# RFP Response to

## *Greenville Utilities Commission*

**RFP #25-21**

**ESRI Utility Network Design Services Vendor Selection**

*May 13, 2025*

# 1 Cover Letter

May 13, 2025

6766 S. Revere Parkway, Suite 100
Centennial, Colorado 80112
(720) 279-9894

Cleve Haddock, Lifetime CLGPO
Procurement Manager
PO Box 1847
Greenville, North Carolina 27835-1847

Dear Cleve:

SSP is pleased to offer a comprehensive proposal to address requirements contained within RFP #25-21 ESRI Utility Network Design Services Vendor Selection. Our response is based on a careful review of the requirements and our extensive industry knowledge gained over 20 years as the leading Esri system implementor in the utility sector. We have assisted hundreds of utilities across the country to "keep the lights on" and understand the importance of having a reliable and experienced partner ready to work alongside you, especially while preparing for a Utility Network Migration that will transform how your business utilizes GIS.

The SSP team brings critical elements to GUC for a successful Utility Network design. These elements include:

- Providing one of the **largest dedicated UN-focused consulting and implementation businesses** with a proven methodology and demonstrated record of success for electric and gas customers.
- Performing **more UN planning, data assessments, and implementation projects** than any other service provider within the utility industry, allowing us to provide direct and consistent input into our planning, road mapping, and strategy practices.
- Leading **Platinum Partner of Esri** – and has won many Esri awards including the 2022 Esri Partner Award for UN implementations and have been identified as an Esri Utility Network Management Specialty Partner, signifying market leadership.
- Applying the **SSP Utility Network Advantage Program (UNAP)** will help GUC envision how the Utility Network fits into your future and create a roadmap for migrating to the next generation of Esri's GIS technology.

SSP Innovations has implemented or is in the process of **implementing the Esri Utility Network in Production** for multiple electric and gas utilities, including:

- CenterPoint Energy - Esri GN to Esri UN (in production)
- FirstEnergy - AutoCAD to Esri UN (in production)
- Southwest Gas - Esri GN to Esri UN
- PSE&G – Esri GN to Esri UN (in production)
- AES - Esri GN / GTech to Esri UN (in production)
- Unisource – Esri GN / GE Smallworld to Esri UN

- Louisville & Kentucky Utilities (LKE) - Smallworld to Esri UN (in production)
- Southern Company Gas – Esri GN to Esri UN (in production)
- Montana-Dakota Utilities (MDU) - Esri GN to Esri UN (in production)
- WE Energies (PGL/NSG) - Esri GN to Esri UN (in production)
- CPS Energy - Esri GN to Esri UN

Table 1 in Section 2.1 Company Overview below provides additional examples of SSP's experience in UN planning for electric and gas utilities.

SSP provides our commitment to delivering a scalable, adaptable solution that aligns with Greenville Utility Commission's goals for design and separate implementation.

GUC's main point of contact is Aaron Kunstmann. My contact details are provided below my signature at the end of this letter.

SSP understands this solicitation is the first step in your ArcGIS Enterprise and Utility Network Upgrade and Migration journey. It offers an opportunity to pick the right partner who is an expert in the Esri GIS utility space. Our collaborative approach ensures your project requirements are met according to your project schedule. SSP's attention to detail, superior industry talent, and exceptional customer service have garnered long-term relationships with all our clients. When you choose to work with SSP, you are embracing a partnership that is beyond transactional - we are invested, committed, and dedicated to your success.

We want everyone involved to be comfortable with our proposal that was designed with your project requirements and our project experience in mind. We welcome a seat at the table so we can work through any questions or concerns that you may have. We look forward to the opportunity to c to ensure all stakeholders are satisfied and enthusiastic about our partnership.

Sincerely,

Aaron Kunstmann
Account Executive
Aaron.Kunstmann@sspinnovations.com
262-282-2447

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# 2 Company Background and Relevant Experience

## 2.1 Company Overview

*Describe the vendor's history, years in the utility industry, size, and core areas of expertise. Include information about ownership structure, location of headquarters, and any relevant subsidiaries or partnerships that support capabilities.*

Founded in 2003, SSP Innovations, LLC is an industry leading GIS consulting, software, systems implementation, systems integration, and data services firm. SSP is based in Centennial, Colorado, with offices in Wisconsin and Alabama. For many years, SSP has focused exclusively on providing successful ArcGIS-based solutions to North American utilities, municipalities, and telecom providers. Of an Esri partner landscape of over 3,000 firms worldwide, SSP is one of only 18 companies, globally, with Platinum status.

SSP is known for providing award-winning services to electric, gas and water/wastewater utilities; telecommunications providers; and pipeline operators across North America. We offer market-leading, innovative products and services in four major practice areas – Utility GIS, Pipeline GIS, Telecom GIS, and Asset & Work Management. Our solutions are designed to help our clients meet their unique business challenges through a combination of deep technology expertise and unmatched familiarity with utility industry best practices.



SSP Innovations LLC (SSP) is a privately held company, headquartered in Centennial, Colorado, with satellite offices in Alabama, California, and Wisconsin. SSP office addresses:

- Headquarters: 6766 S. Revere Parkway, Suite 100, Centennial, CO 80112
- Alabama office: 350 Market Street NE, Suite C, Decatur, AL 35601
- Wisconsin office: 400 Bay View Road, Suite A, Mukwonago, WI 53149

**Qualifications**

SSP has performed more UN-focused planning and implementation services projects than any other vendor in the world and brings this industry-leading experience to GUC's requirements, several of which are depicted in Table 1 below.

*Table 1: Representation of SSP Projects*

| Utility | Commodities | Meters | Project | Status |
|---|---|---|---|---|
| CenterPoint Energy | Gas T&D, Electric T&D | 7M | UN Implementation from GN<br>**Largest live gas UN in America** | **Live in production** |
| FirstEnergy | Electric Distribution | 6M | UN Implementation from CAD<br>**Largest live electric UN in America** | **Live in production** |
| Southern Company Gas | Gas T&D | 4.5M | UN/UPDM/APR Implementation | **Live in production** |
| SOUTHWEST GAS | Gas T&D | 2.2M | UN/UPDM/APR Implementation | Go-live in 2026 |
| PSEG | Gas T&D | 1.7M | UN & UPDM from GN | **Live in production** |
| LG&E KU | Electric G&T, Gas Distribution, Telco | 1.3M | UN from GE Smallworld | **Live in production** |
| MONTANA-DAKOTA UTILITIES CO. | Electric, Gas | 1.2M | UN Implementation from GN | **Live in production** |
| CPS ENERGY | Electric & Gas Distribution | 1.2M | UN Implementation from GN | In pilot phase |
| WEC Energy Group | Gas T&D | 1M | UN & UPDM from GN | **Live in production** |
| aes | Electric Distribution | 1M | UN from Intergraph & GN | **Live in production** |
| UniSource Energy SERVICES | Electric & Gas T&D | 755k | UN/UPDM from GN & GE Smallworld | Go-live 2025 |

## Partnerships

As an Esri Platinum Partner, SSP considers our alliance with Esri the most strategic. We've invested heavily in, and committed to, the highest level of quality related to ArcGIS Enterprise, the Utility Network and related Esri platform services.

SSP also collaborates with specialty partners that provide specific capabilities when a client's requirements call for them.

SSP's partners have made it possible to provide a comprehensive solution to exceed our clients' expectations. Partnerships with these forward-thinking firms help bring best practices to utility, pipeline, and telecommunications organizations nationwide.

## 2.2 Relevant Project Experience

*Provide high-level descriptions of at least three Utility Network projects that include electric and/or natural gas utilities, preferably projects similar in scale to Greenville Utility Commission's requirements.*

*For each project, detail the scope, objectives, challenges encountered, and the outcomes achieved, emphasizing multi-utility deployments, scalability, and adaptability to technological changes.*

*If available, include references to relevant case studies, white papers, or public-facing project summaries that highlight successful implementations.*

*Vendors must provide evidence of successful deployments of ESRI Utility Network systems, preference given to those that have experience with electric and natural gas utilities. Specifically, vendors should have led at least three projects that involved model selection, migration of data, and integration evaluation and solutioning.*

There is no replacement for industry experience. This is how SSP ensures our solutions will meet the mark every time, and it's why we've been chosen to run the world's largest UN implementations in the

electric industry. This includes CenterPoint, FirstEnergy, AES, LG&E and KU, UNS Energy/Tucson Electric Power, among others.

SSP maintains a dedicated UN-focused consulting business with a proven implementation and project management methodology and a demonstrated record of success. Relevant highlights include:

- Completed the largest gas UN implementation in North America at CenterPoint Energy.
- Completed the largest electric UN implementation in North America at FirstEnergy.
- Successfully delivered into production the most UN implementations at large (1m+ combined meters) gas and electric utilities worldwide.
- Produced a proven record of working with Esri and other parties to solve difficult in-flight project challenges and make them successful.

Figure 1 below provides a representation of companies who trust SSP to lead their major GIS projects and implementations.



*Figure 1: Companies Trust SSP to Lead their major GIS Implementations*

Should GUC select the SSP team to implement your next-generation GIS, you'll enter this community of peers – with varying backgrounds (Esri/GE/CAD/Intergraph) but with common goals and a singular partner to rely on. Through SSP, this community supports each other, bringing issues to the forefront before the next utility encounters them – whether they be challenges with product, implementation, or support – so that each project carries less risk and drives more value than those that came before it.

For the purposes of this response, we will focus on the following:

| Utility | Commodities | Meters | Project | Status |
|---------|-------------|--------|---------|--------|
| CenterPoint Energy | Gas T&D, Electric T&D | 7M | UN Implementation from GN **Largest live gas UN in America** | **Live in production** |
| FirstEnergy | Electric Distribution | 6M | UN Implementation from CAD **Largest live electric UN in America** | **Live in production** |
| LG&E KU | Electric G&T, Gas Distribution, Telco | 1.3M | UN from GE Smallworld | **Live in production** |

CenterPoint Energy

This utility serves over 7 million electric and gas customers across six states. They moved from a highly customized Schneider Electric ArcFM-based Geometric Network to the Esri Utility Network. This included over 10 integrations into various enterprise systems such as SAP, Hitachi ABB ADMS, DNV Synergi, and Eaton CYME. CenterPoint also implemented SSP Productivity and SSP MIMS to replace their legacy ArcFM applications for both the office and the field. This project had rolling go-lives throughout 2022 and 2023, with the final region going live in Q4 of 2023. To date, this project is the largest and most complex UN implementation to go-live in the world.

The largest challenges for CenterPoint were organizational change management and the number of customizations that needed to be replaced in the UN. CenterPoint had made several large acquisitions prior to the UN project but had not taken the effort to consolidate and normalize these "new" utilities into their operating model. With the UN implementation, CenterPoint made the conscious effort to consolidate and standardize datasets and business processes to achieve further ROI. This required many workshops and change management discussions to achieve this goal.

The legacy CenterPoint GIS system was heavily customized. While the UN was able to take some of these functions on natively, there were still many business-specific customizations that had to be recreated to reduce the amount of change management needed for the end users. Many of these customizations are extraordinarily complex and specific to CenterPoint, but SSP was able to recreate (and, in some instances, improve) the customization and deliver them successfully to the customer.

FirstEnergy

FirstEnergy serves over 6 million electric customers across five states and ten operating companies. They selected SSP to migrate them away from their AutoCAD based GIS system to the Esri Utility Network as they were staging themselves for a future ADMS implementation. They are still the largest electric-only utility in the world to go live on the UN, which occurred in 2023.

The main challenge we faced with FirstEnergy was the quality of the source data from AutoCAD. While AutoCAD can perform some GIS functions, it cannot do a true topology model, nor does it require spatial connectivity to represent assets on a map. This required SSP to work with FirstEnergy on data remediations processes, both automated and manual. The most serious data issues were corrected before go-live to allow many of the circuits to be built. FirstEnergy selected the remaining issues to correct themselves after go-live.

This was documented in an Esri Case Study: How FirstEnergy Modernized Grid Operations with ArcGIS Utility Network

Louisville-Kentucky Utilities (LKE, also known as Louisville Gas & Electric/Kentucky Utilities)

LKE was the first large utility in the United States to adopt the Utility Network, going live in 2021 for the

gas distribution, gas transmission, and electric transmission datasets. LKE was migrating away from the GE Smallworld technology and establishing themselves as an Esri GIS shop. As part of this project, they also implemented SSP Productivity to improve their editing efficiency and subnetwork (circuit) management.

LKE and SSP faced a unique challenge in this project: the young state of the Utility Network at that time. Since LKE was one of the largest utilities to attempt a migration to the UN, we ran into bugs and shortcomings in the UN technology itself. This required us to work closely with Esri to report, analyze, and mitigate the problems. These mitigations were a mixture of hot fixes, patches, changes in implementation, and work arounds. As a team, LKE, SSP, and Esri were able to resolve enough of the problems so that LKE could go-live and meet their business requirements.

This was documented in an Esri Case Study: Modern Network Management Creates a Foundation for Increased Reliability.

## 2.3   Project References

*List three client references with contact information (name, title, organization, phone, and email) for similar UN projects. These references should reflect the vendor's experience in multi-utility Utility Network implementations.*

In addition to those utilities highlighted above in Section 2.2, many utilities, including those shown in Figure 2 below, have taken advantage of our strategic planning services. SSP has helped numerous utility companies create more efficient workflows for field and back-office operations, including reducing data entry, automating regulatory compliance, improving customer service, and streamlining engineering and accounting. SSP's approach involves assessing clients' needs, crafting tailored solutions, and implementing the full suite of Esri, SSP ActiveGIS products, and associated systems and integrations, often resulting in cost savings, greater efficiency, and improved processes.



*Figure 2: Customers Trust SSP's GIS Consulting Experience*

Relevant case studies/successful deployments are included in the tables below.

| CPS Energy |
|---|
| Contact Information: |
| Bob Strachan, Manager, GIS Services<br>(210) 353-2585 \| rdstrachan@cpsenergy.com |
| Location where services were provided: |
| San Antonio, TX |
| Project Title |
| Utility Network Advantage Program |
| Duration: |
| 9/2022 – 3/2023 |
| Population, utility type, utilities, meter count |
| Municipal, electric & gas, 950k electric meters & 389k gas meters |
| General description of services provided: |
| The UNAP program includes a range of consulting services that are designed to support utilities at various stages of their Utility Network implementation and maintenance. These services can be customized to meet the specific needs of each utility. This service is designed to help utilities assess their current network management systems and plan for the transition to the Utility Network. It includes a detailed analysis of existing data models, workflows, and business processes, as well as guidance on project planning and risk management. |
| Defining scope, schedule, business case/cost-benefit analysis: |
| CPS selected SSP and Black & Veatch to provide a comprehensive consulting engagement plan for its GIS technology implementation of Esri's Utility Network platform of the future. This engagement was based on SSP's industry-leading Utility Network Advantage Program (UNAP) methodology and was designed to lead CPS Energy's GIS transition in support of its electric and gas business units. As a part of this project, SSP identified and analyzed business needs and current and planned systems and data requirements, established goals, identified gaps, addressed organizational aspects and domain capabilities, and assessed the risks and appropriate plans needed to support the ArcGIS Platform and utility network implementation. |
| Project comments: |
| CPS Energy is the nation's largest community-owned provider of electric and natural gas services. They provide utility services to more than 950,000 electric and over 389,000 natural gas customers in San Antonio and portions of seven adjoining counties. Along with their move to the UN, they are in the process of modernizing many of the IT platforms to improve operational efficiency and customer satisfaction. This includes using the UN in a pilot phase to feed with OSI ADMS platform, in which SSP is helping develop the electric data model and part of the integration. SSP is also contracted to complete the implementation of the gas UN and the remaining business processes for the electric business units. |

| Montana-Dakota Utilities |
|---|
| Contact Information: |
| Lance Elroy - Director, Process Improvement and Operations Systems<br>(208) 841-1452 \| lance.elroy@mdu.com |
| Location where services were provided: |
| Boise, Idaho |
| Project Title |
| Utility Network Advantage Program |
| Duration: |
| 1/2020 – 4/2020 |
| Population, utility type, utilities, meter count |

| |
|---|
| Investor-owned, electric & gas, 1.2M meters |
| General description of services provided: |
| The UNAP program includes a range of consulting services that are designed to support utilities at various stages of their Utility Network implementation and maintenance. These services can be customized to meet the specific needs of each utility. This service is designed to help utilities assess their current network management systems and plan for the transition to the Utility Network. It includes a detailed analysis of existing data models, workflows, and business processes, as well as guidance on project planning and risk management. |
| Defining scope, schedule, business case/cost-benefit analysis: |
| Montana Dakota Utilities Resources Group (MDUG) engaged SSP in a strategic initiative to design and implement a new unified GIS data model to support all their utility business segments and provide consistency in how data is modeled across four operating companies in an eight-state territory. SSP was engaged by MDUG to develop an all-encompassing Esri-based Utility Network Management Extension ("UN") Transition Strategy and Roadmap in support of the organization's business planning and operations decisions and to assist in understanding and planning the key steps required to mitigate any transition risks and challenges. The Utility Network Advantage Program ("UNAP") was selected to achieve the following key business and operational objectives:<br>• Ensure the business needs are identified to determine the UN and ArcGIS Pro upgrade architecture and functional capabilities.<br>• Determine and prioritize the critical factors, such as data needing to be cleansed and updated to streamline the upgrade and to take full advantage of the UN and ArcGIS Pro.<br>• Establish a comprehensive roadmap that identifies the overall budgeting and schedule requirements, along with the business releases (and the timing of these releases), each of which incorporates the following:<br>    o Migration and correction of spatial data.<br>    o Implementation and integration of the technology.<br>    o Changes in workflow processes based on business requirements.<br>    o Identification and rollout plan of various organizational, governance, staffing, and associated training needs. |
| Project comments: |
| As a result of the UNAP, MDUG has embarked on an iterative UN implementation project consisting of four phases. It began with SSP designing the unified data model, performing complex source-to-target data mapping, developing migration scripts, and successfully executing the migration of all existing gas, electric, and fiber GIS data to the new unified data model. The project accounted for the business impacts associated with this change while establishing a solid foundation for a successful transition to the new Esri Utility Network. It similarly established a base GIS model for integration with IBM Maximo asset management and other operational systems.<br>Esri has written a case study on this planning effort: Utility Network Migration Planning Springboards Business Transformation |

| Garland Power & Light |
|---|
| Contact Information: |
| Jeff Garcia, AIPS Manager<br>(972) 205-3566 \| jgarcia@gpltexas.org |
| Location where services were provided: |
| Garland, Texas |
| Project Title |
| Utility Network Advantage Program |
| Duration: |
| August 2024 – December 2024 |

| |
|---|
| Utility type, utilities, meter count |
| 243,470 citizens, municipal, electric, 75k meters |
| General description of services provided: |
| The UNAP program includes a range of consulting services that are designed to support utilities at various stages of their Utility Network implementation and maintenance. These services can be customized to meet the specific needs of each utility. This service is designed to help utilities assess their current network management systems and plan for the transition to the Utility Network. It includes a detailed analysis of existing data models, workflows, and business processes, as well as guidance on project planning and risk management. |
| Defining scope, schedule, business case/cost-benefit analysis: |
| GPL requested SSP to conduct a comprehensive consulting engagement plan for migrating their existing ArcGIS and ArcFM GIS environment to the Esri Utility Network platform. In this engagement, SSP collaboratively worked with GPL to develop a Transition Strategy and Roadmap in support of the organization's business planning and operations decisions, and to assist in understanding and planning the key steps required to mitigate any transition risks and challenges. The Utility Network Advantage Program ("UNAP") process achieved in discussing and documenting the following: <ul><li>Business needs and requirements are identified and prioritized.</li><li>The future of GPL's design and outage management systems (closely tied to GIS).</li><li>Data migration options.</li><li>Implementation and integration of technology.</li><li>Workflow processes that will be impacted by the UN.</li><li>A comprehensive roadmap which identifies the overall budgeting and schedule requirements, along with the business releases (and the timing of these releases).</li></ul> |

# 3   Approach and Solution Design

## 3.1   System Design

> *Provide a high-level description of the vendor's approach to designing UN systems for multi-utility environments, including key points of data model selection and modification.*

SSP's proven UN (UN) Strategy and Roadmap methodology guides the UN migration strategy development. This approach will support GUC's business planning and operations decisions and will assist GUC in understanding and planning the key steps required to mitigate risks and challenges, undergo change, and adopt innovative technologies, customizations, and processes. As a collaborative effort, the team is committed to ensuring that GUC's knowledge and expertise are fully integrated into the overall process for this UN migration project:
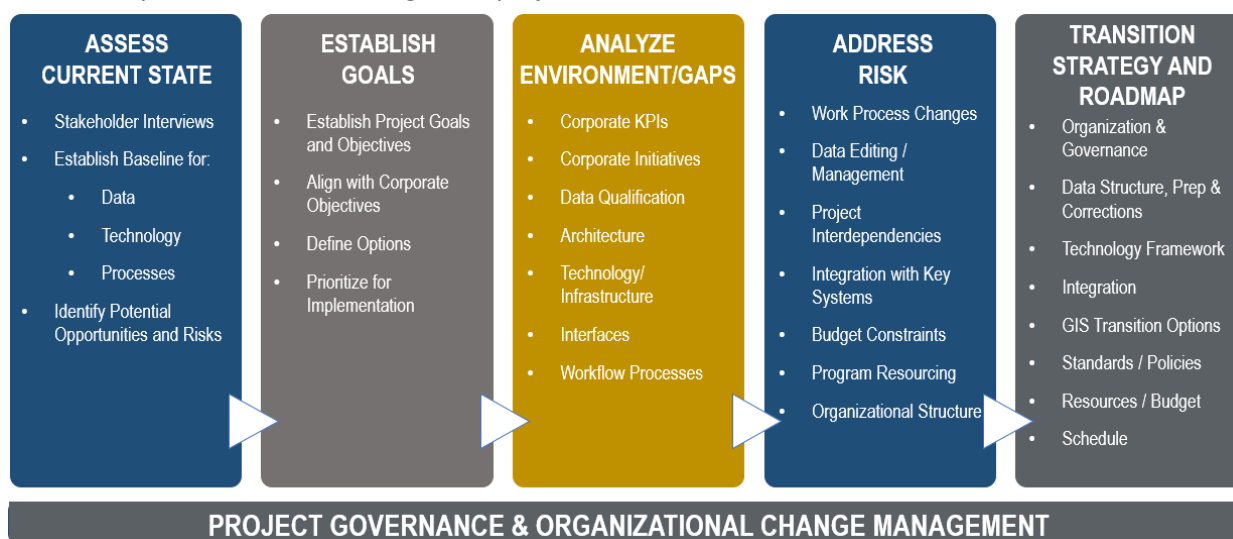


**ASSESS CURRENT STATE**
- Stakeholder Interviews
- Establish Baseline for:
  - Data
  - Technology
  - Processes
- Identify Potential Opportunities and Risks

**ESTABLISH GOALS**
- Establish Project Goals and Objectives
- Align with Corporate Objectives
- Define Options
- Prioritize for Implementation

**ANALYZE ENVIRONMENT/GAPS**
- Corporate KPIs
- Corporate Initiatives
- Data Qualification
- Architecture
- Technology/ Infrastructure
- Interfaces
- Workflow Processes

**ADDRESS RISK**
- Work Process Changes
- Data Editing / Management
- Project Interdependencies
- Integration with Key Systems
- Budget Constraints
- Program Resourcing
- Organizational Structure

**TRANSITION STRATEGY AND ROADMAP**
- Organization & Governance
- Data Structure, Prep & Corrections
- Technology Framework
- Integration
- GIS Transition Options
- Standards / Policies
- Resources / Budget
- Schedule

**PROJECT GOVERNANCE & ORGANIZATIONAL CHANGE MANAGEMENT**

*Figure 3: SSP UN Strategy & Roadmap Approach*

### 3.1.1   Project Preparation

At the initiation of the project, SSP will work with GUC's Project Manager and core team to:

- Conduct Project Preparation and review GUC's current state documents.
- Finalize the work plan and schedule for the planning efforts.
- Prepare project kickoff materials.
- Conduct kickoff meeting with the core team representing pertinent GUC stakeholder groups.
- Ensure mutual agreement with all requirements for project administration to meet Task 1 Deliverables.

This step includes reviewing existing materials related to GUC's current architecture, applications, systems, and data for use throughout the duration of the project. The materials will include the information provided in GUC's RFP along with any additional information GUC considers pertinent to the project. This step also includes finalizing the list of key individuals/groups/departments within the organization to be interviewed and/or participate in all subsequent workshops.

During this segment of the project, SSP will conduct a series of workshops with GUC stakeholders to assess and discuss the current state of GUC's organization. Areas of opportunity for the future GIS platform will be identified and included in the final migration strategy. As part of the project initiation, SSP will conduct a Risk Assessment that will focus on organizational attributes and change characteristics to assess overall risk of the UN implementation project. The results will be used to guide the project and change management aspects of the project in the subsequent phases.

SSP will conduct these workshops with various GUC business units and GUC IT/GIS to identify business needs, constraints, technology, data, processes, staffing, organizational structure, and governance requirements. These workshops will target key business and IT stakeholders and data consumers. Working in collaboration with GUC, the final list of stakeholders will be validated for the required workshops.

| SSP Deliverables |
| --- |
| Project Work Schedule |
| Kick-off Presentation |
| Organizational & Change Risk Assessment |

## 3.1.2  Current and Future State Assessment Workshop

The goal of this workshop is to identify and review the current technology, data, applications, and integrations. All discussions of the current internal data repositories, internal and external to GIS, will be incorporated into an overall plan to transition to the UN and ArcGIS Pro. Critical stakeholder groups that may be part of these interview sessions including, but not limited to:

- IT & GIS (including training and system architecture needs)
- Engineering
- Operations (field crews, inspection, one-call)
- System Planning
- System Control (outage and system management)
- Land Management
- Regulatory Compliance
- Other groups deemed pertinent to this project by GUC.

SSP will coordinate with GUC to ensure the interview workshops are performed efficiently based on GUC staff availability. The interview sessions may combine multiple, potentially smaller, business units or the workshop may host specific business units where a larger group of stakeholders may be involved. Individual workshop sessions will not be necessary where business units share the same function, task, technology, or data needs/usage across the GUC organization. SSP will coordinate workshop days with GUC to organize them based on data history, current operations, and maintenance practices.

The workshops will be conducted onsite over a three (3) day period. The resulting workshops will:

- Review and validate a list of business needs and constraints (current and future) as identified by GUC and SSP collaboratively. In addition, SSP will identify initial Esri training needs that will support the planning and implementation of the UN and ArcGIS Pro.
- Develop a list of:

- o Data, technology, process, and organizational needs to support the critical stakeholder groups' daily job functions.
- o Barriers to success that prevent the critical stakeholder groups from being as effective or successful as they could be.
- o Future state needs and wants from the critical stakeholder groups that will make them more effective and meet or fulfill future GUC business goals.
- o Data elements that are or may be missing to meet future state needs.
- o Initial list of users impacted by project and associated Esri training needs
- o Initial recommended hardware/software requirements and installation/implementation strategies.

The deliverables of this milestone, in conjunction with the data assessment and remediations deliverables, will fulfill the requirements of Task 2.

| SSP Deliverables |
| --- |
| Document All Workshop Findings and Provide Summary Report To GUC |
| Workshop Presentation |

### 3.1.2.1.1  Document Findings

SSP will be responsible for developing the supporting documentation and summaries of the workshops. SSP has allotted five (5) business days of analysis following the workshops which will also allow for follow-ups to complement information gathered during workshops as needed.

In addition, the proposed schedule plans for five (5) days of review by the GUC project team and stakeholder groups following the final consolidation of findings from the current-state assessment workshop. GUC will return all revisions to SSP and SSP will update all documentation, as necessary. SSP will then return the revised document for GUC for review and approval in writing.

| SSP Deliverables |
| --- |
| Comprehensive Summary Report for All Workshops |

## 3.1.3  Data Assessment of Electric and Gas Datasets

SSP's solution involves a detailed assessment and evaluation of GUC's existing data structure for "readiness" to transition from a geometric network (GN) to the (utility network) UN. Evaluation activities will align with GUC's internal standards and business requirements as well as industry best practices.

SSP subject matter experts (SMEs) will review GUC's documentation on current known errors in the GIS thus facilitating a review of GUC's existing validation routines/processes to understand what is not working properly, what gaps may exist, or what additional validation may be required.

Once the routines/process gaps have been identified and documented, SSP SMEs will begin to execute SSP validation routines to confirm existing errors and identify any additional data errors or conditions that must be addressed before migration. A critical component of the assessment is appending a portion

of GUC's data into an SSP-defined UN model to expose network topology errors and provide GUC with a UN asset package to view a subset of its gas data in ESRI's Utility Network.

SSP SMEs will analyze the existing data model as part of the assessment and identify other impacts and considerations. This includes identifying "go-forward" model changes to support any data normalization efforts.

Data assessment results will be documented, and existing data errors or conditions will be organized into three classes as listed below:

- **Severity Level 1 (S1 error)** – Substantial adverse business impact, major application (e.g., outage, ADMS) adverse impact, or prevents migration of data to UN.
- **Severity Level 2 (S2 error)** – Systemic or consistently erroneous data, but minor business or system impacts.
- **Severity Level 3 (S3 error)** – Individual, minor data errors, minimal business, or system impacts, if any. Can migrate data to UN "as-is."

The following checks will be performed by SSP as part of the data assessment and are provided here as a designation of the approach (automated or visual):

| Check Type | Approach |
|---|---|
| Duplicate Feature check | Auto |
| Geographic Coincident Features | Auto |
| OH/UG transitions check | Visual |
| Illegal/Bad Geometry | Auto |
| Attribute Values outside domains | Auto |
| Target Critical Attributes | Visual |
| Geometric Overstrike | Auto |
| Connectivity | Visual |
| Phase/Phase Orientation | Visual |
| Review Data Model | Visual |
| Unit record/Parent feature check | Auto |

GUC shall provide its entire GIS dataset in either a file geodatabase format or database backup to SSP to achieve the most comprehensive analysis of the GIS data. SSP will also request executable copies of any validation routines currently used by GUC.

The deliverables of this milestone, in conjunction with the current/future state assessment and data remediations deliverables, will fulfill the requirements of Task 2.

| SSP Deliverables |
|---|
| Data Assessment Summary & Recommendations Document |
| Detailed Error Logs including:<br>• Summary of errors by severity, number of features checked, number of errors found.<br>• Detailed error listing for each check/routine<br>• Error database |
| GasDataIssues.gdb |
| Gas_UN.gdb |

| |
|---|
| Gas_AP.gdb |
| ElectricDataIssues.gdb |
| Electric_UN.gdb |
| Electric_AP.gdb |

### 3.1.4  Remediation/Correction/Enhancement Plan

SSP will work with GUC personnel to develop a plan of recommended activities to correct S1 and S2 errors and a subset of the S3 errors as approved by GUC. The plan may include recommendations for data normalization across the GIS and data enhancements to support the UN for the GIS data as identified. As part of this plan, SSP will recommend the most cost-effective means to remediate identified errors/anomalies and introduce specified data enhancements relying on existing or to-be-developed automated tools wherever possible.

The plan of recommended correction activities for GUC will be based on the general approach listed below. **Please note that the following tasks will not be completed during this phase of the project, but are presented here as the general basis for the development of the Data Correction/Enhancement Plan**:

- Determine necessary modifications to the existing data model/architecture to best accommodate the UN requirements. Identify appropriate automated routines to correct as many anomalies as possible based on the existing data assessment results. These routines may be existing SSP tools configured for GUC, or they may be new tools created specifically for GUC if the cost to create these tools is less than the cost to correct the related anomalies via manual methods.
- It may be appropriate to normalize the data across various features and attributes dependent on specific data conditions. The plan will include an assessment of areas where data may be normalized and will identify if normalization can be achieved programmatically or if manual efforts will be required. SSP will analyze the existing data model and domains and make recommendations for any changes necessary to support the normalization effort if data normalization is recommended.

The actual correction work as detailed in the Data Correction and Enhancement document may be completed by either GUC or SSP personnel. A project schedule and associated costs will be provided to GUC if SSP is designated to complete this work.

The deliverables of this milestone, in conjunction with the current/future state assessment and data assessment deliverables, will fulfill the requirements of Task 2.

| SSP Deliverables |
|---|
| Data Correction and Enhancement Plan for gas |
| Budgetary resource/cost estimate for data correction and enhancement - a separate SOW will be required here if GUC wants SSP to proceed with the actual data corrections work. |

### 3.1.5 Data Model and Management Workshop

During this task, SSP will conduct a three-day knowledge transfer and discovery session for GUC GIS team members on key aspects of Esri's new UN model, including Asset Groups, Asset Types, Assemblies, Devices, and Associations, and how these correspond to the existing capabilities provided in the current Esri GN environment. This will be followed with another full-day workshop to review the standard UN model in relation to the gaps with GUC's existing GIS GDB models for electric and gas. The workshop will highlight examples of additional fields, relationships, domains, attribute rules, and potential customizations that will be needed to support GUC's business and operational data requirements, as well as data risks associated with data discrepancies and maintenance of existing customizations and integrations. This workshop will also spend time reviewing the existing ArcFM auto-updaters and customizations in use and any unique data management issues that GUC experiences.

The findings of this workshop will support the development of a set of activities for addressing the future execution of the migration of data from the current GIS GDB to the UN model. Options for both automating data migration and manual editing will be discussed during the workshop that will support the data migration and related synchronization between the existing GDB and new UN model. The findings will also include recommendations on how GUC should configure or approach the UN regarding the potential future attribute rules, customizations, quality control, and data maintenance.

Please note that we will not be getting into detailed designs of either the data model or configurations and attribute rules in this workshop. The design phase of the UN migration project will address the detailed aspects of the future migration process, including the UN data model, customizations, integrations, and any synchronization processes.

The deliverables of this will fulfill the requirements of Task 3.

| SSP Deliverables |
| --- |
| Data Model Workshop Summary Report |

### 3.1.6 Third Party Integrations Review Workshop

During this task, SSP will facilitate a one-day workshop to assess the current state and workflow of all integrations that interact with or manage data within GUC's GIS. This will include reviewing the impact(s) of migration from the current GUC GIS models to the UN model as well as the compatibility of existing systems and integrations with the target UN model and ArcGIS Pro.

This review will include the following applications:

- CIS
- SCADA
- OMS
- ADMS
- DERMS
- Planning
- Design
- Asset and Work Management

The outcome of these workshops will be a report outlining the recommendations and best practices GUC should follow to successfully integrate with the listed applications. SSP will also document any issues, risks, and concerns with the listed applications, including if said application should deprecated in favor of newer technologies. These deliverables will fulfill the requirements of Task 4.

| SSP Deliverables |
| --- |
| Third Party Tools & Other Customizations Workshop Summary Report |

### 3.1.7 UN Migration Goals, Objectives, and Risks and Gaps

Using the output of the Current and Future State Workshops, SSP will conduct a one-day workshop to establish the short and long-term goals of the future Esri UN platform and prioritize them using GUC's overall business goals and needs. The goals will help drive alignment and stakeholder engagement and will be prioritized during this workshop using the MoSCoW Prioritization method:

- **MUST** – The goal is critical to project success and must be included in the current delivery. (Note: Goals can be downgraded from MUST, by agreement with all relevant stakeholders; for example, when new requirements are deemed more important).
- **SHOULD** – The goal is important to project success, but it is not necessary to address it in the current delivery. SHOULD goals are as important as MUST, although SHOULD goals are often not as time-critical or have workarounds, allowing another way of satisfying the requirement, so they can be held back until a future delivery.
- **COULD** – The goal is not critical to LBPUD and is often seen as nice to have. A few easily satisfied COULD goals in a delivery can increase customer satisfaction for little development cost.
- **WON'T** – The goal is either the least-critical, lowest-payback item(s), or not appropriate for the roadmap. As a result, WON'T goals are not planned into the roadmap. WON'T goals are either dropped or reconsidered for inclusion in the future.

Time will be spent identifying potential risks and gaps that accompany the retirement of the existing GIS system and implementation of the Esri UN and ArcGIS Pro. This will include such things as invalid assumptions, lack of user requirements or acceptance, resourcing requirements for future-state, technical limitations with new software, or overly optimistic implementation strategy that may involve one or more of the following:

- Organizational readiness and governance.
- Work process changes.
- Data editing functionality.
- Project interdependencies.
- Integration with key systems.
- Budget constraints.
- Program/project resources.

These risks and gaps will be rated for severity based on likelihood of occurrence and impact to the organization. High-level mitigation strategies will be discussed and documented for each risk and gap.

This workshop will be conducted remotely over a single day. The findings will be documented, and GUC will be given five business days to provide feedback and comments on the draft document. SSP will revise the documents per GUC's comments and return it for final review and acceptance in writing. An example of the Goals worksheet is shown in Figure 4 below:

| Goals (An approach chosen to bring about a desired future or change in state, such as achievement of a solution to a problem) | Gap Statements (Defines barriers that must be overcome to achieve a desired goal) | Gap/Benefit Impact Areas  1: Spatial data quality and content  2: Application functionality  3: Technology/architecture/infrastructure  4: Interface requirements  5: Staffing, skills, and training needs  6: Organization, GIS governance  7: Process improvement areas | Objectives (Supports an outcome towards which the organization strives to attain a particular goal and/or benefit) | Recommendations, Initiatives, Activities, and/or Projects (A planned piece of work or set of tasks to achieve a particular objective) | Notes (Any unique discussion points or considerations that came up during the workshop) (Anything unique to a particular Operating Company/Business Unit) | Must, Should, Could, Won't |
|---|---|---|---|---|---|---|
| UN-1. Establish a GIS Governance Committee and decision-making framework. | 1.1 There is presently no official GIS Governance Committee at GPL  1.2 Formal leadership for UN transition required to be successful | 6 | 1.1.1 Establish an Advisory Committee of stakeholders and SME's for data governance, project prioritization, and solution recommendations.  1.2.1 Define a GIS Project and Program Sponsor for Implementation | 1.1.1.1 Develop a GIS Governance Committee to review and update IT/GIS governance structure, procedures, and policies.  1.2.1.1 Work closely with Project sponsor on his or her importance to the success of the project.  1.2.1.2 Work with sponsor and leadership to actively and visibly participate in the UN change process.  1.2.1.3 Build the coalition of support with other senior leadership and managers.  1.2.1.4 Communicate directly with employees about the business reasons and nature of the change – see Communication recommendation. | Committee should be formed prior to the UN implementation to assist in the various aspects of the overall UN effort. This also expands the visibility of how GIS is utilized across utility. | M |
| UN-2. Document Workflows for data update\maintenance procedures. | 2.1 There are currently no documented workflows of how GIS is updated and maintained. | 1,5,6,7 | 2.1.1 Create and document editing workflows from initiation to close-out.  2.1.2 Create and document web map creation workflows. | 2.1.1.1 Conduct business use case workshops with stakeholders to define the necessary systems of record and which attributes are required.  2.1.1.2 Design and implement standardized work procedures to keep GIS and UN data up to date.  2.1.2.1 As new web maps are created, define and document processes as the creation is occurring. | While a bit of a cumbersome task, documenting the entire process will prove useful to determine process gaps, as well as to provide context for users consuming the data. | M |

*Figure 4: Goals Worksheet Example*

Figure 5 below depicts an example of the Risks worksheet.

| ID | Risk | Impact | Probability | Score | Details | Mitigation Plan |
|---|---|---|---|---|---|---|
| 1 | **Project Resource Requirements:** The resource requirements to implement the UN will come from the same pool of people who maintain the current system (GIS, and TSG) and integrated systems on a day-to-day basis along with other IT projects. | 5 | 5 | 25 | The people needed to implement the UN will be the same people who are expected to keep the existing GIS core systems (data and servers) running along with the people maintaining any integrated systems. Business Unit SME's will also be required for the project success. This also includes change requests for IT systems that lead to larger projects. | Executive sponsorship and governance teams will need to be kept abreast of project progress and prioritize efforts to ensure all corporate needs are met. They will also need to monitor resource needs across other TSG/Corporate projects and those priorities. Utilizing partners and contractors can aid in alleviating fatigue. |
| 2 | **Replacement of Design Tools:** Utility's current 3rd party design solution (ArcFM Designer) will not work with the Utility Network and adequate replacements will need to be determined. | 5 | 5 | 25 | The Utility Network is not compatible with the existing ArcFM Designer toolset for construction design which will affect Distribution Engineering and crew consumption of the designs. This will necessitate the search for a new design vendor which could then change business processes based upon tool functionality. | Utility will need to catalog and evaluate these design tools. They will need to discuss migration plans to share data schema as well as integration with existing toolsets such as Lifecycle Assets, Lifecycle Construction Standards, and Lifecycle Work. |
| 3 | **Replacement Outage Management Tool:** Utility's current 3rd party OMS tool (ArcFM Responder) will not work with the Utility Network and adequate replacements will need to be | 5 | 5 | 25 | with the existing ArcFM Responder as an OMS solution which will affect System Operations, crew consumption of the outage data, and the public facing outage map. This will necessitate the search for a new OMS vendor which could then | Utility will need to catalog and evaluate OMS tools. They will need to discuss migration plans with the vendor of these tools and decide how best to integrate with the UN and other internal systems such as the upcoming AMI |

*Figure 5: Risk Worksheet Example*

| SSP Deliverables |
|---|
| Prioritized Goals of the UN Migration |
| Risks and High-Level Mitigation Strategies for the UN Migration |

### 3.1.8 UN Migration Strategy & Roadmap, Timeline, and Budgetary Estimate

In this segment of the project, SSP and GUC will use the information gathered from the previous workshops to develop a realistic timeline for rollout of the UN which will include the required tasks during the Define, Design, Develop, Deploy, and Post-Migration Support phases of the actual migration to the UN. These tasks will be necessary to address gaps in the following elements in support of the UN transition initiative:

- Organizational readiness and governance.
- Resources and staffing.
- Work process improvements.
- Data structure.
- Technology framework.
- Integration with operational and business systems.
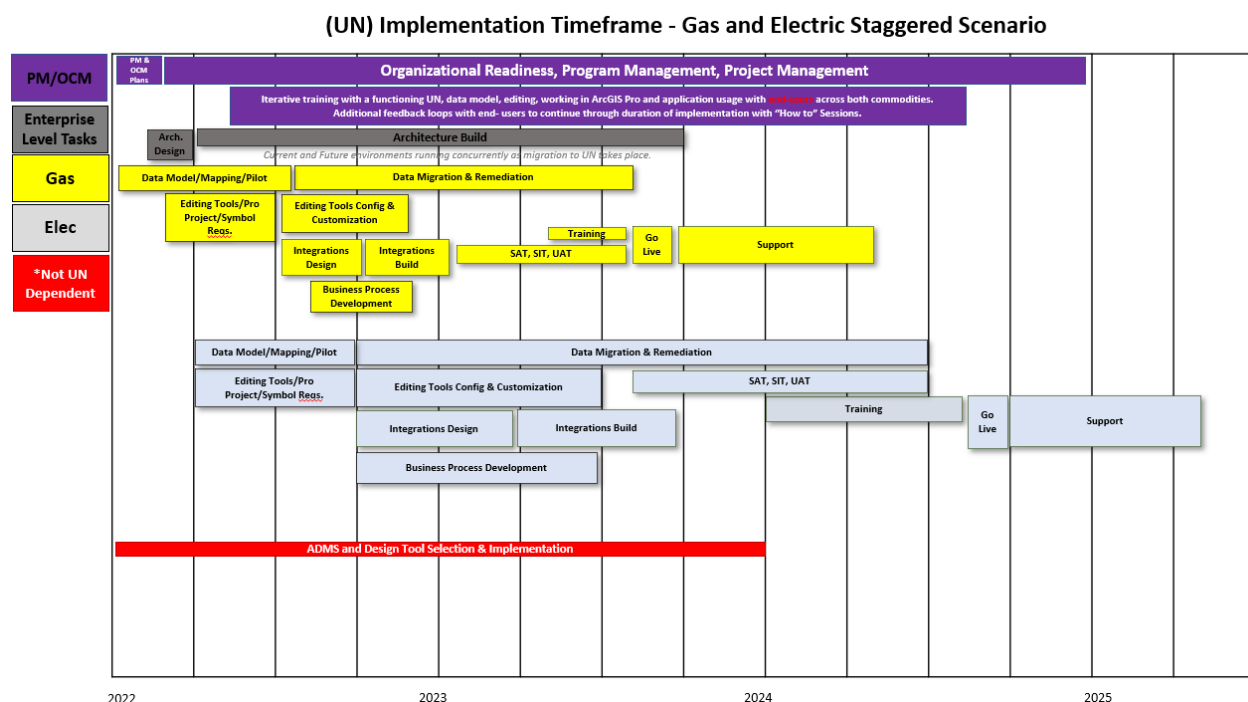- Standards, policies, and metrics.



Figure 6: Sample Migration Strategy High-Level Roadmap (exemplary use ONLY)

A half-day remote workshop will be held to review and collaborate on the proposed high-level migration timeline and the strategy involved for the UN and ArcGIS Pro rollout.

Following this workshop, SSP will develop the following:

- A transition strategy document describing in greater detail the distinct parts and pieces of the implementation timelines, including:

  o A budgetary estimate to complete the migration from the perspective of an agnostic system implementer (meaning it is not written in a fashion that assumes SSP must do the migration work) with major milestones, dependencies, risk mitigations, and baseline LBY resourcing requirements.

These documents will be reviewed with the GUC project team and updated based on feedback. A final one-day remote workshop will be conducted to review the draft budgetary estimate and transition strategy. Once this workshop is complete, SSP will be given the draft budgetary estimate and the finalized timeline document to GUC. GUC will provide written acceptance of the documents to signify the closeout of this task.

This deliverable will fulfill the requirements of Task 5.

| SSP Deliverables |
| --- |
| Draft Budgetary Estimate for UN Migration |
| UN Migration Strategy & Roadmap, Budgetary Estimate, and Timeline Document |

### 3.1.9  Final Presentation

Using all the findings from the previous steps, SSP will prepare a draft presentation, summarizing the tasks from this project and will present the migration timelines and budgetary estimates to GUC. A half-day workshop will be held with GUC core team members to review and update as necessary the draft presentation and strategy document. SSP will also finalize the budgetary estimate at this time. This step is to ensure the final messaging is accurate and meaningful for the larger GUC target recipients and executives. This workshop will also include a further review of the refined draft budgetary estimates.

The UN migration strategy and roadmap document, and draft budgetary estimates will then be updated as needed. A final presentation will be conducted remotely following the review workshop, with GUC receiving a copy of the final presentation, the finalized budgetary estimate, and a summary of all supporting findings documents. GUC will signify their acceptance of these documents in writing.

This will be the capstone deliverable and fulfill the requirements of Tasks 1 through 5 and be used as the basis to move to implementation for Tasks 6 and 7.

| SSP Deliverables |
| --- |
| Finalized Budgetary Estimate for UN Migration |
| Digital Copy of Final Presentation |

## 3.2  Integration Strategy

*Summarize the vendor's approach to integrating UN with CIS, SCADA, GIS, OMS, modeling, planning and design, and potentially ADMS and DERMS, providing examples from similar projects where multi-platform integration was successfully achieved.*

*Vendors should demonstrate experience in integration evaluation and edge system compatibility. Comprehensive analysis and understanding of current process so that level of service is maintained or exceeded.*

The SSP Team approaches each engagement with a focus on "solution-oriented consulting." This method focuses on understanding the business needs of our customers before introducing any specific technology and risk bias toward a particular solution. This enables us to better address the 'efficiencies' and 'process enhancements' described in the requirements above and employ GIS and other software where required. A key area of improving both efficiency and process enhancements is through the integration with other systems, automating workflows, and reducing the reliance on manual and/or paper-based processes. Our long history as a system integrator for a variety of technologies along with implementation experts with GIS experience across an extensive range of customers has provided us with insight into the positive impacts that a solution-focused set of integrations can have on GUC's business operations.

SSP has developed and deployed complex integrations to a multitude of other enterprise systems including SCADA, OMS, CIS, Synergi/CYME, Graphic Work Design (GWD) applications, and ADMS. For many utilities, these are always bespoke integrations designed to meet the specific needs of each customer. This has ranged from projects that support circuit extracts (and other integrations) to OMS/ADMS, work order creation/transitions between GIS, Design, and ERP and CIS platforms, and multiple workflows that involved mobile applications. Specific examples of integration work are listed in the project experience found in Section 2.2and in the project references found in Section 2.3.

The keys to successful integrations typically fall to the basics of granular detail on functional business requirements and strong supporting documentation and workflows. Understanding the requirements and their feasibility is also important as it is common for a requirement to be listed that is very technically complicated and difficult to fulfill. These types of requirements require a strong understanding of the goal of said requirements and whether a less complicated approach can be used to achieve the same or comparable results.

The largest risk to any integration is the testing conducted by the customer. While SSP does conduct functional testing of all developed custom code, it does not replace business process testing and feedback. It has been proven many times that post go-live support issues typically arise because the customer did not conduct enough testing to catch even basic issues.

SSP will discuss integration requirements as part of the overall project as described in section 3.1.6 of this document. The final design of these integrations will be completed during the design phase using our Sustainable Quality Management (SQM) approach depicted in Figure 7.
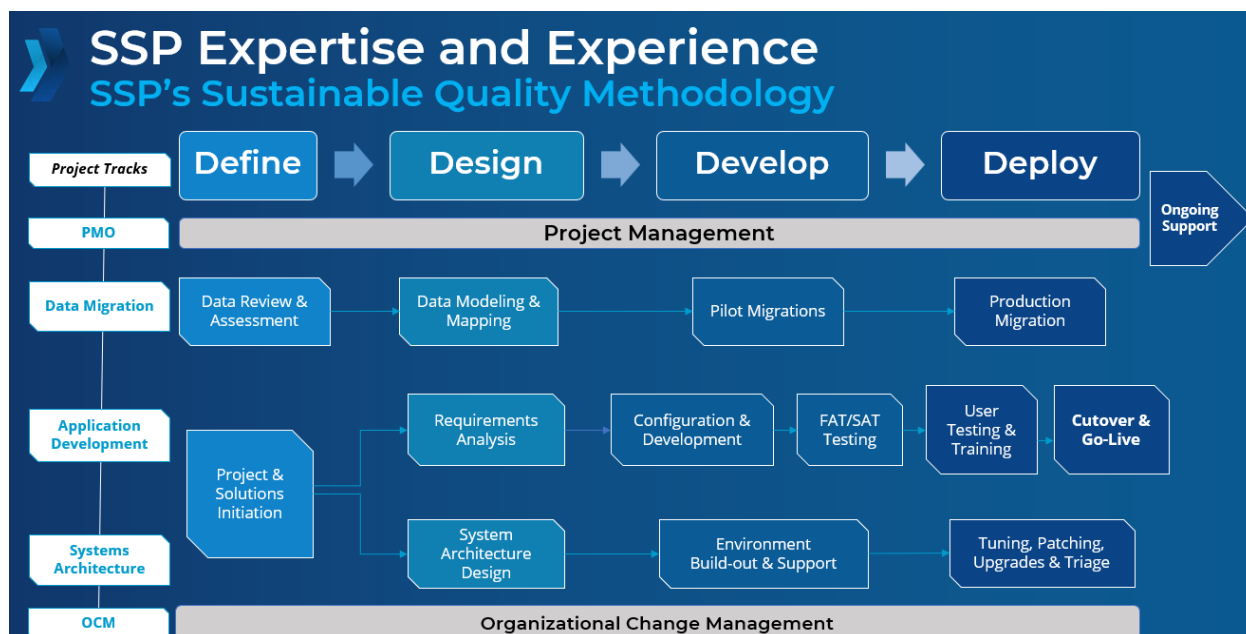
*Figure 7: SSP's Sustainable Quality Management Approach*

## 3.3  Work Plan

*Compile an overview of the approach to work plan generation to accomplish data model selection, identification of data issues, and data corrections. Include a high-level example of a plan that was successfully executed.*

SSP's process for generating a workplan is covered in Section 3.1 of this document.

SSP has had many projects where a customer has moved from the roadmap/strategy stage to a full implementation of the UN. These have included data assessments, data remediations, and data model design, either as standalone efforts or part of the overall UN implementation strategy.

Customers who have moved through the planning process and have implemented or in the process of implementing the UN include:

- CPS Energy
  - o Completed UNAP Roadmap in March 2023.
  - o Pilot phase for Electric UN feeding ADMS is completed.
  - o Pre-project work in process with SSP for gas UN and remaining electric UN implementations.
- CenterPoint Energy
  - o Completed roadmap and design in July 2021.
  - o SSP helped CenterPoint go live with all gas and electric regions by November of 2024.
- Montana-Dakota Utilities (MDU)
  - o Completed UNAP Roadmap in April 2020.
  - o SSP helped MDU go live with all gas and electric regions in September of 2024.
- Unisource Energy (UNS)
  - o Completed UNAP Roadmap in October 2021.

    o    Working with SSP for implementation of UN roadmap for electric and gas, slated for go-live in late 2025, early 2026.

While other customers have completed UNAP Roadmaps and UN implementations with SSP, the ones highlighted above are like GUC in that they serve both gas and electric customers.

## 3.4 Transition Management

> *Notate key items for consideration when developing a transition plan from Geometric Network to Utility Network including resources and impact to processes while maintaining concurrent deployments.*
>
> *Vendors should showcase experience in managing the transition from ArcGIS Enterprise Geometric Network to Utility Network. This includes system architecture, data modeling and mapping, data readiness and managing changes during migration.*

There are several items to consider in a transition plan when migrating from the Geometric Network to the Utility Network. These include, but are not limited to:

- The amount of functionality that is required to migrate to the UN.
- The amount of change required in moving to the UN.
- The amount of change desired in moving to the UN.
- The complexity of the system to be created in the UN.
- The quality of the data to support all requested functionality.
- The timeline allotted to the effort.
- The available budget for the effort.

As part of the UNAP process, SSP collaborates very closely with the customer in talking to their stakeholders to determine the first five items. Some of the transition(s) will require GUC to change business processes while other changes will be nice to have to improve efficiencies and functionality. These required and desired changes coupled with existing functionality that must migrate will determine the complexity of the new UN platform. While examining these requirements, we also need to consider the quality of the data that will support said requirements. For example, if a customer desires highly accurate load flow analysis and impedance calculations but does not have the conductor spacing tracked in GIS, this may not be a feasible goal at this time.

At this point, the estimated timeline and budget for this proposed system must be examined if the new system is feasible or if the project needs to be broken up into phases (such as implementing a viable UN that incorporates all required functionality and leaving the "nice to haves" for future projects). We help GUC determine what is profoundly important and attainable for their proposed UN project to help control costs, timeline, and complexity. We also work to establish a relationship of trust with the GUC project team so that we can speak honestly and frankly about tough issues, such as the potential of migrating a very complex integration into the UN as-is that may not provide the same level of value to GUC as it did in the past.

The largest thing to remember about a Roadmap/Transition Strategy is that it is just that: a strategy. Strategies can change based on new information, new software releases, data remediation, change in business goals, and a host of other reasons. It should not be viewed as an immutable plan. It should be a living plan that can adjust to any relevant new factors.

SSP has applied this logic to all UNAP Roadmaps that became implementation projects. The most successful example of that so far is CPS Energy. After SSP completed our report for what they needed to do to migrate to the UN, we worked closely with CPS's management team to gameplan how to make

this plan reality and have it support their ongoing ADMS implementation. We developed a plan that started with a UN focused on ADMS needs and were able to implement a working system to further prove that the UN could support ADMS. From there, we have worked with CPS Energy to develop the rest of the implementation timeline for gas and electric to support their ERP replacement.

One of the issues we've been discussing with CPS Energy is their need for a data synchronization process between the GN and the UN. Most of our customers have found the data sync was not worth the cost, effort, and risk it introduced to their projects and have chosen to go the "Big Bang" approach for go-live. This means the customer keeps their legacy processes and systems active until the UN system is fully evaluated, end users trained, and everything is proven ready. At that point, all services and processes are cut over to the UN and the legacy GIS platform is shut down. CPS Energy's requirements are viable but immutable: they need a data sync for the GN to UN and they are willing to pay for it. We have been coordinating with a vendor who offers such services to assist CPS Energy.

SSP will bring this same level of expertise and collaboration to GUC for your project. We want to help you determine the best fit of the UN platform to the GUC user base that achieves as many goals as possible while still being feasible.

## 3.5   System Architecture

*Outline approach of addressing architectural changes and considerations. Include examples of successful implementations where users have high confidence in reliability of data and system availability.*

While SSP can provide some guidance of the technical architecture for a highly available ArcGIS Enterprise Platform running the Utility Network, we typically recommend that our customers engage Esri directly for this task. Esri is seeing information and feedback from their entire utility customer base. While SSP has been and is involved with more Utility Network projects than any other vendor, there are more projects than SSP's that provide feedback to Esri.

Esri is current on their own recommendations on how to architect a system based on the planned uses, number of users, number of integrations, etc. They can be and have been subcontracted or directly contracted in many of SSP's implementation projects, providing the analysis GUC is requesting technical architecture.

Regardless of this recommendation, SSP will hold system architecture discussions within the Current and Future State Assessment sessions outlined in Section 3.1.2 to document the future state requirements of GUC for the UN Implementation.

# 4 Project Management Strategy

## 4.1 Project Plan

*Provide a sample project plan with potential resources adhering to a reasonable timeline that meets the design specifications listed above. An approach with remote resources will be considered.*

The project schedule that was used to scope and budget the services is included below (and in Figure 6 above) for additional detail regarding tasks and durations. **The depiction is intended only to provide a sense of estimated project duration and is strictly non-binding.** Following the project kickoff meeting, the SSP Project Manager will update the project schedule and insert all known delays to provide a realistic timeline for project milestones based on the actual project start date.
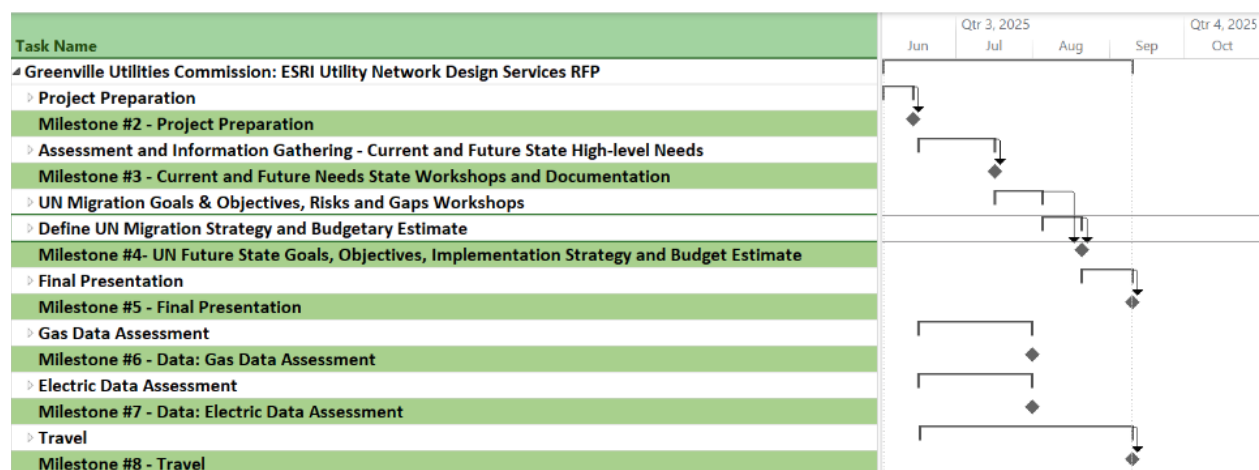


*Figure 8: Sample Project Schedule*

Exemplary resumes follow. Please note, by company policy, a commitment of specific resources for this project can only be made during scope negotiation and is dependent upon the determination of the project start date. This policy exists to allow SSP to maintain a flexible staffing management practice across the variety of skillsets on the team amid multiple project scopes, both proposed and in progress. Roles, responsibilities, and professional biographies of the representative project resources are included below.

### Principal Consultant – David Miller

David specializes in Esri, Schneider Electric, SAP, and GIS product implementations with over 20 years of experience in utility design and field operations and has led project implementations including full product configuration, customizations, system integrations, workflow optimizations, and full system upgrades. David also has experience and expertise with the ArcGIS, ArcFM™, ArcFM Responder™ Outage Management System, ArcFM Fiber Manager™, ArcGIS Collector, AutoCAD suite of software, PLS-CADD, DNV GL Synergi, Clevest Automatic Vehicle Locating System, SAP ECC 6.0, Oracle 11g/12c, Windows 7/8/10 operating systems and cyber security best practices.

With SSP Innovations, David has led or been involved in Utility Network transition planning and implementation efforts at over twenty gas and electric utilities across the nation.

### Role Description:

This role shall serve as consultant and subject matter expert with significant domain knowledge relevant to the project. These consultants are responsible for understanding detailed business requirements and serving as an intermediary between the software engineers and the business staff. They also contribute to the overall success of the project by collaborating to solve problems, implementing design strategies, streamlining processes, and managing project scope.

### OCM Consultant – Dave DiSera

Dave DiSera is an Executive Consultant with SSP Innovations specializing in enterprise GIS planning, organizational change management consulting, and project delivery services involving Esri's GIS Enterprise Platform. He has over 30 years' experience in advancing the use of geospatial and information technologies across electric, gas, and water utilities. Dave has developed and implemented geospatial/informational technology roadmaps and strategic business plans. As a certified organizational change practitioner, he has created and deployed organizational readiness and governance programs to address the aspects of new business and technology objectives, strategies, processes, procedures, and changes in organizational structure or cultural transformations across an enterprise.

### Role Description:

This role will have experience working with customers and leading documentation, training, and a true understanding of the forthcoming changes from an Enterprise GIS/mobile/work management project/implementation. The OCM Consultant will work closely with the customer's business units and internal change management staff to help communicate and minimize the impact around the new software implementations, workflows, and tools being implemented in the proposed project plan.

**Data GIS Analyst – Dan Prowse**

Dan has over 20 years of experience serving the utility GIS industry, Dan specializes in software and data analysis, data migration, quality control, design, and development for FME, ESRI ArcGIS, Microsoft SQL server, Oracle, Azteca Cityworks, and Intergraph applications. He has extensive experience on data migration and conversion projects. Dan is skilled in: FME, SQL Server, Oracle, ArcGIS, ArcFM, Crystal Reports, AutoCAD, MicroStation, Intergraph G/Technology, FRAMME.

**Role Description:**

This role serves as the technical liaison between the data production team and GIS Developers. In this position, team members work across multiple projects to assist in tool and database development, data modeling, import/export of work, and participate in project start-up activities. They work with customers and the project team to analyze and document project requirements and specifications associated with implementation and configuration of software, tools, and technical processes associated with the project and deliverable compliance. They will also assist in identifying and scoping required project software and production/QA tools to support project requirements and specifications.

**Data GIS Analyst/Modeler/Specialist – Andrew Zemple**

Andrew specializes in providing high quality analysis and production of gas, electric and telecommunication data. Working on conflation projects and work order posting he uses customized tools and analytical techniques to assure data integrity is maintained and accurate. He has implemented workflow strategies and trained team members which has resulted in higher user productivity and QA accuracy. His thorough and efficient approach consistently exceeds our company and client expectations. Andrew is skilled in various operating systems, ArcPro, ArcFM™, ArcGIS, Utility Network, and iOS.

**Role Description:**

This role guides the customer through the data mapping process, implementing best practices for data management and use industry/project experience on how best to perform the proposed task. This role will collaborate closely with the team to ensure that the database schema scripts and updates are in line with the customer's expectations.

# 5 Costs

> *Respondents should provide a detailed cost breakdown for services, including a proposed fee schedule for design services. Your proposal should outline both fixed-cost services and a time-and-materials approach, with a not-to-exceed price. Any cost option you present must clearly identify the necessary contingency amount.*

## 5.1 Proposed Fixed Fee Cost

This quote is tied directly to the scope of work detailed within Section 3 of this document. It is inclusive of all labor and expenses related only to the Esri UN Roadmap. Any changes to the scope before or during the project will result in a Change Order.

Table 2 below reflects the work SSP will provide as a firm fixed-price services project. SSP will submit an invoice to GUC upon each project milestone as defined in the table below. Invoice dates listed are estimates and will be determined and mutually agreed to by Project Managers once a contract is executed.

*Table 2: Work SSP will Provide as a Firm Fixed-Price Services Project*

| Invoice # | Milestone # | Project Milestones | Milestone Amount | Invoice Date |
|---|---|---|---|---|
| 1.0 | 1.0 | Milestone 1 - Mobilization Milestone | $ 22,070.55 | Jun-25 |
| 2.0 | 2.0 | Milestone #2 - Project Preparation | $ 12,696.77 | Jun-25 |
| 3.0 | 3.0 | Milestone #3 - Current and Future Needs State Workshops and Documentation | $ 40,719.56 | Jul-25 |
| 4.0 | 4.0 | Milestone #4- UN Future State Goals, Objectives, Implementation Strategy and Budget Estimate | $ 32,698.14 | Aug-25 |
| 5.0 | 5.0 | Milestone #5 - Final Presentation | $ 12,406.52 | Sep-25 |
| 6.0 | 6.0 | Milestone #6 - Travel | $ 10,052.96 | As Incurred |
| 7.0 | 7.0 | Milestone #7 - Data: Gas Data Assessment | $ 51,086.50 | Jul-25 |
| 8.0 | 8.0 | Milestone #8 - Data: Electric Data Assessment | $ 51,086.50 | Jul-25 |
| **Total** | | | **$ 232,817.51** | |

## 5.2 Proposed T&M Cost

GUC has also requested a price based on Time & Materials (T&M) with a Not to Exceed (NTE), which SSP is providing in Table 4 below:

*Table 3: Price Based on T&M with Price/Hours on Each Milestone*

| Invoice # | Milestone # | Project Milestones | Milestone Amount | Invoice Date |
|---|---|---|---|---|
| **1.0** | **1.0** | **Milestone 1 - Mobilization Milestone** | **$ 22,070.55** | **Jun-25** |
| | | Calculated at ~9.5% of overall project price | | |
| **2.0** | **2.0** | **Milestone #2 - Project Preparation** | **$ 12,696.77** | **Jun-25** |

| | | | | |
|---|---|---|---|---|
| | | Total Hours | 61.2 hrs. | |
| 3.0 | 3.0 | **Milestone #3 - Current and Future Needs State Workshops and Documentation** | **$ 40,719.56** | **Jul-25** |
| | | Total Hours | 192.8 hrs. | |
| 4.0 | 4.0 | **Milestone #4- UN Future State Goals, Objectives, Implementation Strategy and Budget Estimate** | **$ 32,698.14** | **Aug-25** |
| | | Total Hours | 154.9 hrs. | |
| 5.0 | 5.0 | **Milestone #6 - Final Presentation** | **$ 12,406.52** | **Sep-25** |
| | | Total Hours | 59.1 hrs. | |
| 6.0 | 6.0 | **Milestone #6 - Travel** | **$ 10,052.96** | **As Incurred** |
| | | Total Hours | **N/A** | |
| 7.0 | 7.0 | **Milestone #7 - Data: Data Assessment** | **$ 51,086.50** | **Jul-25** |
| | | Total Hours | 415 hrs. | |
| 8.0 | 8.0 | **Milestone #8 - Data: Electric Data Assessment** | **$ 51,086.50** | **Jul-25** |
| | | Total Hours | 415 hrs. | |
| **Total** | | | **$ 232,817.51** | |
| | | | **1,298 hrs.** | |

Should GUC elect to go with T&M pricing, the Not to Exceed (NTE) amount would be **$232,817.51** (or 1,298 hours).

# 6  Data Security and Compliance Strategy

## 6.1  Security Framework and Protocols

*Provide an overview of the vendor's security framework, including encryption standards, access control, device authentication, and intrusion detection measures.*

SSP leverages GitHub, TFS, and Azure Dev Ops for product development data secure backup. We also perform a SOC2 Audit annually and maintain Data Breach Response, Information Classification, Information Retention, Network Security, Guest Access, Vulnerability Management, Identity Management, User Access Administration, and AI Use policies as well as Risk Management, Business Continuity, and Incident Response plans.

# 7 Required Forms and Adherence to GUC Policy and Other Requirements

- Acknowledgement and Signature Form
- E-Verify Form

# RFP Acknowledgement and Signature Form

**RFP No.: 25-21, Utility Network Vendor Selection**

The undersigned having carefully examined the location of the proposed work, the local conditions of the place where the work is to be done, the Invitation, the General Conditions, the Specifications and all of the documents for this project, proposes to enter into a contract with Greenville Utilities Commission in Greenville North Carolina perform the work listed in this RFP, including all of its component parts, and to furnish any and all required labor, materials, equipment, insurance, bonding, taxes, transportation and services required for this project in strict conformity with the plans and specifications prepared, including any Addenda, within the time specified.

**Addendum Acknowledgement:**

The following addendum (addenda) is (are) acknowledged in this RFP: _____

**Acknowledgement and Signature:**

1. No Proposal is valid unless signed in ink by the person authorized to make the proposal.
2. I have carefully read, understand and agree to the terms and conditions on all pages of this RFP. The undersigned agrees to furnish the services stipulated in this RFP.

**Respondent's Name and Title:**

Company Name: _SSP Innovations_____

Address: ___6766 S. Revere Parkway, #100, Centennial, CO 80112_____

Telephone: __720-229-0227_____     Fax: __855-706-2018_____

Email: __aaron.kunstmann@sspinnovations.com__     Cell Number: __262-282-2447_____

Contractor License # (if applicable): _20031394090_     Expiration Date: _N/A_____

Federal Tax Identification Number: __36-4546674_____

Authorized Signature: _____     Date: 5/9/2025_____

**Decline RFP:**

We **do not** wish to submit an RFP on this Project. Please state your reason below. Please also indicate if you would like to remain on our Supplier list.

Reason: _____

_____

_____

Company: _____     Address:_____

Name: _____     Signature: _____Date: _____

# E-Verify Form

Letter of Compliance to E-Verify for Greenville Utilities Commission.  Please complete the form below.

1. 1.I have submitted a bid for contract or desire to enter into a contract with the Greenville Utilities Commission;
2. As part of my duties and responsibilities pursuant to said bid and/or contract, I affirm that I am aware of and in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):
3. _X___ After hiring an employee to work in the United States I verify the work authorization of said employee through E-Verify and retain the record of the verification of work authorization while the employee is employed and for one year thereafter; or
4. _X___ I employ less than twenty-five (25) employees in the State of North Carolina.
5. As part of my duties and responsibilities pursuant to said bid and/or contract, I affirm that to the best of my knowledge and subcontractors employed as a part of this bid and/or contract, are in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):
6. __X__ After hiring an employee to work in the United States the subcontractor verifies the work authorization of said employee through E-Verify and retains the record of the verification of work authorization while the employee is employed and for one year thereafter; or

7. __X__ Employ less than twenty-five (25) employees in the State of North Carolina.

   Specify subcontractor: ___N/A_____


   _SSP Innovations, LLC_____ (Company Name)


   By: _Dean Perry_____ (Typed Name)

   _____ (Authorized Signatory)

   _Chief Business Development Officer_____ (Title)


   4/9/2025_____ (Date)

It is certified that this proposal is made in good faith and without collusion or connection with any other person bidding on the same above listed items.  It is also certified that this proposal is made in good faith and without collusion or connection with any GUC employee(s).

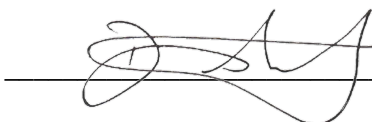Certified check or cash for _____N/A_____ or bid bond for _____N/A_____  attached.


Firm Name:_SSP Innovations, LLC_____ Phone:  (_720_)__229-0227_____


Address:__6766  S.  Revere  Parkway,  #100_____


City _Centennial_____ State __CO_____ Zip Code __80112____


Fax (_855_)__706-2018_____ E-mail __dean.perry@sspinnovations.com_____


Authorized Official __Dean Perry_____ Title __Chief Business Development Officer
                              Typed Name

_____Date 4/6/2025_____


**Your Proposal should be received no later than Mayl 13, 2025, 3:00PM (EDT)**