRISE SERVICES

1500 Jefferson St. SE, Olympia, WA 98501
PO Box 41476, Olympia, WA 98504-1476

Consultant Selection Contact Form

Designated Point of Contact for Statement of Qualifications
For Design Bid Build, Design Build, Progressive Design Build, GC/CM & Job Order Contracting
(JOC) Selections

Firm Name: Electrical Safety Specialists		
UBI: XLYHAR4GQSA3	TIN: 46-1212430	License#: 28509
Point of Contact Name: Noah Hawkins		
Point of Contact Title: Director, Business Development		
Email: nhawkins@arcflashpro.com	Telephone: 913 837-0997	
Address: 119 S Broadway		
City: Louisburg	State: KS	Zip: 66053



EXECUTIVE SUMMARY

Department of Enterprise Services
1500 Jefferson St SE
Olympia, WA 98504

RE: Project No. 2026-160, Campus-Wide Electrical Service Panels Arc Flash Study

ESS is pleased to submit qualifications in response to your RFP for an Arc Flash Risk Assessment. ESS is a certified Service Disabled, Veteran Owned Small Business, having completed hundreds of Arc Flash Risk Assessments and trainings for many clients. We are a safety first company - ensuring the safety of your employees is the reason for our work. The qualifications we demonstrate throughout this proposal will distance us from other vendors responding to this RFQ.

ESS is a 100% self performing company. The benefits of keeping all work in-house include lower cost, higher quality, a more streamlined project via more controlled schedules and scope.

The goal of our team is to identify your hazards and train your employees to protect themselves using the proper electrical safe work practices. Our experience in your facilities, and hundreds of other facilities just like yours, have prepared us to provide you with the best services available.

Our data gathering will be completed by one of our experienced field technicians. By doing this, you can be assured that any changes that have taken place within your electrical system are captured for our analyses and your reports. After our in-house engineers build new single-lines drawings and perform the necessary analyses, using only the data collected by our field technicians. All models will be built using SKM software and will not stop at the top end of your system with data collection and calculations. All 3-phase equipment, including your local disconnects, drives, machine panels, etc.

Our on-going support service sets ESS apart from our competitors. ESS will maintain your records and make updates to your single lines, including new arc flash labels, when needed.

ESS is a safety company and this is a safety project. We do not sell merchandise nor equipment; our mission is to ensure workplace safety. If workplace safety is taken seriously, compliance requirements will take care of themselves.

ESS acknowledges Addendum 1, 2, 3 and 4 that were issued for this project.

Thank you,

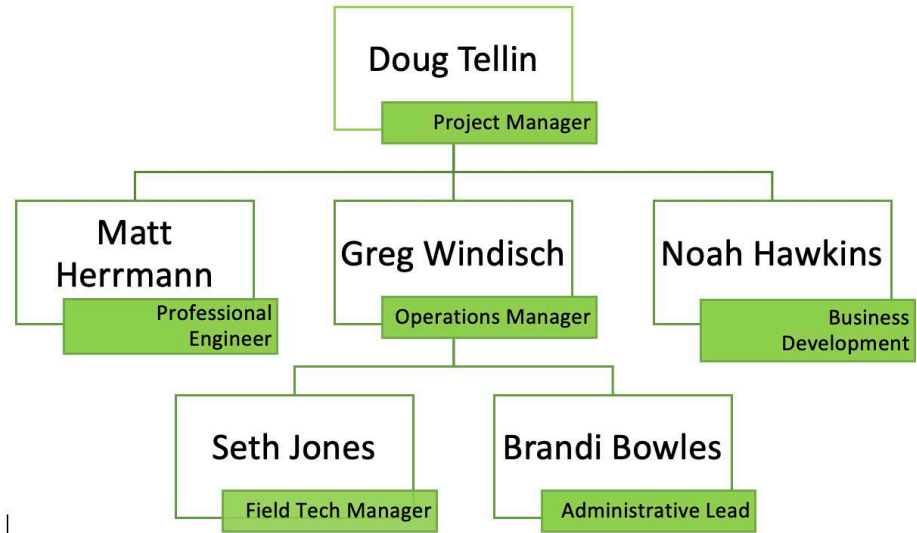
Noah Hawkins

Noah Hawkins
C: (913) 837-0997
O: (816) 925-0443
nhawkins@arcflashpro.com



KEY PERSONNEL

Before introducing our team members who will lead this project, it is imperative to reiterate that ESS is a 100% self performing company. This ensures a include lower cost, higher quality, a more streamlined project via more controlled schedules and scope. This also creates direct communication channels between the field and engineering teams. Our team members are specifically trained to complete projects like yours.



Included herein are the bios of key personnel relative to the completion of your arc flash risk assessment and training.

ESS has conducted thousands of arc flash risk assessments nationwide and abroad, for private and government entities alike. The team members listed here have worked together to complete, on average, 300+ electrical safety projects, annually, over the past 5 years. Our attention to detail and personalized service provides peace of mind the project is completed correctly and will remain up to date.

Doug Tellin; Project Manager

After a rewarding 13-year career working as a master electrician, Doug left his career to follow his true passion in electrical safety. Doug began working for an electrical safety firm where he developed an electrical safety training curriculum, built safety program plans, and was placed in charge of field operations for arc flash assessments involving hundreds of facilities in North America and abroad.

After several years in the electrical safety field, Doug saw an opportunity to adapt to what the industry was lacking. Using his expertise from both his master electrician career and his time as a leader at another firm, Doug partnered to open ESS. Doug envisioned a firm that did not cut corners, was 100% transparent with clients, and ultimately provided clients with a work environment built with electrical safety as their priority.



Doug Tellin; Project Manager (cont)

Professional Experiences:

Doug has developed, implemented and trained personnel ranging from machine operators to university instructors. Doug commonly speaks at national trade shows, client-hosted seminars and regional conferences. Doug also presents NFPA 70E training classes regularly. His presentation skills, as shown in client feedback, are the best in the business.

Doug was responsible for developing industry-leading tactics for data collection when arc flash hit the scene nearly 25 years ago. His arc flash experience includes healthcare facilities, power generation, university campuses, warehouse, distribution and manufacturing facilities plus numerous property management facilities.

Doug's recent experiences include PM services for electrical safety projects at Architect of the Capitol in Washington DC (as their SME), arc flash projects at Department of Enterprise Services, Lake Havasu Municipal, City of Tacoma, City of Riverside, City of Naperville, City of Iowa City, City of Buena Vista, Village of Carpentersville, Village of Winnetka, Village of Woodridge, and much more! Each of these experiences have their own unique challenges and add value as they help prepare us for the next opportunity. Doug will be available to dedicate however much time this given project requires of him to ensure the project is completed on-time, within budget and above and beyond your expectations.

Greg Windisch; Operations Manager

As Operations Manager, Greg plays a vital role in ensuring our clients receive the critical electrical safety information they need to establish a safe working environment.

Greg began his career in the U.S. Marine Corps, serving as a sniper and sniper instructor during two tours in Iraq. After his 4 year military service, he embarked on an 11-year career in the electrical field, gaining extensive experience in the installation and design of commercial, industrial, and institutional electrical systems. He managed numerous large-scale electrical construction projects across the Midwest during this time.

Greg transitioned from the construction field to a career in electrical safety over a decade ago, joining ESS to focus on advancing workplace safety standards. He attended the NJATC/IBEW Local 124 apprenticeship program and attended Metropolitan Community College. In addition, he is a Certified Electrical Safety Compliance Professional (CESCP) as well as an authorized American Red Cross First Aid/CPR/AED instructor. Greg is also an active member of both the National Fire Protection Association (NFPA) and the Institute of Electrical and Electronics Engineers (IEEE).

Greg's recent experiences include Ops Manager services for electrical safety projects at arc flash projects at Department of Enterprise Services, Lake Havasu Municipal, City of Tacoma, City of Riverside, City of Naperville, City of Iowa City, City of Buena Vista, Village of Carpentersville, Village of Winnetka, Village of Woodridge, and much more! Each of these experiences have their own unique challenges in the field and add value as they help prepare us for the next opportunity. Greg will be available to dedicate however much time this given project requires of him to ensure the project is completed on-time, within budget and above and beyond your expectations.



Seth Jones; Field Technician Manager

As Field Service Manager, Seth ensures our employees receive the critical electrical safety information they need to create and maintain a safe working environment. He also ensures ESS personnel are thoroughly trained, well-equipped, and prepared to perform tasks with precision and safety.

Seth began his career with ESS after completing a Bachelor of Business Administration in Project Management from Baker University. Over his 10 years with the company, he has played a pivotal role in overseeing the training of new hires, ensuring that training programs are up-to-date and compliant with the latest OSHA and NFPA standards. Additionally, Seth is responsible for maintaining the quality control of the data collection process, and ensuring adherence to current standards and best practices.

In addition, Seth is a Certified Electrical Safety Technician (CEST) as well as an authorized American Red Cross First Aid/CPR/AED instructor. He is also an active member of both the National Fire Protection Association (NFPA) and the Institute of Electrical and Electronics Engineers (IEEE).

Seth's recent experiences include Field Tech Manager services for electrical safety projects at arc flash projects at Department of Enterprise Services, Lake Havasu Municipal, City of Tacoma, City of Riverside, City of Naperville, City of Iowa City, City of Buenaventura, Village of Carpentersville, Village of Winnetka, Village of Woodridge, and much more! Each of these experiences have their own unique challenges in the field and add value as they help prepare us for the next opportunity. Seth will be available to dedicate however much time this given project requires of him to ensure the project is completed on-time, within budget and above and beyond your expectations.

Matthew Herrmann; PE

Matt is the Engineering Manager and lead PE for ESS. He oversees the day-to-day engineering operations while continuously developing and improving ESS's processes and procedures. As the lead PE, he serves as the Engineer of Record for all engineering tasks including arc flash hazard, device evaluation and coordination studies.

Before joining the ESS team, Matt worked for Kiewit as a Lead Electrical Engineer. During his time with Kiewit, Matt worked with various project teams to design and build combined-cycle generation facilities, along with other high-profile projects, under the Engineer, Procure, Construct (EPC) model. Matt was a support Electrical Engineer for several projects, eventually working his way up to Lead Electrical Estimator, and then Lead Electrical Engineer. Matt received his initial Professional Engineering license in 2017 and is currently registered in more approximately twenty states. He holds a Bachelor of Science degree in Electrical and Computer Engineering from the University of Missouri, KC.

Matt's recent experiences as PE for electrical safety projects at arc flash projects at Lake Havasu Municipal, City of Tacoma, City of Riverside, City of Naperville, City of Iowa City, City of Buenaventura, Village of Carpentersville, Village of Winnetka, Village of Woodridge, and much more! Each of these experiences have their own unique engineering challenges and add value as they help prepare us for the next opportunity. Matt will be available to dedicate however much time this given project requires of him to ensure the project is completed on-time, within budget and above and beyond your expectations.



Noah Hawkins; Director, Business Development

Noah Hawkins is the Director of Business Development for ESS, overseeing growth in the US, European and Asian markets. Noah assumed the role of the business lead at ESS in 2019, helping to expand their presence in multiple industries and develop partnerships with consultants and vendors throughout the safety industry. Noah implemented a CRM for ESS and has since developed a streamlined business model for ESS where he manages marketing strategies, lead development activities, promotional campaigns, and traditional sales activities.

From 2014-2019, Noah was a lead sales associate at Seam Group (formerly Lewellyn Technology), now part of the ABB Service group. During his time at Lewellyn Technology, Noah gained invaluable experience in the electrical safety industry, working directly with clients to help them implement NFPA 70E safe work practices in their facilities. Prior to his time at Lewellyn Technology, Noah consulted for NAVAIR at NSWC, Naval Surface Warfare Center (Crane) to assist with the safe implementation of new weapon systems into deployment.

Noah holds two degrees, including a Bachelor of Science degree in Business from Indiana State University, along with a Computer Science degree. Noah resides in Indiana.

Brandi Bowles, Administrative Lead

Brandi has been working with ESS for nine years. Brandi manages on-site schedules for our field technicians and training staff. Brandi's extensive experience in this role helps ensure a seamless transition from the business side of your projects to the operations side with proper communications and preparedness levels. Brandi also handles outside vendor setup and accounts payable for the ESS team.

Brandi's experience as the ESS Admin Lead includes 281 projects identical or very similar to the DES scope in 2025 alone.



RELEVANT EXPERIENCE

Our arc flash, thermal imaging and training client base at ESS is unique in that we have conducted work in every industry, in every state, and into Asia and Europe.

Our technicians and engineers have worked on campuses large and small; in multi-million square foot buildings to the smallest of service buildings. We have experience working with municipalities & water districts, medical facilities, college campuses, government buildings, and public transportation hubs.

Below is a condensed list of just a few of the hundreds of clients, for whom ESS has completed a thousand + electrical safety services for. Please note all jobs were completed:

- On-time
- Within budget (the only change orders in our decade and a half of existence have come from our clients changing scope to add additional buildings or facilities)
- above and beyond the expectations of our client

Government entities serviced within the past 5 years:

- | | |
|---|-----------------------------------|
| • City of Riverside | • City of San Ventura |
| • City of San Clemente | • City of Crystal Lake |
| • US Department of Labor | • Travis Air Force Base |
| • State Department of Illinois | • Eglin VA Medical Center |
| • City of Naperville | • Pensacola VA Medical Center |
| • Village of Carpentersville | • Panama City VA Medical Center |
| • Springbrook Water District | • Mountain Home VA Medical Center |
| • City of Manhattan | • Barstow Marine Corps Base |
| • Architect of the Capital, Washington DC | • National Institute of Health |

ESS has been the electrical safety SME on Capital Hill since 2019 and we continue to do so. Our services are offered to all jurisdictions in Washington DC and include all buildings including the Senate, Congress, the White House and more.

Well known, Non-government entities:

- | | |
|--------------------------------|------------------|
| • Corporate provide for Cintas | • SC Johnson |
| • iFly / SkyVenture | • Hyatt Hotels |
| • Johnson and Johnson | • Zoetis |
| • Dart Containers | • Unilock |
| • Hilton Hotels | • Ring Container |
| • Bluegreen resorts | • VPET Plastics |
| • Buckeye Partners | • Nypro |
| • Snap-on Tools | • Steris |
| • Ryerson | • Gelita |



RELEVANT EXPERIENCE (continued)

Below are the requested details for several of the projects completed by ESS. All projects were completed on-time and within budget.

Reference #1

City of Riverside

3900 Main St

Riverside, CA

Usha Kademani

(951) 351-6259

Arc Flash & Training

March, '24, \$25,600

Reference #2

Architect of the Capitol

Numerous locations

Washington D.C.

Charles Apple

(571) 287-0580

Electrical Safety Gap Analysis/Training

8/2019 (and newly awarded), \$150,000

Reference #3

National Institute of Health

9000 Rockville Pike

Bethesda, MD

Brandon Wagoner

301-451-4476

QEW Training (Arc Flash pending)

January '23, '24, '25

Reference #4

Village of Carpentersville

1200 L.W. Besinger Drive

Carpentersville, IL 60110

Joe Egler

(847) 551-3490

Arc Flash, IR, QEW Training

Aug '21, Jan '22, Mar '22,



PAST PERFORMANCE

The approach ESS will use for the arc flash assessment at DES will blend our extensive experience list with your detailed list of requirements. Our firm has built a rock solid reputation for conducting arc flash assessments the right way; we prioritize safety for your employees. To do this, we do not cut any corners to improve our margins or jeopardize your deliverables. Our assessments contain no arbitrary cut-off points; this is how we have conducted all of our assessments and this is how we encourage all of our clients to do. Our ESS team will print and apply 100% of your arc flash labels; we do not believe your maintenance team should be responsible for applying these. ESS always provides complimentary arc flash training with EVERY job that we deliver, further showing that employee safety is indeed our #1 goal.

- ESS will conduct all on-site data collection with our own, fully trained and capable field technicians. Our field technicians perform this work on a daily basis.
- ESS will conduct all engineering analyses, utilizing our electrical engineers to model your electrical single lines in SKM Power Systems. Our lead PE will oversee all work and will conduct all reviews of the single lines and will also conduct the various engineering steps to complete the assessment.
- ESS will print all arc flash labels and apply them at all of your facilities.
- ESS will manage all scheduling, budgets and scope related in-house, utilizing the same team members that have an overwhelming amount of experience.

ESS is a Service Disabled, Veteran Owned Small Business (SDVOSB), operating with a central office and offering our services at a very competitive price point. In many instances, our costing is low enough that our clients can add value-add services alongside our arc flash assessments. For example, thermal imaging scans are now a required service per OSHA and the NFPA 70B. Many of our clients fulfill that request by adding it to the arc flash scope. Doing so not only ensures compliance, but it ensures the scans are done properly as all panel covers and dead-fronts are removed for arc flash data collection, thus exposing more components to allow for a more complete thermal scan.

The expertise, experience and relationships built over the past 15 years has allowed us to master the components of what makes our projects so successful from a scope, schedule and budget perspective.

ARC FLASH RISK ASSESSMENT

Our Arc Flash Risk Assessments are completed in a 5-phase approach; most clients will conduct a 3 or 4-phase approach, however with the addition of a 5th phase we have found a way to provide a double quality check to help ensure the accuracy of your reports and single lines, and the integrity of the given labels.

Phase 1: On-Site Data Collection

ESS will not rely on existing drawings, asset lists or use previous studies as input data for our study. Each of our assessments are created from a new model that we build using SKM software, using only data that we collect and verify while on-site.

Proper data collection includes documentation of wire size, wire length, transformer data, over-current protective devices such as breakers and fuses and other miscellaneous data. Equipment included in our assessment will include main switch gear, panel boards, motor control centers, bus ducts and plugs, control panels, branch panels, disconnects and downstream loads, as required by the NFPA 70E and IEEE 1584.

Our assessment will NOT include an arbitrary cutoff point such as a 50-amp threshold or equipment below the last distribution point.

ESS electricians will be required to remove panel covers to expose the details of your equipment. However, shutdown of equipment is usually avoided as we are only observing the equipment and will not be touching the internal pieces in any manner.

CLIENT SUPPORT FOR PHASE 1 WORK

- Identify any areas that may have scheduling requirements or special clothing requirements.
- Ensure equipment is labeled per NEC prior to our arrival. These labels identify equipment names and load information.

Phase 2: System Modeling

Using the data from our on-site data collection, our engineers will model your electrical distribution system in SKM Systems Analysis (ESS also has access to use Easy Power or ETAP, however we recommend SKM). Once the new single line drawings are complete, our PE will review the model to ensure accuracy. If requested, ESS can provide an electronic copy of this model prior to proceeding into the engineering analyses.

Phase 3: Engineering Analyses

Using this new single-line model and the utility provided fault current information, our team will run a short circuit analysis, a protective device coordination analysis and an interrupt rating analysis. Based on these results, our team can then calculate the incident energy analysis to determine the potential hazard at each of the qualified electrical points within your system.

SHORT CIRCUIT ANALYSIS:

A short-circuit analysis of your system will provide a final report with a tabular listing of the available bolted short-circuit current levels at each designated point in the system.

The short-circuit current analysis begins at the point where the local utility provides power and includes all alternative electrical power sources. It continues down through the low voltage terminals of the utility vault transformers, through the main switchgear to the switchboards, panel boards, and motor control centers further downstream. Motors 50 HP and greater will be documented as they may provide fault contribution within the system. The analysis will include industrial control panels as defined by NEC Article 409.09.

PROTECTIVE DEVICE COORDINATION ANALYSIS:

This study analyzes the fault current levels in the system in regard to the operating characteristics of the over current protective devices at the designated points in the system. The arc flash hazard level is directly related to the opening time of the over current protective device protecting the faulted circuit. Therefore, the fuse and circuit breaker parameters have a dramatic impact on the potential arc flash hazard as they affect the arc flash incident energy and flash protection boundary calculations.

The over current protective device time current characteristic must be known from the main service entrance over current protective device(s) at each service entrance equipment location continuing downstream to include all of the switchgear, switchboards, and panel boards.

SELECTIVE COORDINATION:

The electrical system's over current devices were evaluated for selective coordination for the arcing faults associated with the Arc Flash incident energies in this report. This report evaluates trip times for backup protective devices beyond the branch containing the first protective device. Two conditions must be satisfied for the upstream backup protective device to be reported instead of the immediate protective device.

- Condition 1: The immediate protective device must carry 5% or more of the Cleared Fault Threshold value multiplied by the total bus fault current.
- Condition 2: The upstream backup protective device must trip faster and carry a fault current that is bigger or equal to the Cleared Fault Threshold value multiplied by the fault current through the immediate device.

This coordination evaluation only pertains to fault values that affect the incident energy calculations for an Arc Flash Risk Assessment.

ARC FLASH EVALUATION DETAIL:

The Arc Flash Assessment will be conducted under the supervision of a licensed Professional Electrical Engineer with extensive experience in Arc Flash and Power system studies. Electrical Safety Specialists, LLC and W.L. Cassel and Associates Inc. (est. 1933) have a long-standing relationship in performing these studies for a variety of clients.

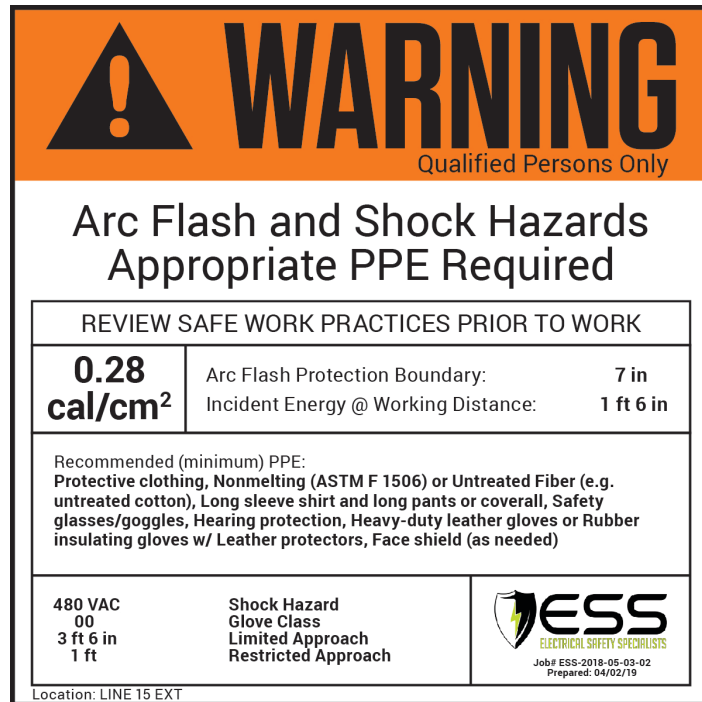
The Arc Flash Evaluation will be conducted using the Short Circuit Study and Protective Device Coordination Study results gathered in the previous steps. The arcing fault current through the protective devices is calculated from the bolted fault value and used to automatically find the time duration of the arc from the time current coordination (TCC) curves. Based on this information, the approach (shock) boundaries, incident energy and arc flash boundary are calculated for each designated location in the power system following the NFPA 70E and IEEE 1584 standards. Device evaluation of equipment will be based on information gathered for the purpose of arc flash hazard assessment. Series ratings of breakers and other equipment that is not gathered during arc flash assessment is not included in this proposal.

Once the incident energy is calculated at each designated location, the corresponding personal protective equipment (PPE) can be specified in conjunction with the NFPA 70E guidelines. Incident energy levels and the corresponding PPE may be reduced by methods such as adjusting circuit breaker settings or by changing current-limiting fuses and circuit breakers.

The arc flash hazard results are based on industry-accepted engineering calculations from NFPA 70E, "Standard for Electrical Safety in the Workplace" and IEEE 1584a, "Guide for Performing Arc-Flash Hazard Calculations."

LABEL CREATION:

Once the engineering analyses have been completed and the incident energy levels have been calculated, ESS will create an arc flash label for every necessary device in your facility. The values provided on each of the labels will be unique to that device and will be based on that device's specific calculations. If the device is fed from various enclosures, our label will represent the worst case scenario for that particular item. The below label is a representation of what our thermal-transfer label looks like:



Phase 4: FINAL REVIEW AND UPDATES

One of the most vital pieces of any arc flash risk assessment is the delivery and application of the labels. ESS has taken the bar to another level in two distinct ways to help make your assessment more practical for your employees. Nobody else in the industry offers both of these procedures; procedures that make our assessment the most comprehensive study available:

- Things change in your facility; machines are added, moved, retro-fitted. Some additions require more electrical equipment. So consider this... ESS applies every label, every time, conducting a double check of your system model along the way. ESS waits until after the label application to deliver your final report and single lines. This practice allows us to capture, report and deliver up-to-date studies, drawings and calculations.
- Your arc flash report is only helpful if the employees who interact with electrical devices put into practice the procedures necessary to protect them from the hazards. Our training programs are carefully designed to incorporate your model, your hazards and solutions that your employees can apply to their immediate tasking.

Phase 5: DELIVERY OF REPORT AND SINGLE LINE DRAWINGS

This is one of the key steps that will separate ESS from the competition.

Upon completion of label delivery, all found alterations to your electrical system will be reported to our engineers for a final update to your study. Other firms may say they have the same capability upon request, but our field technicians are trained to follow the newly created single line drawings and specifically look for updates to the systems, along with any possible oversites from the original collection. This extra step is a service provided to all our clients which ensures the highest quality product to our clients.

Once those changes have been recorded and the necessary updates have been made, the final single lines will be printed off and mailed to your team. Our drawings will be provided on "D" sized engineering paper. 3 copies of these drawings will be provided, along with a USB drive which includes an electronic copy of your arc flash report. If your team would like a hard copy of the arc flash report, please be sure and notify your ESS contact of the request.

COMPLETE LIST OF ARC FLASH DELIVERABLES

Below is a comprehensive list of arc flash deliverables that you will receive from ESS:

- Arc Flash Labels on all equipment as identified by NFPA 70E and IEEE 1584
 - 100% printed and applied by ESS technicians
- Fresh arc flash single line drawings, specific to each facility and created using input data solely from our own data collection tasking to ensure accuracy
- Arc Flash Reports
- NFPA 70E Training
 - Qualified Electrical Worker training is also an option that would add hands-on demonstrations for those workers interacting with 50v or greater.
- Thermal imaging reports, if this service is added

