

Proposal

For
Electric Utility Municipalization Feasibility Study
To
City of Bainbridge Island, Washington

April 14, 2016



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Section 1. Background and Objectives

This section describes the background and objectives for the City of Bainbridge Island's (COBI) Electric Utility Municipalization Feasibility Study.

Bainbridge Island is a Vibrant Community with Engaged Residents

Bainbridge Island is a vibrant community with engaged residents. This is demonstrated by the 2015 National Citizen Survey (NCS) responses, in which 97 percent of respondents rated Bainbridge Island as an excellent or good place to live¹. In the same survey, residents also reported a strong sense of community and felt they had the opportunity to participate in community matters, with nearly all respondents confirming they voted in local elections.

Residents Concerned about Power Utility

In the same NCS study, residents voiced their concerns about the current power utility. Although respondents to the NCS rated all aspects of Bainbridge Island's governance favorably, the "Power Utility" category was found less favorable. It was one of only two services in the Governance section that ranked lower than the same services in other communities. Lower ratings of "Power Utility" service help explain the 2015 formation of Island Power, a grassroots organization that supports the creation of a non-profit municipal electric utility for Bainbridge Island.

Puget Sound Energy is the Current Power Supplier

COBI is currently served by Puget Sound Energy (PSE), an investor owned utility that owns transmission lines, substations and distribution lines on Bainbridge Island. PSE operates under a franchise agreement with COBI that is set to expire in 2022.

Bainbridge Island's Average Load is Around 40 MW

Bainbridge Island's annual average electric load is approximately 40 MW. PSE currently serves approximately 12,000 homes and businesses on Bainbridge Island. Residential customers make up the majority of Bainbridge Island's electric load.

Interest in Exploring Municipalization

COBI would like to explore the benefits and costs of municipalization, through replacing PSE with a non-profit municipal utility. The existing franchise agreement between COBI and PSE does not prohibit COBI from forming a municipal electric utility.

¹ <http://www.ci.bainbridge-isl.wa.us/DocumentCenter/View/6143>

Forming an Electric Utility Could Provide Value to COBI and Bainbridge Island Residents

Forming a municipal electric utility could provide value to COBI and the residents of Bainbridge Island in a number of ways:

- **Increase Local Control** – COBI currently has limited control over energy-related decisions. Forming a municipal electric utility could provide COBI and the residents of Bainbridge Island more control over power supply sources, electric rates and customer service.
- **Decrease Electric Rates** – COBI could purchase power from renewable sources at wholesale prices directly from Bonneville Power Administration (BPA) or other wholesale power suppliers.
- **Enhance Economic Development** – A municipal electric utility could create jobs on Bainbridge Island. It could also develop skilled personnel with expertise and experience in electric markets to assist with future energy initiatives.
- **Improve Customer Service** – Operating a more localized municipal electric utility could improve service response time when power outages occur, ensuring faster power restoration.

Forming and Operating a Utility is Challenging

Forming a municipal electric utility is a lengthy and costly process that involves negotiations with PSE and development of the electric system and all of the resources needed to operate and maintain the utility. This requires significant upfront investment and the setup of a structure to provide efficient operations in order to ensure the utility's viability.

A municipal electric utility must be setup in such a manner as to be economically viable and to keep electric rates competitive. If future electric rates are not competitive, a municipal electric utility may not be a valuable enterprise for COBI.

**Municipalization
Feasibility Study to
Focus on Benefits
and Costs**

COBI is interested in an Electric Utility Municipalization Feasibility Study that focuses on the potential benefits and costs involved with forming and operating a municipal utility to provide electricity to the residents and businesses on Bainbridge Island.

Avant is pleased to offer this proposal to perform a Municipalization Feasibility Study that would include the following:

- An analysis and valuation of the electric delivery system
 - An evaluation of available power supply and transmission options
 - Estimates of utility formation and ongoing operating costs
 - Future revenue, demand and energy rate projections
 - An exploration of financing alternatives
 - An exploration of the key benefits and risks involved
 - Communications and stakeholder engagement
-

**Feasibility Study
Evaluates
Municipalization
versus Current
Situation**

The Electric Utility Municipalization Feasibility Study would also compare the formation and operation of a municipal electric utility with the continuation of service from PSE in terms of the benefits, costs and risks.

In addition, the study would review a number of areas to support good decision making:

- An evaluation of various non-profit utility structures and governance alternatives
 - Additional benefits and synergies that would result from forming a non-profit municipal electric utility
 - Input regarding long-term operations and energy strategy
-

**Avant Can Complete
Preliminary Results
to Support November
Vote**

COBI desires to have the Electric Utility Municipalization Feasibility Study completed in time to communicate results to Bainbridge Island residents prior to an anticipated public vote on this topic on November 8, 2016.

Under this proposal, Avant would publicly present preliminary results of the study in October 2016 and present final results to COBI by March 2017. To accomplish this, we have phased the total work scope into two distinct phases, with Phase I consisting of the work scope that, based on our experience, is crucial to support a public vote in November.

Avant is Uniquely Qualified

Avant is uniquely qualified to provide COBI with an Electric Utility Municipalization Feasibility Study because:

- Avant has a long-term view and extensive experience with the formation and ongoing management of municipal utilities
- Avant's resources consist of a highly experienced team of consultants with a diverse cross-functional background
- Avant supports good decision making through objective evaluation and strong two-way communications to clients and stakeholders

Section 2. Avant Energy Qualifications

Avant Energy Inc. (Avant) is an energy management and consulting firm founded in 1984, with extensive utility management and energy development experience. Avant has served more than 250 clients nationwide, including municipalities, universities, corporations and Native American tribes. With strong experience in municipal consulting and operation of municipal utilities, Avant brings a well-rounded background to municipalization projects.

Avant Has Served Clients Since 1984

Avant is a privately owned company, founded in 1984. With more than 30 years of experience providing professional energy services, we have worked with clients to develop innovative, yet practical solutions based on the belief that “better is possible”.

Forms a Deep Understanding of Client Objectives to Support Good Decision Making

Avant has significant experience guiding public entities through complex policy and long-term decisions. Avant prides itself on forming a deep understanding of the client’s background and objectives. By forming a better understanding of our client and our client’s objectives, we can assist in making good decisions and achieving better results.

Provides Utility Management, Consulting and Development Services

Avant is organized into three areas of service:

- 1) **Utility Management** – With extensive training and experience in long-term energy planning, risk management, resource planning, and financial analysis, Avant assists utilities in managing and controlling costs and risks. Utility management services include power supply planning, energy procurement and hedging, asset management, generation dispatching and administrative services.
 - 2) **Consulting and Master Planning** – Avant consults with communities, utilities and large energy users to develop short, intermediate and long-term energy strategies that balance economics and the environment.
 - 3) **Project Development** – Avant’s development team supports clients in the planning, design and construction of power generation facilities.
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Has Municipal Utility Formation Experience

Avant supports municipal clients in forming and operating independent, economically viable and reliable municipal utilities. Avant has experience providing objective and comprehensive

feasibility studies that have led to both utility formation and a recommendation not to pursue formation. Avant's experience operating municipal utilities provides unique insight during the feasibility phase.

Understands Energy Markets

The energy industry has grown increasingly complex. Changing electricity markets, volatile fuel prices and shifting regulations make it challenging for communities, utilities and large energy users to manage their energy costs and risks. Avant understands this environment well and is committed to its clients' long-term energy objectives. Whether providing assistance with the development of distributed and renewable generation, to developing market-based system strategies, our focus is on finding innovative approaches to manage long-term energy costs and risks.

Avant has specific experience evaluating the Northwest energy market, as well as procuring power from the Bonneville Power Administration (BPA). Avant understands BPA's six Standards of Service for new public customers, as well as the complex Tiered Rate Methodology and Regional Dialogue Contract process.

Negotiates with Incumbent Utilities

Avant has extensive experience negotiating with incumbent utilities on behalf of our clients. We understand the utility market and formulate strategies to effectively negotiate with incumbent utilities, resulting in better outcomes for our clients.

Employs Talent with Diverse Backgrounds

Avant's 35 employees bring a broad range of capabilities to create value for our clients. Our team's diverse backgrounds in management, engineering, financial analysis, economics, utility operations, accounting, law, energy regulations, power supply, acquisitions, public administration and public relations provide the broad expertise necessary to deliver the requested services.

Has Experience Guiding Clients through Public Processes

Avant has extensive experience working with public entities, and guiding municipal clients through public processes. We understand the importance of communication throughout these types of processes and would ensure proper communication with COBI and its key stakeholders throughout the feasibility phase. It is our goal to engage with key stakeholders and position COBI favorably, should it decide to move forward with municipalization.

Section 3. Scope

This section describes the scope for delivering the Electric Utility Municipalization Feasibility Study to COBI.

Phased Work Scope to Support Timeline

The Request for Proposal (RFP) outlined 22 tasks to be completed as part of the work scope. Following communications between Avant and COBI, it has been clarified that preliminary results are desired in time for public presentation in October 2016 to support a public vote in November.

The total work scope is therefore phased into two separate deliverables. The first deliverable is a Phase I Municipalization Feasibility Study Report that contains all tasks that are crucial to support a public vote. The second deliverable is a Phase II Municipalization Feasibility Study Report that contains a refinement of some of Phase I tasks and all remaining tasks, including four tasks that were marked in the RFP as “Other Considerations”.

Phase I: Develop Preliminary Rate Projections and PSE Comparison

Phase I of the Municipalization Feasibility Study would focus on providing preliminary municipal utility rate projections and a comparison with PSE rates. The preliminary rate projections would be based on an evaluation of the upfront utility formation costs and the ongoing utility costs.

Phase II: Develop Preliminary Project Plan

Phase II of the Municipalization Feasibility Study would focus on preparing the Preliminary Project Plan. Emphasis in Phase II would be on refining some of the Phase I estimates and projections, exploring the key benefits and risks that were identified in Phase I, and positioning COBI well for any potential negotiations with PSE.

**Phase I Kick-off
Meeting and Onsite
Visit**

Avant proposes a kick-off meeting with COBI's selected staff to support the Municipalization Feasibility Study. The main purpose of the kick-off meeting is to discuss the goals and expectations with regard to the Municipalization Feasibility project.

In conjunction with the kick-off meeting, Avant would conduct an onsite visit to the facilities to start the system evaluation process. A review of the major facilities on Bainbridge Island is critical in determining the condition of the electric system and identifying any potential severance issues or capital improvements that may be needed. The preliminary inventory of facilities, the boundary map and the identification of severance issues and costs would be based on data gathered during the onsite visit, as well as publicly available data.

The above scope of work includes task numbers 1, 3, 4 and 5, as listed in COBI's Request for Proposals.

**Evaluate Upfront
Formation Costs**

Avant would perform several tasks that together would provide a preliminary evaluation of the upfront costs involved with municipal utility formation.

The cost of formation would be outlined, including the valuation of the facilities that are currently owned by PSE that would need to be acquired, and the potential interconnection approaches. The preliminary facility acquisition costs would be determined using the book value of the assets based on publicly available data. These values would be further refined based on the results of the site visit and the general condition assessment.

The process and preliminary timeline of forming a municipal utility and acquiring any electric facilities currently owned by PSE would be outlined, including any approvals or permits needed.

The above scope of work includes task numbers 9 and 20, as listed in COBI's Request for Proposals.

**Assess Power Supply
and Ongoing
Operations
Management Costs**

Avant would perform several tasks that together would provide an assessment of the utility's power supply and ongoing operations costs.

Power supply costs:

Alternatives associated with the Tier 1 preference power purchases from the Bonneville Power Administration (BPA) would be analyzed and the wholesale electricity rate would be projected for a 20 year period, along with interconnection options to BPA's transmission system. The process of becoming a preference customer of BPA would be outlined. Projections related to distributed generation, energy efficiency and demand response efforts for BPA would also be provided.

Ongoing operations management costs:

The electric utility operation costs would be estimated based on the experience of other publicly-owned electric utilities in the region, as well as based on Avant's experience with electric utility operations and management.

The above scope of work includes task numbers 6, 7, 8 and 10 as listed in COBI's Request for Proposals.

**Develop Preliminary
Rate Projections**

Avant would develop preliminary projections and estimate COBI's electric rates.

Electric loads would be estimated using public records showing the number of consumers and typical average power consumption patterns in Washington, while estimating load growth based on regional average projections.

The cost of operation, including power supply and renewal and replacement costs, would be estimated based on projections for comparable municipal utilities. The average electricity rate will be based on the revenue requirement projection.

The above scope of work includes task numbers 2, 10 and 11 as listed in COBI's Request for Proposals.

Compare Rate Projections to PSE Rates

Based on the evaluation of upfront and ongoing costs, a comparison of the costs and benefits of municipalization versus the current scenario would be conducted by comparing the municipal utility rate projections with PSE rates.

The above scope of work includes task number 11 as listed in COBI's Request for Proposals.

Identify Key Benefits of Municipalization

The key long-term benefits to COBI and the Bainbridge Island community that may result from formation of a municipal electric utility would be identified based on Avant's experience with electric utility formation and operations, as well as examples from other publicly-owned electric utilities in the region.

Identify Key Risks and Issues of Municipalization

An overview of the key long-term financial and operational risks to be considered with formation of a municipal electric utility would be identified based on Avant's experience with electric utility operations and management, as well as examples from other publicly-owned electric utilities in the region.

The above scope of work includes task number 15 as listed in COBI's Request for Proposals.

Deliver Phase I Feasibility Report

A report summarizing the Phase I findings would be submitted to COBI in draft format for review. After COBI's review of the draft report, comments and suggestions would be incorporated into a final Phase I Municipalization Feasibility Report.

Present Phase I Results at Two Public Meetings

Following the approval and finalization of the Phase I Municipalization Feasibility Report, a public meeting would be held to present the Phase I results to Bainbridge Island residents. If desired, an additional public meeting would be scheduled between the Phase I kick-off and the finalization, to present intermediate results to the public. During any public meetings, Avant would provide communication tools, such as a brochures, to all attendees summarizing the project updates and results.

The above scope of work includes task number 21 as listed in COBI's Request for Proposals.

Phase II Kick-off Meeting

The first step within Phase II would consist of a kick-off meeting with COBI's selected staff to support the Phase II activities.

The outcome of the kick-off meeting would be a better understanding of the project's Phase II goals and objectives, a more focused approach to the specific tasks in Phase II, and establishment of a project schedule with key milestones and deadlines.

Refine Upfront Capital Estimates

As part of this scope of work, the upfront formation cost estimates would be refined, with a specific focus on the asset acquisition costs and the interconnection costs.

Additionally, in this stage, the alternative means of financing the facility acquisition costs would be outlined, with advantages and disadvantages of each. An overview would be provided, showing system acquisitions within the last 10 years, along with estimated book value, potential and actual acquisition costs of each

The above scope of work includes task numbers 12 and 14 as listed in COBI's Request for Proposals.

Further Explore Key Benefits of Municipalization

As part of Phase II, the key benefits that might occur as a result of municipalization would be further assessed. The following would be provided:

- An overview of potential socially responsible initiatives
- An overview of secondary benefits to COBI or Bainbridge Island residents
- An overview of the potential uses of any rate differential, especially exploring investment in renewable resources, undergrounding or enhanced reliability

The above scope of work includes task numbers 16, 17 and 19 as listed in COBI's Request for Proposals.

Further Assess Key Risks and Issues of Municipalization

As part of this scope of work, the key risks and issues that might occur as a result of municipalization would be further assessed, including the following:

- A comparative risk and cost analysis including a "carbon tax" or "social cost of carbon" for PSE, versus a municipal-owned electric utility

The above scope of work includes task number 18 as listed in COBI's Request for Proposals.

Prepare Long-term Projections

As part of Phase II, the key projections that were prepared in Phase I regarding the electric load and electric rates would be extended to a 20-year time horizon.

This scope of work furthermore would include the following:

- Comparison of retail rates for similar size municipalities and investor owned utilities in the region and an outline of the different governance approaches.
- Comparison of future impacts related to distributed generation, energy efficiency and demand response efforts to be achieved under PSE versus BPA.

The above scope of work includes task numbers 7 and 13 as listed in COBI's Request for Proposals.

Develop Preliminary Project Plan

As part of this scope of work, a preliminary project plan would be developed, showing the key milestones and timeline for the implementation phase.

Included in this scope of work is a comparison of the three types of non-profit utilities, including similarities, differences, advantages and disadvantages of each, as well as the required formation process for each.

The above scope of work includes task number 22 as listed in COBI's Request for Proposals.

Deliver Phase II Report

A report summarizing the Phase II findings would be delivered to COBI in draft format for review. After COBI's review, any comments or suggestions would be incorporated into a final Phase II Municipalization Feasibility Report.

Present Phase II Results at Public Meeting

Following the approval and finalization of the Phase II Municipalization Feasibility Report, a public meeting would be held to present the Phase II results to Bainbridge Island residents.

During the public meeting, Avant would provide communication tools, such as a brochures, to all attendees, summarizing the project.

The above scope of work includes task number 21 as listed in COBI's Request for Proposals.

**Overview of Tasks
per Phase**

For clarity, each of the 22 tasks mentioned in COBI's Request For Proposals are listed below along with suggested project phases:

Task	Description	Phase I	Phase II
1	Prepare a boundary map	X	
2	Prepare an electric load forecast and list of available BPA energy efficiency, distributed generation and demand response programs	X	X
3	Identify facilities for purchase and PSE system capital improvements	X	
4	Identify potential severance issues	X	
5	Assess current facilities, including number of smart meters	X	
6	Evaluate BPA power and transmission availability, the 20 year rate forecast and steps to be taken to access BPA power	X	X
7	Describe BPA energy efficiency, distributed generation and demand response programs comparing BPA to PSE		X
8	List and recommend options and costs for municipal utility operations	X	X
9	Estimate book value of the facilities and identify potential financial and operation risk for PSE	X	X
10	Provide an economic evaluation of municipal ownership and operation	X	X
11	Provide expected annual revenue requirement for a municipal utility and PSE rates over a 20 year period	X	X
12	Identify and recommend options for financing mechanisms		X
13	Provide a comparison of retail rates for municipalities with/without electric utilities	X	
14	Provide a comparison of system acquisitions within the last 10 years, showing book value and acquisition costs		X
15	Identify municipal utility operational risks and concerns that should be considered by COBI	X	X
16	Provide a list of potential socially responsible initiatives that COBI may consider as part of creating a municipal utility		X
17	Provide a list of synergies and other benefits that might accrue to COBI, its residents and its businesses from formation		X
18	Perform a comparative risk and cost analysis, including a "carbon tax" or a proxy of "social cost of carbon" for a COBI utility		X
19	Provide an opinion on the potential use of a rate differential for investment in or development of renewable resources, undergrounding and/or enhanced reliability		X
20	Identify the steps, costs and timeline for municipal utility formation and facilities acquisition	X	X
21	Prepare reports and present project updates and results at public meetings	X	X
22	Provide a comparison of the three forms of non-profit utilities		X

Section 4. Approach

This section describes Avant's approach for delivering the Municipalization Feasibility Study services, as outlined in the previous section, to COBI.

Provide an Experienced Team in Utility Formation and Operation

Avant has assembled a highly experienced team with a diverse background in finance, engineering and energy regulations and who have worked together on municipal advisory projects. The proposed project team has expertise in municipal utility formation and operation and would utilize well established structures and processes to meet COBI's needs.

Partner with Local Engineering Firm

Avant is partnering with TriAxis, a Washington based engineering firm, for the general assessment of the existing electric system on Bainbridge Island. Partnering with a locally-based engineering firm better supports this scope of work, while their local presence ensures any site visits would be conducted efficiently.

Deliver Services Cost-Effectively

Avant's experience on a wide range of municipal energy projects enables us to deliver high quality feasibility study services to COBI in a cost-effective manner while creating value for the community of Bainbridge Island.

Avant would provide a communication format that works best for COBI. Team members would arrange travel as necessary and propose periodic in-person meetings with COBI's key staff. In addition, we propose using video conferencing to support updates and communication needs while delivering services cost-effectively.

Communicate Effectively to Keep Stakeholders Informed

Avant would ensure communication efforts focus on keeping stakeholders informed about the project. This would include communication of overall goals, as well as overviews of any initiatives and expected results. Primary to all external communication and messaging throughout the project would be positioning COBI favorably, should it decide to move forward with electric utility formation.

Use Publicly Available Data to Support Timeline

The availability of data from PSE is one potential challenge in developing the feasibility study for COBI. In cases where necessary primary data is not available, the project team would endeavor to use publicly-available benchmark data from representative utilities, in order to stay within the project budget and achieve reliable results within the planned timeline.

**Provide Studies that
Support
Good Decision
Making**

Avant has significant experience guiding public entities through complex planning and policy decisions, including decisions related to formation and operation of municipal utilities.

Avant would work with COBI and other stakeholders to provide high quality documents that would support good decision making.

Section 5. Project Team

This section describes the proposed project team to perform the Municipalization Feasibility Study for COBI.

Experienced Team with more than 150 Years of Collective Industry Experience

Avant brings together an experienced team of advisors. The selected individuals to work on the Municipalization Feasibility Study have experience with:

- Providing professional services to municipalities
- Municipal utility formation and operations
- Stakeholder engagement
- Management of large-scale energy projects

The experienced team members together have amassed more than 150 years of collective experience in these key areas.

Utility Formation and Hands-on Utility Operation Experience

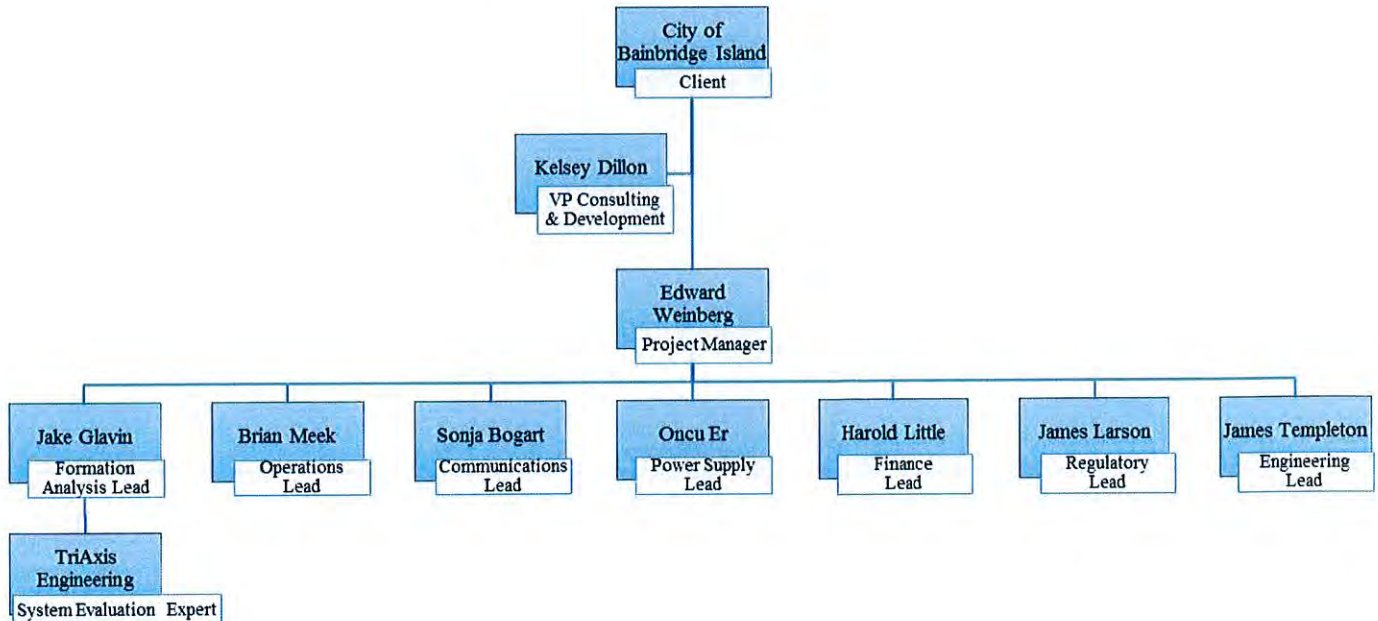
The Project Team includes individuals who showcase a broad range of capabilities in the key areas of utility formation, utility operations and long-term power supply planning. The knowledge and experience of the Project Team members cover the broad range of functional areas required to provide a robust feasibility assessment, identify opportunities for energy improvement and overall efficiencies, provide high quality deliverables and support COBI in good decision making.

Provide Cost Effective Services

By applying highly experienced individuals, the study would be conducted efficiently. This saves both time and money, while delivering high quality services to clients.

Organizational Chart

Below is an organizational chart showing how Avant proposes to provide the services to COBI.



Project Leads – the following individuals will have primary responsibility for managing and overseeing the support team.

Vice President, Consulting and Development: Kelsey Dillon

Kelsey Dillon is the Vice President of Consulting and Development at Avant and would oversee all aspects of the project. Ms. Dillon. Her expertise includes feasibility analyses, project development and energy supply planning. She is experienced in all phases of feasibility studies and development projects. Ms. Dillon received an M.B.A. from the University of Minnesota's Carlson School of Management where she was designated a Carlson Scholar. Ms. Dillon holds a B.A. in Economics from the University of Minnesota.

**Senior Associate,
Consulting:
Edward Weinberg**

Edward Weinberg would act as Project Manager and primary point of contact for COBI, ensuring timely completion of all aspects of the project. Mr. Weinberg is a Senior Associate at Avant. He has more than 10 years project management experience and has managed energy projects in the U.S., Europe and Asia. Mr. Weinberg has experience with a range of commercial transactions across the global energy and environmental commodities markets, including alternative fuel supply, carbon emission reductions and power purchase agreements. Mr. Weinberg received a M.Sc. in Economics from the VU University in Amsterdam, The Netherlands.

**Manager, Consulting:
Jake Glavin**

Jake Glavin would act as Formation Analysis Lead, providing key support in coordinating the project. Mr. Glavin is a Consulting Manager at Avant. He is currently coordinating another municipalization feasibility study and has been involved in multiple studies. He has a diverse engineering and business background that provides strong value in assessing the technical and economic factors driving energy costs and energy risks of projects such as this. Mr. Glavin has experience in technical negotiations with large utilities. He received a B.S. in mechanical engineering *cum laude* from the University of Notre Dame. Mr. Glavin received an M.B.A. from Carnegie Mellon's Tepper School of Business.

**Director, Plant
Operations:
Brian Meek**

Brian Meek would act as Operations Lead, with responsibility for identifying and analyzing utility operating costs and risks. Mr. Meek is the Director of Plant Operations at Avant and has 18 years of experience in electrical generation operations and water chemistry management. His areas of expertise include nuclear power generation, water and polyamide chemistry, and human performance management. Mr. Meek has managed capital projects in coal, nuclear, and natural gas electrical generation facilities. Mr. Meek holds a B.S. in Nuclear Engineering Technology from Thomas Edison State College in New Jersey, an M.B.A. from the University of Phoenix, and is a veteran of the United States Navy. Mr. Meek is currently a doctoral candidate in Leadership at Walden University.

**Director, Product
Development and
Marketing:
Sonja Bogart**

Sonja Bogart would act as Communications Lead for the project, responsible for stakeholder communication and public relations. Ms. Bogart brings more than 20 years of experience in areas such as strategic communications, media relations, public relations, marketing and energy product development. The majority of her experience is in the energy industry, at both the electric distribution and generation/transmission levels. Ms. Bogart has also coordinated successful security service industry business and account acquisitions. Ms. Bogart is Director, Product Development and Marketing at Avant. Ms. Bogart holds an M.B.A. from the University of St. Thomas and a B.S. in Business Administration from the University of Oregon.

**Vice President, Strategic
Planning:
Oncu H. Er**

Oncu Er would act as Power Supply Lead, responsible for developing long-term power supply and load projections. Mr. Er is the Vice President of Strategic Planning at Avant. He oversees clients' energy supply portfolios and has extensive experience providing complex financial analysis. Mr. Er is experienced in a wide range of power purchase agreements and other utility contract negotiations. Mr. Er has more than seventeen years of energy experience, including many years in natural gas and electricity futures and options trading and brings specific expertise to the project team regarding energy markets. Mr. Er received a B.A. in economics *magna cum laude* from Macalester College. He received an M.B.A. in finance from the University of Minnesota's Carlson School of Business. Mr. Er also a Harvard Business School alumnus and has completed the Strategic Decision Making and Risk Management Program at Stanford University.

**Vice President:
Harold Little**

Harold Little would act as Finance Lead, providing analysis regarding available financing options. Mr. Little is a Vice President at Avant. He has experience issuing municipal bonds, as well as extensive finance and power industry experience. At Chase Econometrics in Philadelphia, he worked with a team that developed projections of electricity demand and supply in the major economies of the world and evaluated fuel supply contracts. He went on to work for Consol Energy in Pittsburgh, preparing projections of US electricity demand and supply forecasts, competitor analysis, and long term strategic plans. Mr. Little's power generation experience also includes financial planning and analysis with Cogen America and international financial management with NRG in Minneapolis. At Avant, he has gained finance experience with Clean Renewable Energy Bonds, tax exempt bond issuance, 1603 grant financing structures, and DOE Energy Efficiency and Conservation Block Grants administration.

Mr. Little earned a B.S. in Economics and a M.S. in Mineral Economics from Penn State University. He also holds a M.S. in Industrial Administration with a concentration in Finance and Competitive Strategy from the Tepper School of Business at Carnegie Mellon University.

**Vice President, Regulatory
Affairs:
James Larson**

James Larson would act as Regulatory Lead, providing analysis of the different non-profit options and regulatory matters surrounding municipal utility formation. Mr. Larson is Avant's Vice President of Regulatory Affairs and Corporate Treasurer. He is an attorney with 35 years of utility regulation and power purchase agreement experience. Mr. Larson received a J.D. *magna cum laude* from William Mitchell College of Law. He received a B.S. in Engineering Sciences from the United States Air Force Academy.

**Technical Expert:
James Templeton**

James Templeton would be Engineering Lead, providing utility operations management and maintenance support. Mr. Templeton has managed engineering and construction projects for industrial, utility, municipal, and institutional clients. Mr. Templeton has extensive energy experience, including combined heat and power and biopower projects, for colleges and universities and large energy users. Mr. Templeton has more than 30 years of design and construction experience and more than 20 years of experience working on projects as a contractor to Avant. Mr. Templeton holds a B.S. in Civil Engineering from Union College and is a registered Professional Engineer in Connecticut.

Support Team – the following individuals will be assigned to work on the project and provide specific subject matter expertise.

**Senior Quantitative
Analyst:
Sam Meersman**

Sam Meersman would be Power Supply Specialist, in charge of providing 20 year rate and load forecasts. Mr. Meersman is a Senior Quantitative Analyst at Avant, where he conducts advanced long-term forecasting analyses on various aspects of energy markets, including physical and financial hedging, renewable energy technologies, risk mitigation and management, and long-term energy portfolio planning. He has extensive experience in statistical modeling, as well as in transmission asset management, engineering, and project development.

Mr. Meersman received a B.S. in Civil Engineering and Mathematics from the University of Wisconsin – Madison, a M.S. in Structural Engineering from the University of California – Berkeley, and a J.D./M.B.A from the University of Minnesota Law School and Carlson School of Management.

**Vice President and
Controller:
David W. Niles**

David W. Niles would be Finance Specialist for the project, responsible for all economic and financial modeling. Mr. Niles is Vice President and Controller at Avant. He has more than 10 years of experience performing accounting and finance functions, including internal and external financial reporting, financing and compliance. Mr. Niles received a B.A. in Economics *magna cum laude* from Carleton College, where he was also elected to Phi Beta Kappa. He received an M.B.A. with an emphasis in Finance from the Carlson School of Management at the University of Minnesota, where he was designated a Carlson Scholar.

**Senior Electrical Engineer
(TriAxis):
Michael Beanland**

Michael D. Beanland would be the System Evaluation Expert for the project, responsible for assessing the existing electric facilities on Bainbridge Island. Mr. Beanland has more than 40 years of experience in electric system design, planning, engineering and management. Mr. Beanland is experienced in the design, analysis and construction of power substation components and systems, as well as high-voltage overhead and underground distribution design. Mr. Beanland received a B.S. in Electronic Engineering and an M.S. in Electrical Power Engineering from California Polytechnic State University.

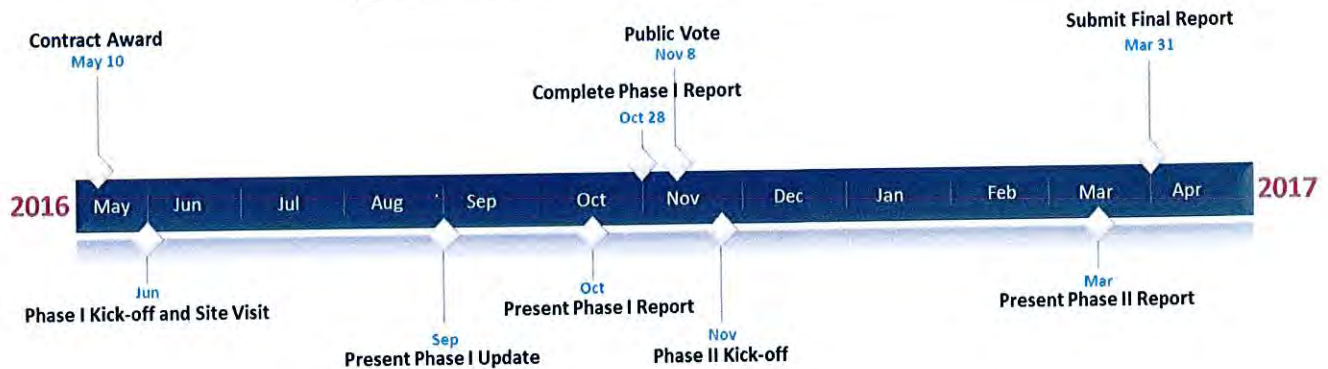
**President and CEO:
Derick Dahlen**

Derick Dahlen, President and CEO of Avant, would be available to provide strategic advisory and negotiations support as requested by COBI. Derick has over 30 years of experience consulting for clients. Although Mr. Dahlen is not proposed as a core member of the project advisory team, he is fully committed to ensuring COBI receives high value service from Avant.

Mr. Dahlen has more than 30 years of experience negotiating with utilities and provides leadership, strategic guidance, and long-term power planning to Avant and its clients. Mr. Dahlen holds an M.B.A. from the University of Virginia. He did his undergraduate work at the Massachusetts Institute of Technology.

Section 6. Schedule

The Project Team would complete the scope of work according to the schedule illustrated below. This schedule is based on information in the Request for Proposals as well as following telephone and email communications between COBI and Avant Energy.



**Interviews with
Selected Candidates:
April 26 – May 10,
2016**

Interviews with shortlisted consultants are expected to take place in the period between April 26 and May 10, 2016, after which the final selection will take place.

**Contract Award:
May 10, 2016**

Notice to proceed with the project would be provided by COBI on or around May 10, 2016.

**Phase I Kick-off
Meeting:
May 2016**

A kick-off meeting would be held in mid-May, 2016 between COBI and key stakeholders to discuss the goals and expectations of the Municipalization Feasibility Study. Alongside this meeting, an onsite visit would take place to review the electricity system and existing facilities.

**Present Phase I
Intermediate Results
at Public Meeting:
September 2016**

The Municipalization Feasibility Study project and intermediate results would be presented at a public meeting to be held by early September 2016.

**Present Phase I
Report at Public
Meeting:
October 2016**

The final Phase I Municipalization Feasibility Study Report results would be presented at a public meeting to be held by mid-October 2016.

**Submit Phase I
Report:
October 28, 2016**

Following the public meeting, a draft Phase I Municipalization Feasibility Study Report would be submitted to COBI for review, comments and approval.

All comments would be discussed and incorporated into the final Phase I Municipalization Feasibility Study Report, which would be submitted to COBI by October 28, 2016.

**Public Vote:
November 8, 2016**

A public vote about municipalization is expected to take place on November 8, 2016.

**Phase II Kick-off
Meeting:
November 2016**

Following the results of the public vote, a kick-off meeting for Phase II of the Municipalization Feasibility Study would take place in November 2016.

**Present Phase II
Report at Public
Meeting:
March, 2017**

The final Phase II Municipalization Feasibility Study Report results would be presented at a public meeting to be held by mid-March 2017.

**Submit Final
Report:
March 31, 2017**

Following the public meeting, a draft Final Municipalization Feasibility Study Report would be submitted to COBI for review, comments and approval.

All comments would be discussed and incorporated into the final Municipalization Feasibility Study Report, which would be submitted to COBI by March 31, 2017.

The Final Municipalization Feasibility Study Report would compile the results from Phases I and II and would also contain a proposed timeline for further steps toward municipal electric utility formation and operation. Avant would provide COBI with five bound copies of the final report.

Section 7. Cost Estimate

Avant proposes the following fee and schedule for the scope of work described in the sections above.

**Fee Proposal
Phase I: Time and
Materials Estimate
\$72,000**

The scope of work described in this proposal for Phase I would be completed on a time and materials basis estimated at an amount of \$62,000. This fee would cover the scope of services described in Section 3 of this proposal for Phase I.

In addition, travel expenses would be reimbursable at cost. It is estimated that the total travel expenses for Phase I of the project would amount to \$10,000.

**Fee Proposal
Phase II: Time and
Materials Estimate
\$58,000**

The scope of work described in this proposal for Phase II would be completed on a time and materials basis, would be completed on a time and materials basis estimated at an amount of \$51,000. This fee would cover the scope of services described in Section 3 of this proposal for Phase II.

In addition, travel expenses would be reimbursable at cost. It is estimated that the total travel expenses for Phase I of the project would amount to \$7,000.

**Interview with
COBI to Confirm
Estimate
Assumptions**

The time and materials estimate proposed above is based on Avant's understanding of COBI's objectives and the scope of work outlined in the Request for Proposals. If an interview with COBI were to suggest a different understanding, we would update our proposal accordingly.

**Estimated Costs For
Each Task in Phase
I and II**

Phase I Tasks	Description	Estimated Budget (\$)
1	Boundary Map	2,000
2	Electric Load Forecast and BPA energy efficiency, distributed generation and demand response programs	4,500
3	Inventory of Facilities for Purchase and System Capital Improvements	4,500
4	Identify potential Severance Issues	4,000
5	Assessment Current Facilities including number of smart meters	7,000
6	Evaluate BPA power and transmission availability, 20 year rate forecast and steps to be taken to access BPA power	4,000
8	Options and costs for municipal utility operations	7,000
9	Estimate book value of the facilities and identify potential operation risk for municipal utility	7,000
11	Expected annual revenue requirements for rates in first 20 years of operation	2,500
15	Identify operational risks and concerns for consideration for the municipal utility	3,000
20	Identify steps, costs and timeline for municipal utility formation and facilities acquisition	3,500
	Report drafting, meetings, general communications and presentations	13,000
Total Phase I		62,000

Phase II Tasks	Description	Estimated Budget (\$)
7	Describe EE, DG and DR programs comparison BPA versus PSE	3,000
9	Identify financial and operational risks for PSE	3,500
10	Economic evaluation of municipal ownership and operation	4,000
11	Expected annual revenue requirement for PSE rates over a 20 year period	2,500
12	Identify and recommend options for financing mechanisms	3,500
13	Comparison of retail rates for municipalities with/without electric utilities	3,000
14	Comparison of system acquisitions in last 10 years showing book value and acquisition costs	4,000
16	List potential socially responsible initiatives that COBI may consider as part of creating a municipal utility	3,500
17	List synergies and other benefits that might accrue to COBI, its residents and its businesses from formation	3,500
18	Comparative risk and cost analysis including a "carbon tax" or a proxy of "social cost of carbon" for a COBI utility	4,000
19	Provide opinion on potential use of rate differential for investment in renewable resources, undergrounding and/or enhanced reliability	4,000
21	Report drafting, meetings, general communications and presentations	9,000
22	Comparison of 3 types of utilities	3,500
Total Phase II		51,000

Section 8. Experience and References

This section outlines Avant's representative experience relating to this project.

Colville

The Confederated Tribes of the Colville Reservation (Colville) is a federally recognized American Indian Tribe located in North Central Washington. Colville's reservation covers 1.4 million acres and is served by six different electric utilities. With the objective of increasing control of their energy supply and increasing their tribal sovereignty and energy independence, Colville issued an RFP to evaluate electric utility formation.

In 2015, Avant conducted a preliminary feasibility assessment to evaluate the economic viability of forming and operating a tribal electric utility. The assessment targeted two potential service territories on the reservation with the highest potential to support a viable tribal electric utility. Avant evaluated the electric loads, electric infrastructure, power supply alternatives, operational costs, legal considerations, and formation risks. Avant identified a proposed service territory and power supply arrangement that could support a viable tribal electric utility with competitive rates. Furthermore, Avant recommended a phased utility formation approach that reduced upfront formation costs and risks.

Following the feasibility study, Colville hired Avant to lead the utility formation activities. On behalf of Colville, Avant has been working with BPA to meet the Six Standards of Service required to secure a Regional Dialogue Contract with BPA. Avant has a thorough understanding of BPA's customer requirements, Tiered Rate Methodology, and transmission costs. In addition to working with BPA, Avant has also led infrastructure acquisition discussions with the incumbent utility.

Reference: Ricky Gabriel, Community Development Committee Chairman, Colville Confederated Tribes Business Council, Ricky.Gabriel@colvilletribes.com, (509)634-1684

Lac Du Flambeau

The Lac du Flambeau Band of Lake Superior Chippewa Indians (LdF) is a tribe in Wisconsin served by a large investor-owned utility.

LdF engaged Avant to conduct a preliminary feasibility study for the development of a tribal electric utility. Avant performed an analysis of LdF's electrical load, an analysis of the retail and wholesale prices in the region, and an evaluation of the expected operating costs.

Based on Avant's evaluation, the conclusion was reached that LdF's tribal utility rates would likely be higher than LdF's current electric rates. Avant recommended alternative strategies to reducing the Tribe's overall energy costs.

Reference: Brian Hoover, Energy Program Coordinator
Lac du Flambeau, (715) 588-7214

**Minnesota Municipal
Power Agency
(MMPA)**

The Minnesota Municipal Power Agency (MMPA) supplies 12 Minnesota member communities with competitively priced, reliable and sustainable energy. The Agency is owned by its member cities and governed by a Board of Directors with representatives from each community. MMPA's members serve a population of nearly 150,000 with a peak load of approximately 320 MW.

In the early 1990s, when MMPA's members decided to supply their own power, Avant provided key support to form their own wholesale power agency. Avant has served as the exclusive utility management company and advisor to MMPA for more than 15 years. Management services provided to MMPA include long-term strategic and day-to-day management, energy procurement, energy hedging, asset management, energy project development, and financial, regulatory, accounting and administrative services. Avant's experience in power supply planning and development of power generation facilities has been an important component in MMPA's long-term success. Avant produces detailed annual budgets for each of MMPA's facilities and guides the MMPA board of directors regarding all strategic decision making.

Reference: Steve Schmidt, Anoka City Councilman and MMPA Chairman, jshmeeven@aol.com, (612) 669-5468

**Northern Illinois
Municipal Power
Agency
(NIMPA)**

The Northern Illinois Municipal Power Agency (NIMPA) is a three member joint action agency formed in 2004. Agency members include the City of Batavia, the City of Geneva and the City of Rochelle. In 2015, NIMPA came to Avant with the objective of driving down power supply and plant operations costs.

Starting in December 2015, Avant began operations services to NIMPA. We also develop and implement hedging, scheduling and Auction Revenue Rights (ARR)/Financial Transmission Right (FTR) strategies for NIMPA. Avant maintains relationships with independent system operators and generation resource partners on behalf of NIMPA. Daily activities include submitting generation offers, tags, and financial schedules in multiple Independent System Operator (ISO) markets.

Reference: Gary Holm, President of NIMPA,
gholm@cityofbatavia.net, (630) 454-2309

**City of
Emmetsburg, IA**

Emmetsburg is located in northern Iowa. The City has operated natural gas, water and sewer utilities for a number of years and decided to explore forming an electric utility to take over service provided by MidAmerican Energy, an investor owned utility. As part of the exploration process, Avant conducted a feasibility study to explore having the City supply power to area homes and businesses.

The study consisted of Avant estimating electrical load and future retail and wholesale electric rates, valuing the distribution system, analyzing power supply options, assessing risks, projecting costs and estimating resulting savings.

After finalization of the feasibility study the City decided not to bring electric service under the municipality.

Reference: John Bird, City Administrator/Utility Superintendent,
4thebird@ncn.net, (712) 852-4030

**City of
Everly, IA**

Everly is located in rural northwest Iowa. With the desire to save money for their residents and wishing to gain control over energy supply, it explored taking over electric service from the incumbent provider, Alliant Energy.

Avant assisted the City by conducting a preliminary study for the feasibility of electric utility formation. The study included a financial analysis, a benefits analysis, rate and cost forecasts, a review of legal, financial and operational hurdles and an electric system valuation. After study completion, the City decided against moving ahead with electric utility formation even though it provides natural gas, water and sewer services.

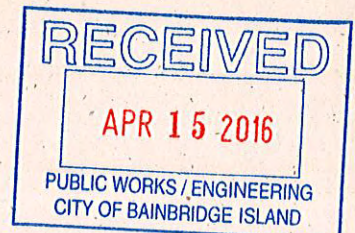
Reference: Josh Rinehart, Utilities Manager,
everly.utilities@evertek.net, (712) 834-2691

BROWN & KYSAR, INC.
Statement of Qualifications



**BROWN
& KYSAR**
INC.

P.O. Box 1720 ♦ Battle Ground WA 98604
Business: 360.687.3966 ♦ E-mail: bki@bki.cc



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April 13, 2016

Douglas Schulze, City Manager

City of Bainbridge Island, Washington

280 Madison Ave. N

Bainbridge Island, WA 98110

RE: Proposal to perform an Electric Utility Municipalization Feasibility Study

Brown & Kysar, Inc. (BKI) is pleased to submit this proposal to City of Bainbridge Island (COBI) to perform an electric utility municipalization feasibility study.

At BKI, we describe our purpose as “Growing great people and supporting communities”. We do this by focusing on our niche: Serving small public power in the Pacific Northwest.

We have assembled a multidisciplinary team to assist COBI:

- **Brown & Kysar** (Battle Ground, WA) - Project Lead: distribution engineering, equipment assessment and forecast, utility operations and costs.
- **EQL Energy** (Portland, OR) - Utility financials, revenue requirements, load forecast, power supply forecast and contracting, ratemaking, energy efficiency/ demand response, and distributed generation.
- **McDowell, Rackner, and Gibson, PC** (Seattle and Portland) - Legal processes.

This team is uniquely qualified to assist COBI for the following reasons:

- We performed the Utility Development plan for Jefferson PUD following the agreement between Jefferson County and PSE. We have unique insights into the actual costs, timelines, and risks of starting and running a municipal utility - contrasted with information in a preliminary feasibility study.
- We are located and work in the Pacific Northwest and have insights into the workings of Public Power, Puget Sound Energy (PSE), and BPA. This will be useful in evaluating the day one cost/benefits as well as the 20-year horizon.
- Our team has worked at BPA and has unique insights into the “Tier 1” supply and transmission services, and alternatives. We have represented clients in resource and transmission planning studies of PSE.
- We have developed customer service, smart grid, and energy efficiency programs for numerous utilities. We were involved in PNW Smartgrid Demonstration project and have piloted projects in demand response, energy storage, and Conservation Voltage Reduction.

- We have assessed a load management program for a 55MW campus distribution system in Vancouver, BC
- Our team has led and participated in contested utility-related proceedings and understand the strategies of Investor-Owned Utilities.

We feel our team's primary role in assisting COBI is to provide sound factual base from which citizens and COBI can make a well-informed decision. We think that our team can provide the City with an unmatched level of experience and detail to supply you with all necessary data, pros, and cons of forming a new municipal utility, and I hope you conclude the same after reviewing the following information.

We appreciate your consideration of the BKI team for this project. Please do not hesitate to contact us if you have any questions or require any additional information. Feel free to call me at (360) 687-3966 or email me at erikk@bki.cc.

Sincerely,

Erik Kysar, PE

President

OVERALL PROJECT APPROACH

Project Understanding

As stated in the Request for Proposals (RFP), the City of Bainbridge Island (COBI) is requesting technical and professional services to assist staff with economic and technical analyses to evaluate the potential benefits and costs of forming and operating a municipal electric utility to serve the residents and businesses on Bainbridge Island.

We understand from both the Request for Proposals, and from the presentation BKI provided to the City in January that there are several distinct reasons for this study:

1. To inform the Council of COBI as to the short-term and long-term costs and benefits of a public utility.
2. To inform the voters as to the costs and benefits of a municipal utility.
3. To determine if there are other viable non-profit utility structures.
4. To determine if there are other services, benefits, or synergies a non-profit utility could provide the residents of COBI that are not currently available.

General Approach

Some of the best comparable information will come from similar regional municipalizations. Recent successful transactions demonstrate utilities paying a little over two times book value for assets, and costing municipalities in non-utility efforts, e.g., public relations, legal, etc. These comparisons will allow COBI to understand the cost and timing of a municipalization effort. At some point, we know that PSE will hire a contractor to provide a critique of our work, and we have worked with/against these firms in the past.

The reality of operating a utility, whether private or non-profit, can be difficult and challenging. We will provide the good, the bad, and the ugly of running an electric utility today.

To provide the best information for the Council and residents of COBI, our goal with this feasibility study is to provide an unbiased and experienced opinion, working with a team of experts versed with both public power and investor-owned utilities.

COBI Utility Data

We understand from work on similar projects, familiarity with PSE behavior, and from the answers to our RFP questions that there will be limitations to certain historical data. From experience, we know Puget Sound Energy (PSE) has not been willing to provide system information prior to an affirmative vote for creating a new utility.

Our team has access to relevant data through our channels with PSE, BPA, similar utilities in the region, other municipalization/acquisition projects, and other regional studies. We expect to use various econometric, demographic, and other system expertise to provide best estimates.

Our approach will be to build a revenue requirements model for COBI that can easily be updated with new information or to test various future scenarios.

A more detailed discussion of each task is included in the following section titled Approach to Each Specific Task. An Estimate of Costs for each task is included in the same section, as well as a budget summary. This cost will be fixed bid. Any additional tasks that may be requested, that do not fall under the original 22 tasks will be billed on a Time & Material basis at normal rates at the request of the City of Bainbridge Island.

Proposed Team of Experts

The RFP requires a multidisciplinary team of engineers, financial analysts, utility managers, and attorneys to study and to advise. As such, we propose a team of experts to provide the services and products requested in the RFP.

- Brown & Kysar, Inc. (BKI) as the lead consultant for the project. The BKI team will be made up of four people, Erik Kysar, Mike McInnis, Rick Vermeers, and Jeff Kaiser, with additional support as needed. Erik has worked on multiple system assessments in the past, including the successful formation of Jefferson PUD's electric system. Mike also worked on the Jefferson PUD formation and was a past general manager of Clallam PUD, another successful public utility on the Olympic Peninsula. Rick worked for many years as Director of Electrical Engineering for an investor-owned utility (not PSE), and as such understands the governance and requirements of investor-owned utilities. Jeff provides services for multiple small public utilities in the Puget Sound region.
- EQL Energy, LLC (EQL) works utility clients in areas related to revenue requirement and rate designs, smart grid and energy efficiency, and wholesale power and transmission services and contracting. Ken Nichols has 20 years of utility operations experience and is an expert in distribution load management, smart grid, energy efficiency, demand response, storage, and load forecasting. Steve Knudsen recently retired from BPA and has over 20 years of experience in wholesale power, and utility revenue requirements and rates.
- Kirk Gibson with McDowell, Rackner, and Gibson, PC (MRG) will be the subcontracting attorney to review the legal questions, along with Joel Paisner of Ascent Law Partners, LLC to provide support services. This is the same legal team who successfully completed the Jefferson PUD electric utility formation.

Please refer to the qualifications and experience section for more information on each firm and the individuals. The experts working on each task is included in the section titled Approach to Each Specific Task.

WHO IS BROWN & KYSAR?

At Brown & Kysar, Inc. (BKI) we strive to be the premier consulting partner for small and midsize public utilities in the Pacific Northwest.

Our firm started in 1985 as Rex Brown Consulting Engineers (RBCE). RBCE was founded by Rex Brown, an amicable engineer from Texas. Rex and his engineering staff developed a market niche serving the needs of public utilities that had little or no engineering staff. They nurtured utilities by promptly responding to their challenges and needs.

That legacy continues today at BKI on a larger scale. Rex hired Erik Kysar in 1990 and began growing the business. With Erik's engineering skills and Rex's client-focused service, the chemistry between them and their clients has resulted in the sterling reputation the company enjoys today. In 2006, Erik purchased the business, changed the name to Brown and Kysar Inc., and took on the job of owner and principal.

BKI continues to specialize in providing consulting services to public power utilities in the Pacific Northwest. With our public utility focus, boots on the ground service and total operational support, BKI helps utilities do what they do best: provide exceptional service to their customers.

BKI prides itself on employing multi-disciplinary individuals with a wide variety of



experience. Our team members have been utility managers, utility board members, engineering and operations managers, and system engineers before joining BKI. Other team members have experience working with public utility boards, smart grid systems, mining operations, industrial and commercial electrical systems, equipment manufacturers, and include two former line superintendents and a number of professional engineers. Our combined experience equates to more than 200 years in the electric utility industry.

Our experience helps us make wise and innovative design decisions, control both engineering and project costs and streamline schedules. Our job isn't done until we exceed the expectations of our clients!



WHO IS EQL ENERGY?



In business, timing is everything. EQL believes that the time has come for the demand side of the energy equation to play a larger role in integrating new energy supplies. EQL believes that the technologies for managing energy and distributed resources are only getting faster, more efficient, and less expensive, and that these technologies will contribute to smarter utility planning, rate design, and operation.

Our clients benefit from a deep understanding of the utility business perspective, regulatory process, and system operations. We have worked in most facets of the electricity and natural gas value chain: supply, wholesale trading and contracting, rate design, and demand side management. This perspective helps us plan and evaluate end-use and demand solutions that make sense.

EQL Energy works with electric and gas utility teams to evaluate customer operations, DSM, Rates, and operational plans. Ken Nichols even helped start a large New Zealand utility from scratch. Resource planning has become more complicated and involves distributed resources, load management and constraints inherent in the transmission and distribution systems. Our team and partners have done bulk power and distributed resource planning. We see our expertise as building customer rates, programs, and resources (e.g., solar, energy efficiency, etc.) that address customer desires and utility operational objectives. This involves: Power contracting and trading/risk management, resource planning, cost of service and ratemaking, customer service and programs, metering and revenue protection, and related regulatory support.



WHO IS MCDOWELL, RACKNER, & GIBSON?

Experienced

McDowell Rackner Gibson is nationally ranked by U.S. News in energy law; in Oregon, the firm is top-ranked in administrative, regulatory, and energy law. Our attorneys are recognized locally and nationally as among the best lawyers in energy, environmental, telecommunications, and administrative law.



Responsive

We are committed to a client-centered model based on a clear understanding of our clients' needs.

Effective

We take pride in using our experience, skills, and industry stature to provide our clients with the best possible legal results. And, we work efficiently to accomplish our clients' goals without burdening them with unnecessary fees.

REPRESENTATIVE CLIENTS

- Idaho Power Company
- Public Utility District No. 1 of Jefferson County
- Southeast Alaska Power Agency
- Cascade Natural Gas Corporation
- NW Natural
- PacifiCorp
- Golden Valley Electric Association, Inc.
- Okanogan PUD
- Guam Power Authority
- ComSpan USA
- Level 3 Communications
- T-Mobile
- Columbia Basin Electric Cooperative, Inc.
- Surprise Valley Electrification Corp

SAMPLE PROJECT LIST

Brown & Kysar, Inc. has performed many electrical utility system appraisals for public utilities purchasing parts or all of systems from other entities. Several successes are listed below:

Jefferson County PUD #1

In 2008, the Jefferson County citizens authorized Jefferson County PUD #1, an existing water PUD, to pursue acquisition of power service for Jefferson County. This provided authorization for the PUD to begin acquisition negotiations. Brown & Kysar assisted the legal team with technical and financial negotiations. BKI then created a recommended Utility Development Plan, which provides a framework for implementation of an operating utility. BKI provided a complete system value assessment to comply with RUS financing requirements.

Columbia River PUD

Columbia River PUD was actually formed in 1940. However, it did not become an operating electrical utility until 1984, after it took over operations of the former Portland General Electric service area in the St. Helens, Oregon area. Rex Brown's scope of work was a full system assessment during the formation of the PUD to determine an equitable amount to pay PGE.

Yakama Power

Yakama Power is a new tribal utility formed in March of 2006. The utility was formed to provide independence and increase the standard of living for Yakama Nation members. Yakama Power has been able to accomplish this by hiring tribal members to support electric customers on the reservation formerly served by PacifiCorp and Benton REA, plus an added benefit of broadband.

The proposed methodologies for developing fair market values for the various completed assessments have taken many forms. The most common is to develop a "blue book" value of the system by determining the replacement cost via a full system inventory less depreciation. This approach can also be compared with a value based on total electrical billings. The exact methodology to be used will be determined in conjunction with Bainbridge Island.

BROWN & KYSAR, INC. TEAM

Erik Kysar, P.E.

Principal Engineer, President, Mentor

Education:

Bachelor's of Science in Electrical Engineering, Portland State University, Portland Oregon, 1992

Certifications:

Professional Engineering License, 1996

Licensed in the states of: Washington, Oregon, Nevada, and California

**Erik's Role with Brown & Kysar, Inc:**

Erik's primary management vision is to establish and maintain a premier client-based consulting firm for small and mid-sized public utilities in the Pacific Northwest. He has the unique foresight from both his consulting and management experience to assist and develop long-term visions, directions, and philosophies for the future, helping clients understand their needs and develop a sustainable plan of action to address those needs.

Erik's Industry-related Work Experience Includes:

Erik's engineering and management career spans over twenty-five years. He has dealt with all aspects of public utilities including system evaluation, load forecasting, system studies and long range plans. Erik also has extensive experience in permitting, contracts, retail rates, right of way and easement procurement, construction administration and system design.

Erik has successfully assisted numerous utilities in developing a vision for their system, creating multiple five, ten, and fifteen year long-range comprehensive plans with load forecasts, system modeling, financial forecasting, and budgeting.

Richard L. (Rick) Vermeers, P.E.

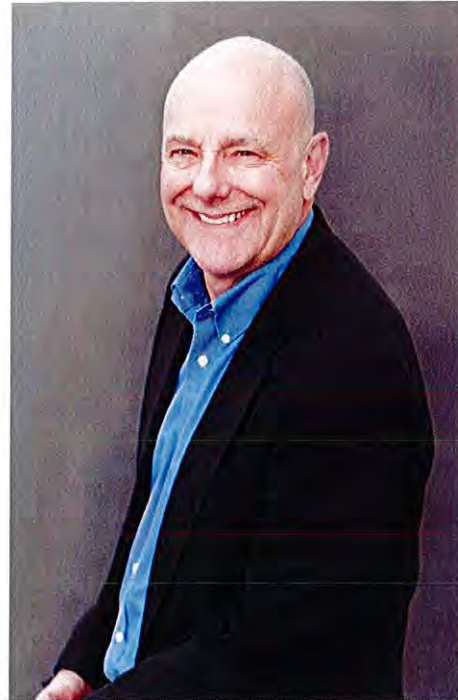
Principal Engineer, General Manager

Education:

Bachelor's of Science in Electrical Engineering, Washington State University, Pullman, WA, 1975

Certifications:

Professional Engineer License, State of Washington
Project Management Certificate, Washington State University, 2004

**Rick's Role with Brown & Kysar, Inc:**

Responsible for Design, Account Managers, Permits, Real Estate and Environmental Support, Business Operations and Business Development.

Rick's Industry-related Work Experience Includes:

Forty One Years of experience in engineering and management at Avista Corporation (formerly WWP) and Brown & Kysar including field operations, long range transmission system planning, project management and corporate capital and expense budget leadership; evaluation of economic alternatives and review of environmental and regulatory submittals; Strong background in negotiating transmission contracts with Bonneville Power and Bonneville Customers as well as experience in testifying before the Federal Energy Regulatory Commission and in court cases; Responsible for engineering recruiting and human relations for engineering and bargaining unit reports. Significant electric and gas field operations experience.

Michael McInnes, PE

Senior Engineer

Education:

Bachelor of Science, Electrical Engineering, Washington State University

Certifications:

Professional Engineer, State of Washington

**Michael's Role with Brown & Kysar, Inc:**

Although retired, Michael continues to provide services to BKI as needed for projects in which his experience in the utility industry can be of assistance.

Michael's Industry-related Work Experience Includes:

Michael worked at Clallam County PUD on the north Olympic Peninsula for 30 years in the positions of Engineer, Chief Engineer, General Superintendent and General Manager. During this time he became knowledgeable in most every aspect of public utility operations.

After leaving the PUD and relocating to Clark County, Michael began working as a consulting engineer for Power Wave Engineering and then BKI. During his 12 years of consulting Michael became familiar with several municipal, cooperative, and PUD electrical systems in Washington and Oregon. His experience with these public utilities covered a wide range of operations.

Michael worked with Jefferson County PUD in its acquisition of PSE facilities in Jefferson County. The work effort included evaluation of the condition and value of the electric system as well as a "Utility Development Plan" as support for the financing arrangement the PUD undertook. Several system improvement and transition projects were engineered.

Michael was also involved in early discussions for Thurston County PUD in consideration of acquisition of PSE facilities and also with the City of Cle Elum when there was similar interest for that municipality.

Jeff Kaiser, EIT

Account Manager, Electrical Engineer

Education:

Bachelor's of Science in Electrical Engineering, University of North Dakota, Grand Forks, ND, 2013

Certifications:

Fundamentals of Engineering (FE), 2013

**Jeff's Role with Brown & Kysar, Inc:**

Jeff's role is a very diverse one, which includes assisting several utilities in system improvement projects, as well as day to day operations assistance. The tasks required in these projects include staking, design, project management, permitting, construction support, and training of engineering designers. Jeff has a knack for superior customer service and providing quality support for small utilities.

Jeff's Industry-related Work Experience Includes:

Jeff's engineering and management career spans over a few years. His experience began while interning at an investor owned utility, Montana-Dakota Utilities (MDU), which laid the foundation for his role at Brown & Kysar. He has dealt with many aspects of electric utilities, public and investor owned, including system reliability and improvement projects, distribution rebuilds, development of distribution standards, permitting, and substation rebuilds.

EQL ENERGY TEAM

Ken Nichols

Principal

Education:

Portland State University, 2011-, Assistant Professor

Stanford University, M.S., Management Science and Engineering Energy Modeling Forum, contributor, 1992

Willamette University, BA Physics and Computer Science, 1986.


Ken's Role with EQL and Industry-related Work Experience Includes:

Mr. Nichols' practice areas at EQL are smart grid business planning and operations, demand response and energy efficiency program design and evaluation, utility ratemaking, resource and transmission planning, energy policy. His clients include utilities, vendors and utility service providers, as well as large energy consumers.

- Washington State Distribution Collaborative, speaker/member
- Western Interstate Energy Board. Paper for SPSC – States and Provincial Steering Committee. Distributed Energy Resources and changes in Distribution planning and operations. (2015)
- Renewable Northwest and Oregon Solar Energy Industry Association. Value of Solar docket at OPUC.
- University of British Columbia, Electric Load Management study (T&D infrastructure deferral), (2014-present)
- West coast utilities in areas of IDSM (demand response and EE) program planning, rate designs, and DSM evaluation and planning (ongoing)
- Innovari Inc., Hillsboro, OR. Product Marketing, BMS controls, utility dispatchable backup generation, inverter utility integration. (2014-2015)
- Bonneville Power Administration, Vancouver, WA, commercial strategy and policy in power transmission, non-wire analysis and resource planning (2013-2014)
- Industrial Energy Efficiency firm, Strategic and business planning, networked projects (2013)
- VP, Energy Management at PureSense Environmental Inc., Fresno, CA. (11/11-1/13). Providing strategic direction, operations, vendor/utility relationships, sales/marketing training, and financial planning for new products in AutoDR controls and energy management.
- Refrigeration controls company, AutoDR development, DR pilot, and marketing
- Energy Storage startup – Utility demonstration, Arpa-E grant, commercialization, market assessments (2012)
- Assistant Professor, Portland State University "Smart Grid for Sustainable Communities." (2010)

F. Steven Knudsen

Utility Financial Analyst

Education:

Bachelors of Science in Economics, University of Oregon, 1976

MBA in Finance, Northwestern University Kellogg School, 1979

Steven's Role with EQL and Industry-related Work Experience Includes:

Mr. Knudsen has extensive experience and credentials in energy analytics, load forecasting, revenue requirements, rate development, energy and transmission asset development and asset acquisitions, utility finance, regulatory compliance, transmission system modeling, and complex contract negotiations. He has held senior technical positions and management positions in the energy industry; in both the public sector and the private sectors.



Mr. Knudsen worked over 20 years for the Bonneville Power Administration during which time he held key management and technical positions responsible for transmission and power revenue requirements, financial forecasting, load forecasting, generating resource evaluation and acquisition, regulatory compliance, rate development, strategic planning, tariff development, power supply hedging and risk management, energy storage, and transmission expansion and reliability planning.

From 1995 to 1999 Mr. Knudsen worked for Pacific Gas Transmission during which time he was Director of Business Development responsible for pipeline capacity marketing, pipeline expansions, project rate development and natural gas storage development.

From 1999 to 2003, Mr. Knudsen worked for the PG&E National Energy Group as a lead generating asset developer in the Rocky Mountain West during which time he was responsible for the full range of generation development including responding to utility RFP's for generating resources, site acquisitions, generator interconnections, transmission purchases, EPC contract negotiations, and generator O&M contracts.

Mr. Knudsen has been in private consulting practice since 2014.

Bill Henry, C.E.M.

Senior Associate

Education:

Bachelors of Science in Construction Engineering Management, Oregon State University, 2006
 Energy Resource Management Certificate, University of California, Davis, 2010
 Guest Lecturer (PSU Smart Grid Course), and graduate coursework Portland State University, 2010-2013

**Certifications:**

Association of Energy Engineers

- Certified Energy Manager

Bill's Role with EQL and Industry-related Work Experience Includes:

Mr. Henry's practice areas are demand response program management, energy DSM and DR settlement and evaluations, WECC market policy implications on DER, commercial energy management, and combined heat and power. His work involves analyzing utility DR programs for utility and vendor clients, identifying best practices in wholesale market operations related to renewable integration and demand based grid services, and business case development for DR and EE programs. His clients include: University of British Columbia, PureSense Environmental, Inc., Ecofys US, BPA, and other confidential companies.

- Integrated DSM program evaluations and assessment
- Western Interstate Energy Board. Paper for State and Provincial Steering Committee on Distributed Energy Resources and changes in Distribution system planning and operations.
- Managed PureSense participation in California utility DR programs
- Key relationship with customers in DR programs
- Developed business case for utilities to evaluate DR programs
- Developed system-wide DR potential estimate for vertically integrated utility
- University campus power system and building load analysis for peak load reduction

MCDOWELL, RACKNER, AND GIBSON TEAM

Kirk Gibson

Partner

Education:

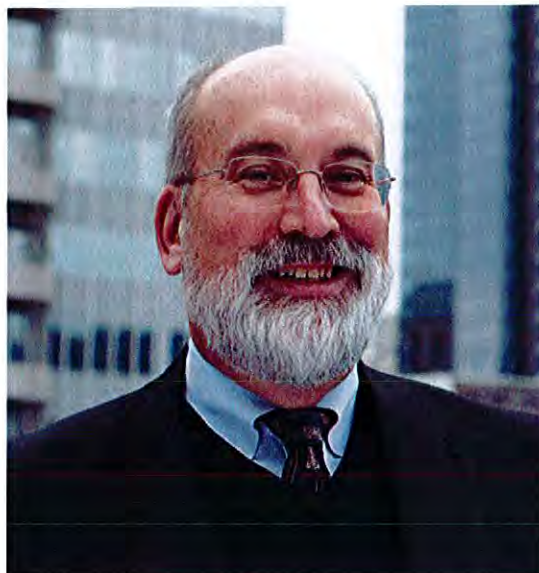
BS in Commerce, Rider College, 1975

MBA, Boston College, 1977

JD, Franklin Pierce Law Center (aka: University of New Hampshire), 1984

Legal Experience:

Kirk practiced with Ater Wynne LLP for fifteen years from 1995 to 2010. While at Ater Wynne, he was head of the firm's energy practice. Prior to joining Ater Wynne, Kirk worked for NW Natural and the Nevada Public Service Commission. Kirk was a financial analyst with Mobil prior to practicing law.



Kirk's Industry-related Work Experience Includes:

Kirk has over 30 years of experience advising business organizations and public entities on economic, strategic, legal, and regulatory policy issues. His practice focuses on advising energy clients, including electric and gas utilities, power producers, and oil pipeline operators. Kirk has been involved in all facets of utility business operations and the development of generation facilities for utilities and independent power producers throughout the West and Alaska and has handled major regulatory cases before public utility commissions in Alaska, Oregon, Nevada, and Washington.

Representative Work:

- General Counsel to Surprise Valley Electrification Corporation (OR)
- Corporate Counsel to Columbia Basin Electric Cooperative, Inc. (OR)
- Energy/Regulatory Counsel to Golden Valley Electric Association, Inc. (AK)
- Counsel to Bradley Lake Project Management Committee (AK)
- Counsel to Alaska Intertie Management Committee (AK)
- Special Counsel to City of Boulder in its consideration of municipalization (CO)
- Lead Counsel to Public Utility District No. 1 of Jefferson County's acquisition of electric facilities of Puget Sound Energy (WA)
- Regulatory Counsel to Guam Power Authority (GUAM)
- General Counsel to Columbia River People's Utility District (OR)

APPROACH BY TASK

TASK 1

Prepare a boundary map of the proposed service area. This map should also delineate the transmission, substation and distribution system facilities on Bainbridge Island necessary to provide such service, and the point at which the municipal utility would interconnect with the transmission grid. The map should reflect proximity to transmission lines.

Approach to this task	
Several sources will be used. These include aerial imagery, a drive through of the system, and review of the BPA and regional transmission maps. <i>(Please refer to General Approach in the Overall Project Approach section regarding the likely lack of PSE information for all tasks.)</i>	
Final Product of this task	Boundary Map with Substations and Transmission lines, along with transmission interconnection points
Subject Matter Expert(s) working on this task	BKI
Estimate of costs for this task	\$1,930

TASK 2

Using historic, econometric and other data as appropriate, prepare projections of potential electrical load and numbers of customers to be served (by category—residential, commercial, industrial) by COBI over a 20-year horizon. The projections of potential loads should include energy and capacity loads, as well as diurnal, monthly and annual load shapes. Such projections should take into account distributed generation, energy efficiency and demand response efforts, as well as programs currently available and which may be available in the future to Bonneville Power Administration (“BPA”) requirements customers promoting such activities.

Approach to this task

We will use best available load and demographic data to specify Day One loads and seasonal/diurnal load profiles, and examine a few alternative 20-year load futures.

Data may include that from adjoining utilities, PSE, BPA substations, COBI, etc. The base case will establish specific assumptions that will define the physical dimensions of the current Puget electric supply service that COBI must replace. (Day One). We will then create two or more possible future 20-year load and growth scenarios and explicitly test the economic implications of long-term risks and opportunities expected from any decision to municipalize. Scenarios will vary impact of population/economic growth, distributed energy resources/loads (energy efficiency, demand response, distributed generation, CVR, storage, EVs, etc.), and use of alternative fuels.

Final Product of this task

Detailed description of existing electrical loads on the island broken out by sector, disaggregated to monthly energy loads and seasonal diurnal load shapes. The specification of existing loads will be of detail and format to support a comparison of the rates of other utilities if applied to COBI loads. (Task 13). A minimum of two future load growth scenarios will be prepared for use in testing the financial risks and potential rewards of any decision to municipalize

Subject Matter Expert(s) working on this task

EQL

Estimate of costs for this task

\$9,246

TASK 3

Determine which facilities would likely need to be acquired and/or constructed as part of the establishment of a new municipal electric utility (e.g., transmission, sub-transmission and substation facilities; operations center, warehousing and pole yard). Address the potential advantages and disadvantages of municipal ownership of distribution facilities, and any transmission facilities and/or substations needed to provide service on Bainbridge Island. Identify any system capital improvements planned for installation on Bainbridge Island by PSE in the next five (5) years, and for the subsequent fifteen (15) years if available. A thorough understanding and documentation of PSE planned system enhancements will allow the Council to consider what a “no action” alternative would entail (if there is agreement to continue to receive service from PSE).

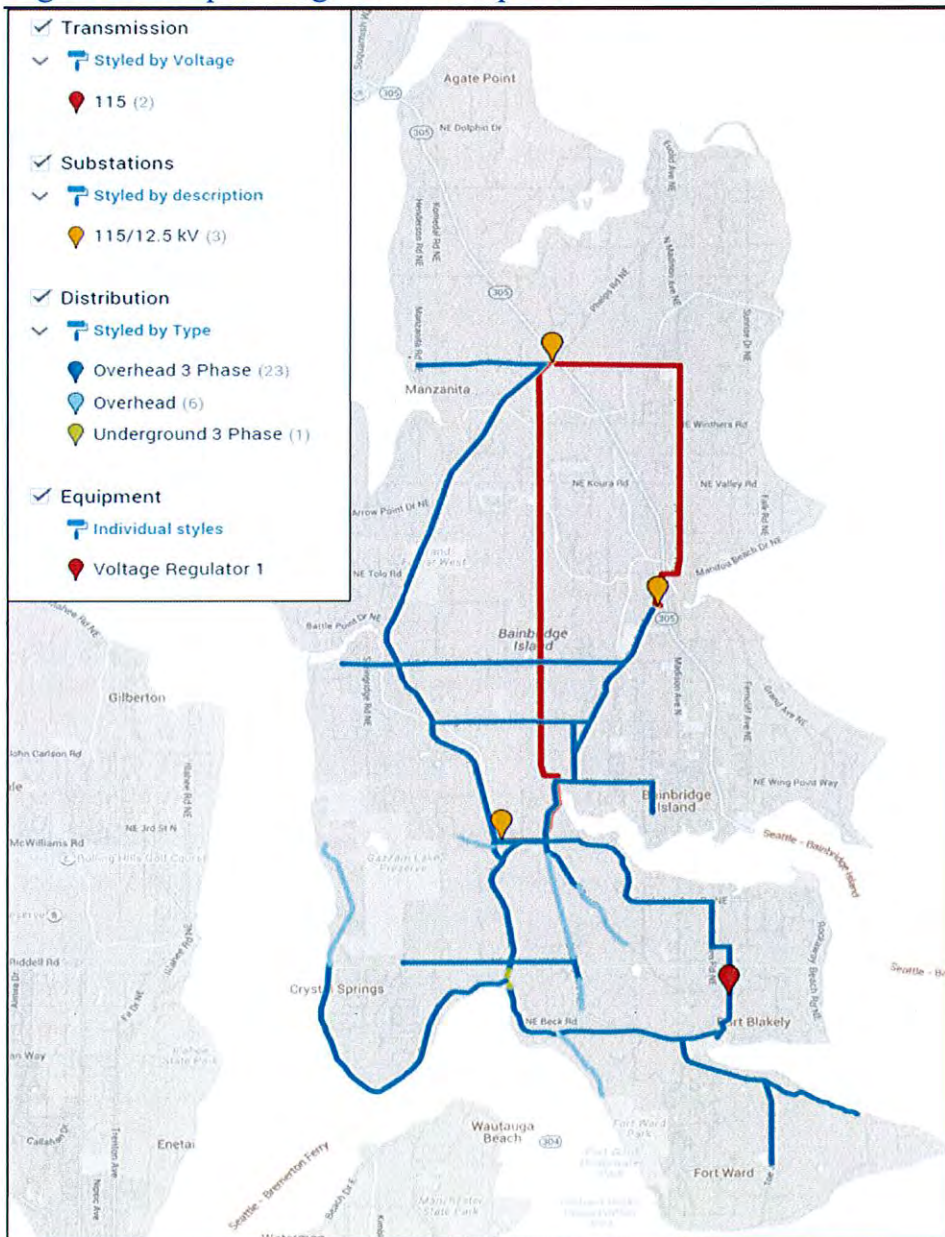
Approach to this task

First, an overview assessment of existing facilities will occur. Then, new locations for a warehouse, operations center, and pole yard will be valued. Major deficiencies will be identified in the system including substations and transmission. PSE capital improvement plans will be requested and compared to what we have identified.

Lastly, pros and cons of municipal ownership of various pieces of the system will be developed, including WECC / NERC compliance impacts, costs, local control, etc. Bainbridge Island also has higher costs of living, these additional costs must also be considered for wages/living expenses for employees. Project team will use a linked map and spreadsheet tool to identify and compile inventory of existing equipment. See [Figure 1](#) below.

Final Product of this task	Report with cost estimates, EQL Google-based GIS map and database of system.
Subject Matter Expert(s) working on this task	BKI, EQL
Estimate of costs for this task	\$19,400

Figure 1: Sample image of GIS map tool



TASK 4

If applicable, identify potential severance issues at the boundaries of the acquisition area to be served by the municipal electric utility.

Approach to this task	
Task 1 will be completed first to establish the potential boundaries of the system. Physical systems will then be reviewed as to stranded assets and other issues. It is expected to be fairly easy to identify due to COBI being physically an island with minimal electrical sources from the mainland.	
Final Product of this task	Overall map and impacts detailed in report including physical plant constraints and costs
Subject Matter Expert(s) working on this task	BKI, EQL
Estimate of costs for this task	\$4,651

TASK 5

If applicable, provide a general assessment of the existing distribution facilities (and any necessary transmission and substations) including age, condition, and state of technology (e.g., metering, power quality enhancements) located on Bainbridge Island and necessary to provide electric service with a municipal electric utility. The number and type of smart meters currently in use on Bainbridge Island should also be provided.

Approach to this task	
Task 1 and Task 3 will be completed first to establish the boundaries and an overview of the system. A review of the distribution system with the state, age, and condition will be developed, along with an estimated number of metering, miles of distribution line, and other equipment quantities. The technology on the island including metering, SCADA, and outage management will also be reviewed.	
Final Product of this task	List of product
Subject Matter Expert(s) working on this task	BKI, EQL
Estimate of costs for this task	\$10,024

TASK 6

Provide an assessment of the availability of BPA power for a new municipal electric utility, the availability of BPA transmission to deliver such power to Bainbridge Island, the likely rates at which such power and transmission service could be purchased from BPA over a 20-year horizon, and the steps that would need to be taken to access such BPA power and transmission.

Approach to this task

We will establish the exact nature COBI's rights to secure a long-term "requirements" power supply from BPA, and the expected cost of that supply, the steps required to access the power supply, and associated timeline.

Because COBI loads are existing loads, no major transmission infrastructure need be built for COBI to move its power supply away from PSE. Nevertheless, transmission service to COBI would need to be restructured. We will describe current transmission to COBI and how that transmission would need to be restructured if COBI loads were severed from Puget.

Final Product(s) of this task

We will prepare two report sections. The first will outline our findings regarding the availability, cost and steps to access a long-term power supply from BPA. The second section will describe the current nature and cost of transmission service to COBI, and the structure and cost of transmission should COBI move the island's power supply to BPA, or other power provider.

Subject Matter Expert(s) working on this task EQL

Estimate of costs for this task \$6,483

TASK 7

Assuming that the municipal electric utility procures its power supply from BPA, describe any energy efficiency programs currently available to and any expectations from BPA for such a municipal utility as a requirements customer of BPA, and any demand response and distributed generation programs or other assistance that is likely to become available in the future. Estimate over a 20-year horizon the energy efficiency, distributed generation and demand response resources that are likely to be achieved by such utility, compared to the energy efficiency, distributed generation and demand response resources likely to be achieved on Bainbridge Island under PSE during a comparable period. In making such estimates, impacts of the energy efficiency and capacity goals of the 7th Power Plan assigned to BPA and its requirements customers should be examined.

Approach to this task	
We will compare and contrast current energy efficiency programs from PSE and BPA, and their relevance to COBI customers. We will also examine the path towards cost effective distributed energy resources on COBI, and what role PSE and BPA will have. We will lay out how COBI could manage their EE and DER budget with BPA. We will also share our recent opinions on cost effectiveness of DER relevant to COBI (energy efficiency, demand response, storage, microgrids, distributed generation, CVR, etc.). This task will inform task 2 scenario load forecast, task 11 revenue requirement, and task 19 on using funds for cost effective DER	
Final Product of this task	Amount and cost of DERs in prescribed future scenarios, and their impact on load and revenue requirements. Identify personnel at public power utilities that can share with experience working with BPA energy efficiency programs.
Subject Matter Expert(s) working on this task	EQL
Estimate of costs for this task	\$8,587

TASK 8

Identify and recommend options and costs for a municipal utility to develop and/or contract for business systems to handle customer service, billings, collections, and systems that may be needed to perform operation and maintenance, such as crew dispatch and SCADA.

Approach to this task	
This task will involve reviewing other Utility's systems, as well as bringing in vendors that can supply such systems, as well as technical support on them. A look at costs and benefits to each system will be reviewed and recommendations will be made based on potential budgets.	
Final Product of this task	A comparison list of the various options for the business and operations systems, with costs and benefits.
Subject Matter Expert(s) working on this task	BKI, EQL
Estimate of costs for this task	\$9,064

TASK 9

Provide a reliable estimate of book value (OCLD) of the facilities that would likely need to be acquired by a municipal utility to provide electric service to Bainbridge Island, and an enumeration of the financial and operational risks that PSE may confront over a 20-year horizon.

Approach to this task

This task will build off of the information developed in Task 1, 3, and 5. Various sources including the Handy Whitman index and comparable utility systems will be used. Keep in mind that depending upon the method of acquisition and the negotiations, utility system values may need to also cover lost-opportunity cost, “blue-sky” and other factors.

The financial and operational risks that PSE may confront will also be documented. More detail can be provided after the vote.

Final Product of this task	Report
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Subject Matter Expert(s) working on this task	BKI
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Estimate of costs for this task	\$8,703
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TASK 10

Provide an economic evaluation of municipal ownership and operation, including assumptions or derivations as to the potential acquisition costs, severance costs, operating and maintenance costs, likely annual capital investments and costs, power supply sources and costs, start-up and other non-recurring costs, lost tax revenues, lost franchise revenues and other key variables.

Approach to this task

We will develop a financial pro-forma projection of a COBI municipal utility. Identify and document all key financial assumptions.

Final Product of this task	Financial model in spreadsheet format that will produce income statement and balance sheet summaries under base case and alternate assumptions. The model will calculate basic financial ratios to inform the feasibility of utility financing with 100% debt. The model will be developed as an ongoing tool available to COBI staff.
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Subject Matter Expert(s) working on this task	EQL, BKI
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Estimate of costs for this task	\$15,096
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TASK 11

Provide the expected annual revenue requirement for rates the first 20 years of operation needed to fund and operate a municipal electric utility, including identification of all major cost elements. Provide the expected annual revenue requirement with the same level of detail for rates for a comparable period for electric service to Bainbridge Island by PSE including costs of any decommissioning and remediation of any coal-fired generation, if applicable. Using the foregoing 20-year annual revenue requirement for the municipal electric utility and PSE's forecast retail rates for the same period, provide a comparison of forecast retail rates for the municipal electric utility and PSE for a 20-year period.

Approach to this task	
The financial model prepared for Task 10 will be expanded to a 20 year model with 20 year assumptions. The model will be used to test alternative assumptions (scenarios) as directed by BKI team and COBI staff, including a comparison to 20 years of continued service under PSE.	
Final Product of this task	Expansion of Task 10 financial model to a 20-year scenario model.
Subject Matter Expert(s) working on this task	EQL
Estimate of costs for this task	\$15,217

TASK 12

Identify and recommend options for potential financing mechanisms, including an evaluation of their relative advantages and disadvantages.

Approach to this task	
Identify and evaluate possible financing options, such as bank loans, as well as the municipal bond market. Relative costs of borrowing, as well as pros/cons regarding ease of lending will be presented. Some methods may or may not be available.	
Final Product of this task	Report and summary table of potential options with pros and cons. Preferred alternative used in Task 11.
Subject Matter Expert(s) working on this task	BKI
Estimate of costs for this task	\$4,184

TASK 13

Provide a comparison of the retail rates for municipalities with electric utilities, such as the cities of Port Angeles, Ellensburg, Milton, Cheney and Steilacoom, with the retail rates charged by investor-owned utilities in nearby communities. Describe the types of governance approaches used by cities with municipal electric utilities and their advantages and disadvantages, such as those employed by the cities of Seattle and Tacoma, Washington, and Eugene, Oregon.

Approach to this task	
A review of rates of neighboring and similar utilities, as well as the investor owned in the region. Advantages and disadvantages of the various forms of governance will be mapped out and presented.	
Final Product of this task	Graphical presentation of comparison rates normalized to the resulting monthly bill for a typical (average) COBI household under each alternate utility's rates. . Comparison table of governance options with pros and cons.
Subject Matter Expert(s) working on this task	EQL
Estimate of costs for this task	\$3,014

TASK 14

Provide a comparison of system acquisitions within the past 10 years showing the estimated book value, potential acquisition cost, and actual acquisition cost for each system.

Approach to this task	
See Appendix A to SOW with a table that shows successful and unsuccessful utility acquisitions. Our very recent experience with Jefferson PUD will be a good barometer to compare with other related projects.	
Final Product of this task	Report that summarizes range of acquisition costs, and metrics that could be compared to COBI municipalization.
Subject Matter Expert(s) working on this task	BKI
Estimate of costs for this task	\$4,767

TASK 15

Identify the known or potential operational risks or concerns that should be considered by the COBI (such as response to major outages following a windstorm).

Approach to this task	
Having an emergency response plan will be very important if the utility is formed. The approach to this task will be to map out the various operational risks and concerns as they would be identified in an emergency response plan. We will also discuss some of the asset, operational and resource measures that could be considered, e.g., outage management systems, backup systems at key sites, microgrid sections, etc.	
Final Product of this task	Emergency response plan considerations including financial risk of outages. Share SAIFI and SAIDI statistics for PSE and surrounding utilities.
Subject Matter Expert(s) working on this task	BKI, EQL
Estimate of costs for this task	\$5,630

TASK 16

Provide a list of potential socially responsible initiatives that COBI may consider as part of creating a municipal power entity, e.g. low interest loans, supplementing power to certain lower income homes, senior programs, etc.

Approach to this task	
Share programs used at other public power utilities in the PNW we think are relevant to COBI.	
Final Product of this task	A summary table of programs with pros and cons, cost estimates, followed by more detailed explanation of each. Identify key personnel at public power utilities that can share program experiences.
Subject Matter Expert(s) working on this task	EQL
Estimate of costs for this task	\$3,912

TASK 17

Provide listing of synergies and other benefits that might accrue to COBI, its residents and businesses, from the formation and operation of a municipal electric utility by COBI (such as the installation of broadband).

Approach to this task

Provide examples of municipal utilities with synergistic services for other utilities, e.g., broadband.

Relevant additional services will be identified, and other public power utilities will be interviewed regarding the synergy and effectiveness of ancillary services provided to their customers.

Final Product of this task	Summary table
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Subject Matter Expert(s) working on this task	EQL
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Estimate of costs for this task	\$5,072
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TASK 18

Do a comparative risk and cost analysis including a “carbon tax” or a proxy “social cost of carbon” for a prospective COBI electric utility, assuming reliance on a BPA power supply, and a similar analysis for PSE and its power resources.

Approach to this task

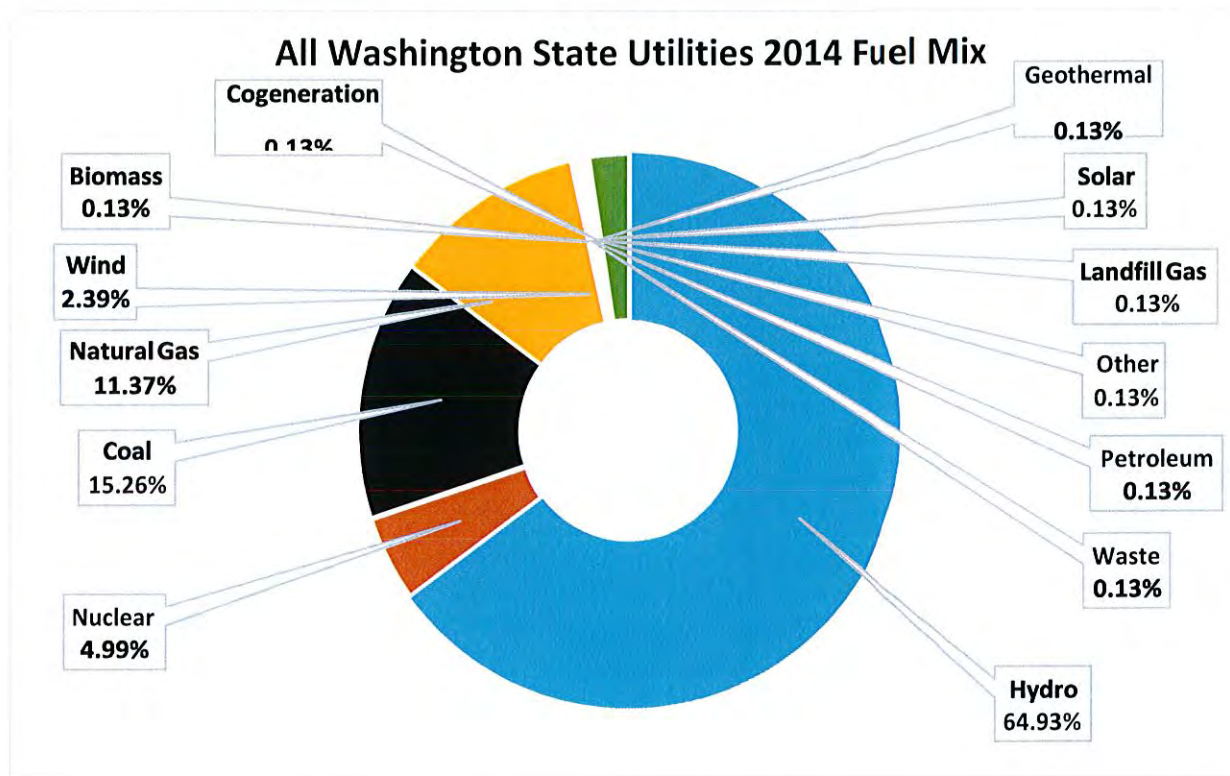
Include carbon content of resource portfolios in the load forecast model, estimate 20 yr carbon cost (\$/ton) scenarios based on best available data from Carbon markets and forecasts. Include amount and cost forecasts in the revenue requirement model, as a separate line item to be included or show separate from total revenue requirement.

Final Product of this task	Additional analysis and line items in task 2 load forecast regarding carbon amount with scenarios, Carbon cost forecast (\$/ton), and include in task 11 revenue requirement.
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Subject Matter Expert(s) working on this task	EQL
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Estimate of costs for this task	\$4,174
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Figure 2: Fuel Mix Diversity for All Washington Utilities



TASK 19

If Task 12 demonstrates that a municipal utility would likely provide service to Bainbridge Island at retail rates lower than those of PSE for comparable service, opine on whether such rate differential or “dividend” could be used by the municipal utility to pursue investment in or development of renewable resources, undergrounding and/or enhanced reliability.

Approach to this task	
Provide examples of public utilities investing in development of renewable resources (e.g., community solar), undergrounding and/or enhanced reliability, or other power services.	
Final Product of this task	Summary opinion
Subject Matter Expert(s) working on this task	BKI, EQL
Estimate of costs for this task	\$1,929

TASK 20

Identify the steps and costs required, along with a projected timeline, for COBI to form a municipal utility and acquire the electric distribution plant (including substations) currently operated by PSE, including all necessary approvals and/or permitting requirements.

Approach to this task	
1. Identify municipalization steps for COBI. 2. A detailed chronological order of events. 3. Break down the overall costs from task 9 and 10 to match the events.	
Final Product of this task	Summary of steps to form a utility, Chronological Timeline with associated costs by event.
Subject Matter Expert(s) working on this task	BKI, MRG (optional)
Estimate of costs for this task	\$10,062

TASK 21

In cooperation with staff, prepare and present findings of the foregoing analyses at three (3) COBI scheduled public meetings.

Approach to this task	
Preparation and presentation of the findings at the public hearings. A meeting with COBI staff will happen prior to the public hearings to ensure COBI staff are up to speed on the study findings. The format will be a workshop, rather than a stiff presentation. Have descriptive and visual material the average person can understand and comprehend.	
Final Product of this task	Public workshop with two-way dialogue.
Subject Matter Expert(s) working on this task	BKI, EQL, and MRG (optional)
Estimate of costs for this task	\$30,285

TASK 22

Provide in matrix format a comparison of the three forms of not-for-profit utilities (municipal, public utility district and cooperative), how they are similar to and/or differ, the relative advantages and disadvantages of each, and the steps required for their formation and their relative availability to provide electric service to Bainbridge Island.

Approach to this task	
Define the benefits, costs, processes, and political repercussions of a PUD, Municipality, or Co-op.	
Final Product of this task	Comparison matrix
Subject Matter Expert(s) working on this task	BKI
Estimate of costs for this task	\$5,570

PROPOSED PROJECT SCHEDULE

SOQ Due	April 15
Bid Awarded	Early May
Project Kickoff With COBI	Early May
30% of Tasks Complete	End of June
80% of Tasks Complete	Early August
Meeting with COBI	Early August
First Public Workshop	Mid-August
100% of Tasks Complete	End of August
Second Public Workshop	Mid-Late September
Last Public Workshop	Mid-October

COST AND BUDGET

This feasibility study would be a fixed cost bid totaling **\$187,000**, with cost break down for each task shown in the Approach by Task section of this document. This is based on approaching the project on a feasibility level, with any added run offs or scope change from the Approach by Task to be billed at normal hourly rates.

This cost does not include any usage of Kirk Gibson of McDowell, Rackner, and Gibson (MRG). If COBI decides to use attorney services during this feasibility study, and/or having the attorney present during public workshops, will be in addition to the fixed cost at normal MRG rates.

Cost by Task:

TASK	Task Title	Cost (USD)
Engineering/Facilities/Network		
1	Boundary Map	\$1,930
2	Load Forecast	\$9,246
3	Determine Facilities Needed	\$19,400
4	Severance Issues	\$4,651
5	Assessment of Existing System	\$10,024
6	Availability of BPA Power	\$6,483
7	Energy Efficiency and DER	\$8,587
Operations/Finance/Economic Analysis		
8	Business Systems	\$9,064
9	Estimate of Book Value (OCLD)	\$8,703
10	Economic Evaluation of Municipal Ownership	\$15,096
11	Expected Annual Revenue Requirement	\$15,217
12	Financing Mechanisms	\$4,184
13	Public vs. IOU Rate Comparisons in Washington State	\$3,014
14	Acquisition Comparisons of other Municipalizations	\$4,767
15	Managing Operational Risks	\$5,630
Other Considerations		
16	Socially Responsible Initiatives	\$3,912
17	Other Benefits	\$5,072
18	Compare Carbon Costs of Power Supply (PSE/BPA/other)	\$4,174
19	Use of Rate Revenue for Energy/Reliability Initiatives	\$1,929
Legal/Process/Policy		
20	Cost and Timeline of a Takeover of PSE	\$10,062
21	Three Public Hearings/Workshops	\$30,285
22	Municipal/PUD/Co-op Comparison Matrix	\$5,570

BKI CLIENT EXPERIENCE





Appendix A: Estimated premiums Over OCLD for the Sale of Various Electric Utility Equipment and Properties.

Locale	Selling Entity	Purchasing	Nature of Equipment	Premium Over OCLD	Purchase Price per customer	Status of Transaction
Jefferson County, WA	Puget Sound Energy	Jefferson PUD	D	280%	\$5,300	Completed
Hermiston, OR	PacifiCorp	City of Hermiston	D	220%	\$1,600	Completed
Sandpoint, Idaho	PacifiCorp	Avista	D	35.00%		Completed
Kalispell, Montana	PacifiCorp	Flathead Electric	T/D	25-35%	\$3,333	Completed
St. Helens, Oregon	PGE	West Oregon Coop	D	N/A		Unsuccessful
Northern California	PacifiCorp	Nor-Cal	T/D	14.00%		Unsuccessful
Kauai County, Hawaii	Citizens Power	Kauai Island Utility Coop	T/D	21.50%	\$6,935	Completed
Montana	Montana Power	Northwestern	G/T/D/NG	31%	\$3,785	Completed
Alberta	TransAlta	UtiliCorp		33%	-	Completed
Portland, OR	Enron	Northwest Natural	G/T/D	48%	\$3,973	Unsuccessful
Portland, OR	Enron	Sierra Pacific	G/T/D	66%	\$4,429	Unsuccessful
Portland, OR	PGE	Enron	G/T/D	80%	\$4,699	Completed
Alaska	Arctic Utility	TDX North Slope Gen.	G/T/D	-34%	N/A	Completed
Alaska	Tligit-Haida RAD	Alaska Power Co.	D	2.20%	N/A	Completed
Alaska	Far North	Central Electric	D	> 200%	N/A	Completed
Alaska	Thorne Bay	AP&T	G/T/D	60%	N/A	Completed



April 15, 2016

Mr. Barry Loveless, Director of Public Works
City of Bainbridge Island
280 Madison Avenue N
Bainbridge Island, WA 98110

**Subject: Proposal to Provide Consulting Services
Electric Utility Municipalization
Feasibility Study**



Dear Mr. Loveless:

D. Hittle & Associates, Inc. (DHA) is pleased to submit our qualifications to the City of Bainbridge Island (COBI) to provide assistance with the evaluation the potential costs and benefits of forming and operating a municipal electric utility to serve the residents and businesses of Bainbridge Island. DHA has over 45 years of experience in providing analytical, engineering and management consulting services to municipal and cooperative utilities throughout the Pacific Northwest. The firm has an exceptional reputation in working with small to medium sized consumer-owned utilities, government agencies and large power users.

In recent years we have assisted various municipalities, counties and local organizations as they assess the feasibility of establishing new consumer owned electric utilities. Over the last few years we worked with the City of Millersburg, Oregon to assess the feasibility of acquiring electric facilities owned by PacifiCorp and establishing a municipal electric utility. A public referendum was held in November 2015 to determine whether or not to proceed with forming the municipal electric utility. The referendum was not passed.

We provided the initial feasibility study of electric service for Thurston County Public Utility District (PUD) in 2012. In 2008, we provided the initial feasibility study of electric service for Jefferson County PUD and provided additional assistance to the PUD community in assessing the costs and benefits of consumer-owned electric service in Jefferson County. Following the initial feasibility study, Jefferson Co. PUD proceeded towards establishment of an electric utility and began electric service on April 1, 2013. An initial feasibility assessment for electric service was also provided to Skagit County PUD in 2008.

An earlier feasibility assessment led to the formation of a municipal electric utility in Hermiston, Oregon in 2001. DHA assisted Hermiston in all technical and analytical aspects of the City's acquisition of acquiring the local distribution system from PacifiCorp and establishment of a municipally-owned electric utility. There are several other cities, cooperatives, and public utility districts for whom we have performed studies evaluating the acquisition of customers or assets and the economic and technical feasibility of starting electric utility service.

In addition to our direct experience with assessing the feasibility of establishing electric service within the entirety of a municipality or county, we have assisted Asotin County PUD with undertaking electric service to PUD-owned electric loads whereby electric assets owned by Avista Corporation were not acquired. We have also assisted Whatcom County PUD in evaluating the feasibility of providing electric service to two large industrial facilities. In this case, Whatcom County PUD was looking to construct high voltage transmission lines to serve the industrial customers rather than acquire PSE-owned facilities. We have also helped in the formation of cooperatives and the sale and purchase of utility assets among publicly owned electric utilities.

We believe our experience with similar evaluations and our knowledge of the Pacific Northwest electric utility industry will serve COBI well in determining the feasibility of its options related to initiating electric service in Thurston County. Because of our experience we have many insights into what is required for a successful municipalization and contacts throughout the region and country that may provide COBI with insights and advice.

A number of study issues identified by COBI are potentially of a legal nature and as such, we are proposing to team with the law firm of Gordon Thomas Honeywell, and specifically, Don Cohen of that firm. Any legal work would be performed in coordination with the City Attorney and only as needed, avoiding duplication with City Attorney work.

Gordon Thomas Honeywell ("GTH") is a 120-year-old law firm with 50 attorneys in offices in Seattle and Tacoma. GTH has provided a full range of legal services to electric utilities and other public entities throughout the Pacific Northwest for many decades. It is one of the region's most trusted law firms, priding itself on using a practical understanding of both law and business to bring value to its utility clients and providing the highest quality legal services in a timely, dependable, and cost-effective manner. Background information on GTH is at www.gth-law.com.

Qualifications

DHA is highly qualified to provide the services requested by COBI. We are a relatively small firm with extensive experience in all aspects of electric utility planning, operation, financing, engineering and management. Many of our employees have worked for public utilities and public agencies in the past and are familiar with the issues that affect these agencies. We are also experienced in working with utility boards, city councils and other governing bodies and strive to provide reports, presentations and workshops that help boards make well-informed decisions.

Much of our focus has been and continues to be with publicly-owned utilities and utility agencies. As such, we have a significant awareness of the needs of public utility organizations and understand that ultimately, the goal is always on the efficient and effective use of public resources. The benefits of public utility ownership should be realized by the residents and

businesses in the community. Further, electric service needs to be provided in a safe and reliable manner.

DHA has over 45 years of experience in providing engineering and consulting services to electric utilities, government agencies, municipalities and commercial industry throughout the Northwest and the Western United States. DHA provides a wide range of engineering and consulting services including planning, permitting and design of electrical generation, transmission and distribution systems. The firm has an exceptional reputation in working with small to medium sized consumer-owned utilities, government agencies and large power users. DHA has a staff of approximately 15 engineers, designers, and consultants in two offices, Lynnwood and Kennewick, Washington. DHA is a corporation based in Washington.

Hiring DHA provides COBI with several distinct advantages over other firms:

1. **Knowledge and understanding of utility statutes and requirements:** Several key DHA staff have worked at Washington utilities in management positions as well as been deeply involved in advising consumer-owned utility clients for decades. We provide engineering and consulting services to many Washington municipal, cooperative and PUD utilities.
2. **Knowledge and understanding of BPA service requirements, policies and contracts:** Assigned DHA staff have been part of the BPA policy development process associated with BPA serving Asotin County PUD, the City of Hermiston and Whatcom County PUD and Jefferson County PUD. We have provided management consulting services to clients regarding BPA rate and contract matters. We also know key BPA staff on a first name basis. We understand the BPA rate structure and understand the timing of service or waiting requirements for new service by BPA.
3. **Knowledge and database on Puget Sound Energy (PSE):** DHA has (over the past 15 years through public records) built a database on PSE service quality, transmission lines, FERC filings, and asset values. DHA is very familiar with PSE and its facilities and yet has never worked directly for PSE. We know what is in the public record and where to find it. This knowledge has been gained from working for customers of PSE, competitors of PSE, the union that represented many PSE employees, and advising PUD's and Cities considering alternatives to PSE.
4. **Understanding the public relations and political aspects of a feasibility study:** Feasibility studies, such as this, are potentially controversial documents that will be evaluated by citizens groups and PSE. They will be the subject of newspaper stories and advertising. They will also be information documents to advise COBI and its City Council, as well as, provide independent expert information to citizens. DHA has been through this process many times and understands the complexities. We also understand the Edison Electric Institute "playbook" and strategy papers used by investor owned electric utilities to discredit such studies and can provide those insights to COBI.

5. **Knowledge of electric utility engineering design:** As a firm that regularly provides Washington State and Pacific Northwest electric utilities with design and construction services associated with transmission, distribution and substations, we can identify service options that may not now exist and know how to price those options for inclusion within the feasibility study. Similarly, DHA is familiar with a variety of distributed energy and renewable energy resource concepts.
6. **Knowledge of electric utility financing:** DHA is a nationally recognized engineering consulting firm that helps our clients finance projects. We served as the consultant of record for Energy Northwest with regard to matters related to monitoring bond covenants on behalf of bond holders. We also provided Energy Northwest with Conservation Renewable Energy Bond (CREBs) certificates for wind energy projects. John Heberling has been involved with the issuance of over \$4 billion in electric utility revenue bonds and notes to finance electric system projects.
7. **Knowledge of electric utility management consulting:** DHA regularly performs management consulting studies to advise electric utilities on how to structure their operations. This has included, long range capital plans, staffing plans, evaluation of crews and methods, Integrated Resource Plans (IRP's), crew safety training, studies on performing work in-house versus contracting it out, and setting electric utility rates.
8. **No Conflicts of Interest with PSE or other Investor Owned Electric Utilities:** DHA has never worked directly for PSE and our firm's focus is on Pacific Northwest consumer and cooperatively owned electric utilities, along with selected government agencies and industries.
9. **Good working relationship with other public utility consultants:** DHA has worked on many assignments with financial advisors and attorneys who regularly work with publicly-owned utilities. DHA is also an associate member of the Washington PUD Association and knows key individuals at that organization. Furthermore, DHA is a member in good standing within the Public Power community through our active associated membership in the NWPPA, the Oregon PUD Association, WRECA, and ORECA. We are also a member of the Electric League of the Pacific Northwest, with one of our engineers serving on the Board of that organization.
10. **Management commitment to advising COBI:** The two key staff identified in our proposal to COBI includes the President and Vice President of DHA. As such, we take this project very seriously and will make sure that all resources of DHA will be made available to COBI on this important project.

DHA provides a wide variety of services to electric utilities. Typical services include:

- **Energy Resources**

- On-site & Emergency Generation Design
- Power Supply Arrangements and Negotiations
- Project Management
- Integrated Resource Plans
- Transmission Contract Negotiations and Rates
- Project Feasibility Studies

- **Transmission & Distribution (T&D) Systems**

- Substation Design and Construction Services
- Overhead Distribution design
- OH & UG Road Relocation designs
- Submarine power cable design
- Customer Connections
- System Valuations, Appraisals
- System Protection Schemes
- Data Acquisition, Monitoring & Control (i.e. SCADA)
- T&D System Planning and Design
- Underground Distribution design
- OH & UG line extensions
- Plat design and Large
- Staking and Field Services
- System Reliability Studies

- **Demand-Side Management (DSM)**

- Utility T&D System Efficiency Improvements
- Load Shaping Strategies
- Electric Reliability Improvements
- NEC & NESC Code Compliance Remediation
- Targeted End-Use Load Efficiency Projects
- Power Quality Studies

- **Competitive Electric Service Strategies**

- Energy Load, Delivery, Supply Integration
- Innovative Customer Services
- Utility Partnering Ventures
- Direct Access/Retail Wheeling & Strategies

- **Economic Analysis/Financing**

- Revenue Requirements
- Retail Rate Analyses
- Unbundled Electric & Natural Gas Rate Studies
- Bond Issue Engineers Reports
- Grant Applications and Management
- Cost of Service Studies
- Power Supply Options
- Alternative Ownership Structures
- Assistance with Negotiations
- Expert Witness Testimony

Experience with Similar Projects

DHA has provided several studies and assessments similar to the feasibility evaluation requested by COBI. These studies include:

- ***Feasibility Study – Acquisition of Electric System Facilities
City of Millersburg, Oregon***

DHA was retained in October 2013 to study the feasibility of establishing and operating a municipal electric system in the City of Millersburg, Oregon. Millersburg is a relatively small city with a large commercial loads. The study involved the identification of electric facilities that would need to be acquired from Pacific Power or alternatively, need to be constructed to obtain power from BPA and provide power to the residents and businesses in Millersburg.

Detailed discussions were held with BPA regarding interconnection and contract issues. Acquisition and construction costs were estimated, financing options were evaluated and quantified and detailed projections of operating costs and revenue requirements for the proposed new municipal utility were developed. Comparisons of estimated retail rates for the City electric system and Pacific Power were prepared and the long-term economic benefits to the community were defined.

Following completion of the study in January 2014, on-going support was provided to the City and its legal counsel. DHA participated in public meetings and work sessions with the City Council to answer questions and support the study and its findings. Following a public referendum in November 2013, the City decided not to pursue establishment of the municipal electric utility.

- ***Electric Initial Business Assessment
Thurston County PUD No.1, Olympia, Washington***

The commissioners of Thurston County PUD, based on input from a public meeting held in January 2012, decided to perform a business assessment related to the PUD providing electric service to certain businesses and residents. DHA was retained by the PUD to provide a study of the various technical and economic issues associated with the District providing electric service within Thurston County.

DHA explored ownership options, evaluated electric facilities needed for service, estimated the costs of acquisition of facilities from Puget Sound Energy, and estimated the costs of owning, operating, maintaining and administering an electric utility to provide electric service to a portion of the county. A detailed economic analysis was prepared and the net benefits to the residents and businesses to be served by the PUD were estimated.

Following completion of the study in August 2012, DHA provided presentations to the PUD commissioners and the general public, which included a public access TV presentation. The

PUD decided not to pursue providing electric service, based on the results of a vote of the County.

- ***Preliminary Feasibility Study – Electric System Acquisition
Jefferson County PUD, Port Hadlock, Washington***

With uncertainty over the future of PSE and significant local citizen concern over foreign ownership and privatization at the time, the PUD undertook a feasibility study in 2008 related to the PUD acquiring the electric facilities of PSE in the county and providing electric service to those businesses and residents currently served by PSE. DHA was retained by the PUD to provide a study of the various technical and economic issues associated with the PUD acquiring PSE-owned electric facilities and providing electric service within Jefferson County. The purpose of the study was to provide an initial assessment of the potential costs and benefits over a ten year projection period to the electric consumers in Jefferson County if the PUD were to provide electric service in the area currently served by PSE.

In general, the study estimated the costs of acquiring necessary electric facilities, estimated the electric loads in the proposed service area, evaluated power supply options, estimated the cost of operating an electric utility, defined staffing needs, necessary rolling stock and vehicles, and determined what the PUD would need to charge for electric service to recover revenues sufficient to pay all of its costs. Costs of electric service from the PUD were compared to continued service from PSE. Much of this information was presented by DHA staff at a series of informational public meetings scheduled and sponsored by the PUD.



A public referendum was held in 2009 that authorized the PUD to form an electric utility and following that, the PUD negotiated with PSE to purchase PSE's electric system assets in Jefferson County. It also obtained a power purchase contract with BPA. The sale of assets by PSE was reviewed by the Washington Utilities and Transportation Commission and a significant portion of the sale price was credited to the ratepayers of PSE. The PUD began electric service on April 1, 2013.

***Preliminary Feasibility Study – Electric System Acquisition
Skagit County PUD, Mount Vernon, Washington***

DHA was retained by the PUD in 2008 to provide a study of the various technical and economic issues associated with the PUD acquiring PSE-owned electric facilities and providing electric service within Skagit County. The purpose of the study was to provide an initial assessment of the potential costs and benefits over a ten year projection period to the electric consumers in Skagit County if the PUD were to provide electric service in the area currently served by PSE. The study estimated the costs of acquiring necessary electric facilities from PSE, estimated the electric loads in the proposed service area, evaluated power supply options, estimated the cost of operating an electric utility, and determined what the PUD would need to charge for electric service to recover revenues sufficient to pay all of its costs. Costs of electric service from the PUD were compared to continued service from PSE.

"D. Hittle's work for Skagit PUD#1 was enormously helpful in aiding the Commission of Skagit PUD to make a decision to put forth a ballot initiative seeking Electric Authority from the citizens of Skagit County. Their services and deliverables met and exceeded our expectations."

*Robbie Robertson,
Commissioner*

- ***Electric Service Options
City of Port Townsend, Washington***

DHA conducted a study on behalf of the City of Port Townsend to evaluate alternative forms of consumer-owned electric service in the city and in Jefferson County. The options included: (1) a municipal electric utility; (2) either a Jefferson County PUD serving just the incorporated City or a larger Jefferson County PUD serving the incorporated City as well as other areas of the county; (3) service through an existing publicly-owned electric utility; and (4) an RUS cooperative. The study defined the issues related to each proposed alternative for electric service, evaluated issues related to purchasing power from the Bonneville Power Administration as a new utility and defined schedule requirements associated with establishing a new electric utility.

- ***Electric Facility Acquisition and Utility Startup
City of Hermiston, Oregon***

DHA provided feasibility analysis, technical assistance and management consultation as the City evaluated and pursued acquisition of electric distribution facilities and formation of a municipal electric system. Engineering plans and financial operating projections for the City's municipal electric utility were prepared. The financial projections included detailed estimates of all costs of power supply, operation, maintenance, debt service and annual improvements and additions for a ten-year analysis period. The savings to residential and commercial customers in the City that would be realized with a municipal utility were estimated for a number of scenarios. DHA also provided expert witness testimony on behalf of the City in its legal proceedings related to condemnation of the existing electric system

facilities. The Hermiston Energy Services system was established on October 1, 2001 and DHA continues to serve as the City's Independent Engineer monitoring performance and conducting periodic economic and engineering analysis.

- ***Analysis of Electric Service to Georgia Pacific and Bellingham Cold Storage Whatcom County PUD, Ferndale, Washington***

DHA performed an analysis of alternate service of the Bellingham Cold Storage Facility and the Georgia Pacific Mill and developed a conceptual transmission plan to connect these new proposed loads of Whatcom County PUD to the nearest BPA point of interconnection. DHA developed three basic routes that included both overhead and underground transmission that could be built without being blocked by existing PSE transmission lines. Our role included design, negotiations with BPA, public presentations of information, estimation of revenue requirements and permitting. This analysis resulted in DHA developing a design/build set of contract documents that Whatcom County PUD used to secure a design/build transmission Contractor for this project. DHA also served as Owner's Representative on behalf of Whatcom County PUD in negotiations with the Contractor. The project was ultimately terminated by Whatcom County PUD at the request of Bellingham Cold Storage and Georgia Pacific prior to their taking service from the PUD. Both firms negotiated significant cost reductions from Puget Sound Energy.

- ***Assessment of Providing Electric Service Asotin County PUD, Clarkston, Washington***

DHA was engaged to provide a "Fair Market Valuation" of the Washington Water Power (Avista) electric system located within the District's service area. The study was prompted by the PUD's concern that the investor owned utility was considering a system wide sale of its properties and the PUD wanted to be prepared to offer to purchase the system within its service area. The work included a detailed inventory of the electric system properties and an estimate of "replacement cost new less depreciation" of the facilities, an analysis of the number of customers, the energy sales and revenues, (based on the rates being charged by the private utility), by customer class and a pro-forma operating statement including the operating costs of the system. DHA also developed a projected debt service payment that could be supported by the projected revenues less operating expenses.

A subsequent feasibility analysis was conducted for Asotin County PUD in 2002 to evaluate the feasibility of acquiring Avista's facilities in Asotin County and providing electric to the residents and businesses of the County.

- ***Electric System Acquisition and Expansion Columbia River People's Utility District, St. Helens, Oregon***

In 2000, Columbia River People's Utility District, St. Helens, Oregon acquired the electric facilities of Portland General Electric in several communities that had been surrounded by

the PUD's electric system. Prior to the acquisition, DHA provided a feasibility assessment, evaluated the facilities to be acquired, estimated the costs of acquisition and provided assistance with financing and projections of operating expenses.

- ***Electric Facility Acquisition Study***
Rockwood People's Utility District, Gresham, Oregon

The Rockwood Peoples' Utility District of Multnomah County, Oregon is an established water utility district in east Portland, Oregon. DHA evaluated the service area for the utility and the major substation, transmission and distribution facilities were inspected and reviewed for inclusion based on the service needs of the customers in the area. DHA also identified the potential operating areas and separation engineering issues to establish the area as an independent utility. Pro-forma operating results including power supply costs, operations and debt service were established as part of the revenue requirement for a new electric service division.

- ***Feasibility Study***
Electric Facility Acquisition and Formation of New Electric Utility
Clackamas People's Utility District, West Linn, Oregon

In March 2004, DHA was retained by the Clackamas People's Utility District (PUD) Feasibility Study Political Action Committee to provide a preliminary feasibility study of the proposed Clackamas PUD (CPUD). The purpose of the study was to provide a limited initial assessment of various technical and economic issues associated with the establishment of CPUD to acquire certain Portland General Electric (PGE)-owned electric facilities and provide electric service in Clackamas County.

The study involved the estimation of acquisition costs and development of a plan for establishing a new electric utility. Costs and benefits were defined and estimated electric rates for the new utility were compared to estimated rates for PGE. The community interest in conducting the study was prompted by the sale of PGE by its previous owner, Enron Corporation. A public referendum was held and the community decided not to proceed.

Personnel

Staffing for this assignment will be primarily provided out of DHA's Puget Sound Office located in Lynnwood, Washington. John Heberling and Bob Schneider, who both have extensive experience with consulting assignments of this type, will provide the necessary services. Randy Valerio, P.E. will provide technical information with regard to engineering and estimating costs. Don Cohen is proposed to be included on the project team to provide legal assistance as necessary.

John Heberling, P.E. has conducted many studies evaluating the feasibility of establishing consumer-owned electric utilities. John developed a study for the City of Millersburg, Oregon to evaluate the feasibility of establishing a municipal electric utility. He was the primary technical consultant working with the City of Hermiston during the initial assessment and formation of the City's municipal electric utility operation. John continued to advise Hermiston on BPA contract, retail rate and other planning matters for many years following establishment of the municipal electric utility. John is a nationally recognized expert in economic feasibility analysis and in the financing of publicly and cooperatively owned electric utilities.

Bob Schneider, P.E., has many years of experience providing similar services to various entities throughout the Northwest and has conducted power supply and delivery discussions with BPA on behalf of several utilities. Bob advised Whatcom County PUD on service to Bellingham Cold Storage and Georgia Pacific as well as service of additional Whatcom County PUD loads. He was the DHA project manager on an assignment for the International Brotherhood of Electrical Workers, Local 77 which involved intervention in the merger of Puget Sound Power and Light Company with Washington Energy Company before the Washington Utilities and Transportation Commission. The focus of that testimony was on future electric system reliability and its likely deterioration based on the initial terms of the merger agreement.

Bob Schneider was also the DHA project manager on a preliminary feasibility study for the City of Bonney Lake regarding municipalization and evaluation of options with regard to PSE's White River hydroelectric project on Lake Tapps. He also submitted expert witness testimony on behalf of the Port of Seattle SEATAC in their wholesale transmission access proceeding before the Federal Energy Regulatory Commission, involving PSE stranded transmission costs. Mr. Schneider was the Power Manager of Snohomish County PUD and negotiated the purchase and sale of generation resources and power purchase contracts. He is also a recognized expert in distribution and transmission reliability issues.

Mr. Schneider and Mr. Heberling jointly conducted the recent initial electric service feasibility assessments for Thurston County PUD, Jefferson County PUD, Skagit County PUD and the City of Port Townsend, Washington.

Don Cohen of Gordon Thomas Honeywell is one of the most respected utility and municipal lawyers in the Northwest. He has been regularly named to the Washington Super Lawyer list, and to Best Lawyers-Seattle in Municipal Law. Don understands municipal government not only based on his almost 35 years providing legal advice to and, when necessary, handling litigation for, municipal utilities, public utility districts, joint operating agencies, and cooperatives, but also because of 20 years of community service activities for the City of Mercer Island. Information on certain aspects of Don's utility practice is summarized in the material that follows.

Professional resumes for all of these individuals are provided with this proposal.

Proposed Approach

In the Request for Proposals (RFP) dated March 10, 2016, COBI has indicated that it is interested in conducting an analysis to evaluate the benefits and costs of forming and operating a municipal electric utility to serve the residents and businesses of Bainbridge Island. The analysis will be used to inform the COBI Council of the costs and benefits of a municipal electric utility compared with continued electric service from Puget Sound Energy (PSE). It is anticipated that the analysis will be used, along with other materials to provide information to voters when the matter is placed on the ballot.

In addition to determining the costs and benefits of forming a municipal utility, the Council is also seeking information regarding the process that would be followed to form a municipal utility. Further, the Council would like to understand if establishing a municipal utility would open up currently unavailable opportunities for local control over energy sources serving Bainbridge Island that could foster economic development, decrease greenhouse gas emissions, increase system reliability and improve power quality.

Although the primary focus of the study is to evaluate the feasibility of establishing a municipal utility, the COBI Council is also interested in gaining a better understanding of the comparative benefits of and costs of other forms of consumer-owned utilities (public utility district, electric cooperative). Additional benefits that may be derived from other services such as city-owned broadband are to be presented as well.

DHA is well qualified to conduct the scope of work requested by COBI and provide the information needed by the Council and the community to determine if and how it should best proceed to form a consumer-owned electric utility. We are well aware of the process to evaluate such proposed efforts. Our work products and reports are straightforward, comprehensive and readily understandable. We are also prepared to assist the Council and COBI with the presentation of the information to the public and to support the technical and economic analyses included in the study.

Following is a detailed approach to each of the tasks identified by COBI in the RFP. The proposed approach to accomplishment of the tasks is based on our past experience for similar studies. The first task, a kickoff meeting, is important from the aspect of defining expectations and gaining a better understanding of the goals of COBI. Note that we have included three optional tasks in the following descriptions, Tasks A, B and C, not identified in the RFP.

Task A Kickoff Meeting

A meeting will be held in Bainbridge Island with COBI management and advisors to discuss the goals and expectations of COBI with regard to the study. The meeting will also serve as an opportunity to strategize on alternative courses of action that COBI could take in the future to achieve its electric service goals and to discuss issues affecting the electric utility industry in the Northwest.

An important element of this meeting (potentially as a workshop with the Commissioners) will be to share lessons learned from past studies, key BPA service and policy issues that will impact the economic feasibility, timing of utility formation, the range of desired service options to be studied, and a “big picture” perspective discussion on possible outcomes should any of the alternatives prove economically viable. Basic assumptions to be used in the analysis will be discussed, as will data requirements. The outcome of the kickoff meeting will be a better understanding of the study objectives and approach, identification of specific service options to be evaluated and a project schedule.

We would also suggest that we discuss how we could do portions of some of the tasks as part of a fatal flaw analysis so that costs are controlled, should a significant problem be found early in the analysis. Furthermore, we would propose that we discuss zoning and franchise issues and strategies at the kickoff meeting.

Task 1 Prepare Boundary Map

A map will be prepared of the proposed service territory for the municipal utility showing existing transmission lines, substations and distribution facilities. (See Figure 1, attached) The map will indicate the potential transmission interconnection point for the new utility. We will conduct a visual inspection of the existing electric system on Bainbridge Island to obtain basic information for the map. The map will be prepared with AutoCAD so that future modifications and augmentations can be readily accomplished and the map can be used for further engineering and analysis and presentation.

It is important to note that existing PSE electric distribution system maps could be made available to COBI at some point. Initial requests for this kind of information does not typically result in obtaining any meaningful materials.

Task 2 Develop Load Forecast

This task will be accomplished by using public records of the number of consumers on Bainbridge Island and typical average power consumption patterns in Western Washington. The number of consumers and energy consumption for each customer class (residential, commercial, and other) will be defined. We will obtain information on distributed generation already known to be employed on Bainbridge Island from COBI planners. Load growth will be estimated for 20 years based on regional average projections and local factors and will take into account expected energy efficiency and distributed generation measures.

The result of this task will be an electric load forecast showing number of consumers and energy sales by customer class, total utility energy requirements and peak demand by year for 20 years, 2016-2035. We will use a previously developed Excel model, modified for COBI, to accomplish this task in a very efficient and effective manner.

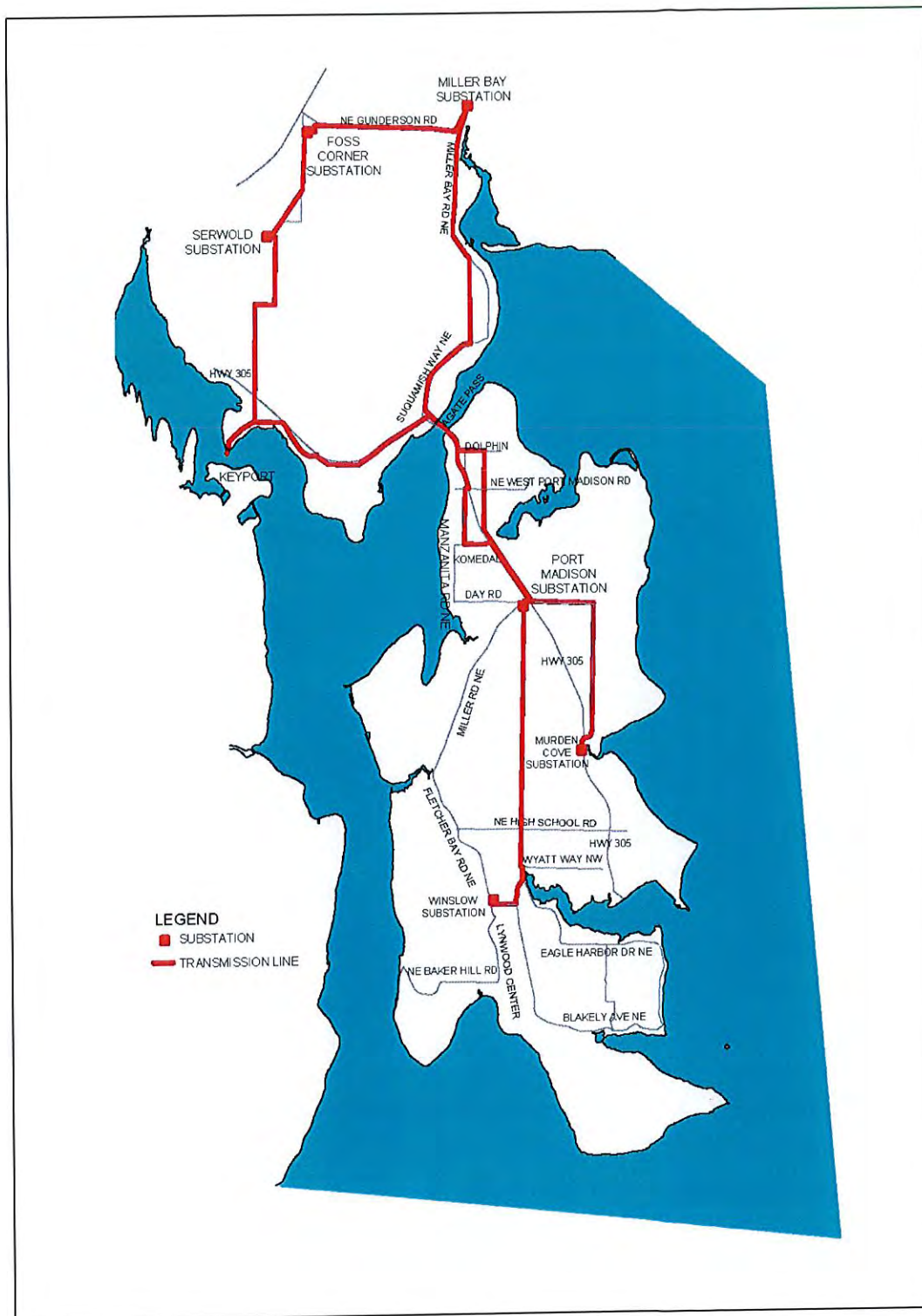


Figure 1
Bainbridge Island, Washington and Adjacent Area
Location of Existing Electric Transmission Lines and Substations

Task 3 *Define Electric Facilities to be Acquired or Constructed*

The basic electric facilities that will be needed to serve the customers on Bainbridge Island will be identified. Additional facilities that will be needed to operate the COBI's electric system separate from the existing facilities of PSE will be specified. Potential transmission interconnection facilities will also be identified. The advantages and disadvantages of municipal ownership of all or some of these facilities will be identified and other options, such as wheeling over PSE's system will be discussed. This task will also include discussions with BPA regarding options for interconnecting the COBI utility system to the BPA grid.

We will review PSE's available plans for capital improvements on Bainbridge Island and indicate how these improvements are intended to affect electric service.

The cost of these facilities will be estimated by general component (e.g. substations, overhead distribution lines, underground distribution lines, transformers, meters, etc.) based on experience with other similar systems. The cost of additional new facilities will also be estimated, as will the timing when these costs would most likely be incurred.

Task 4 *Identify Applicable Severance Issues*

Potential severance issues at the boundary of the new utility and PSE's system that may be applicable will be reviewed, identified and presented. Regulations and laws affecting these issues will be indicated and the potential costs associated with severance issues will be estimated.

Task 5 *Assess Existing Distribution Facilities*

An assessment of the general condition of the existing distribution, substation and transmission facilities on Bainbridge Island will be conducted. Much of this task will be performed by viewing the facilities in the field. For efficiency, we would expect to coordinate this field work with the field visitation conducted in Task 1.

The condition assessment will be used to determine how well and how long the existing system can serve its function. It will serve as a basis for estimating future capital improvement needs of the new utility. It will also serve to provide an estimate of the average age of the existing facilities for calculating the average amount of depreciation already realized by PSE on these facilities.

Task 6 *Define BPA Power and Transmission Issues*

BPA's rules and regulations with regard to service by a new public power utility customer will be defined and presented. The limitations on availability of Tier 1 power and the schedule for when BPA power can be obtained will be defined. We will conduct discussions with BPA representatives regarding power and transmission issues as part of this task.

The cost of BPA power and transmission services to the COBI utility will be estimated for each of the first 20 years of proposed COBI utility operation. Due to BPA's rules, regulations and rate structure, it is expected that some of these costs will change in the first few years of the new utility's operation.

Task 7 *Define Energy Efficiency Programs*

BPA energy efficiency programs will be reviewed and presented. We will also conduct a review of other energy efficiency programs that are currently being implemented by other electric utilities in the region and expected in the reasonable future. An estimate of the costs and benefits of these programs will be compiled so as to allow for the quantification of effects on, and costs and benefits for the COBI utility can be made.

It will also be necessary to define the programs that PSE is implementing or planning to implement regarding energy efficiency, distributed generation and demand response resources and estimate the costs, benefits and impacts of these programs. A comparison of the estimated results of PSE programs with the estimated results of the COBI utility will be provided. In particular, the estimated benefits of the potential improvement in the results of these programs with local control of the electric utility will be described.

A 20 year projection of these energy efficiency programs will be provided.

Task 8 *Identify Options and Costs for Operations*

Various options for operating and maintaining a potential new utility will be defined and quantified. In the past we have recommended contracting of these services as well as provided a detailed estimate of staffing and equipment for new City employees to provide this work. The City of Hermiston, for example, contracted with Umatilla Electric Cooperative to provide all operations, maintenance, engineering, billing and planning services. This has worked very well. Jefferson County PUD contracted some services initially but has since hired skilled labor for line crews and other tasks.

Estimated costs to provide the service will be quantified for inclusion in the long-range projection of costs of operation.

Task 9 *Estimate OCLD of Facilities*

We will estimate the Original Cost Less Depreciation (OCLD) of the electric facilities needed to provide electric service on Bainbridge Island. The facilities identified in Task 3, above, will be defined in such a manner that current unit costs can be applied to establish an estimate of the total cost of facilities. The condition of the facilities as determined in Task 5 will be factored in as well. PSE's average system investment in distribution facilities as well as the declared value of PSE assets on Bainbridge Island and Kitsap County will be reviewed as well.

The Reproduction Cost New Less Depreciation (RCNLD) will be developed and connected to the estimated OCLD value. These values will be used to define the high and low ends, respectively, of an estimated range of purchase prices that COBI might expect to pay to acquire the system facilities.

Task 10 Provide Economic Analysis of Municipal Utility

The economic analysis to be prepared for the study will clearly identify all estimated initial costs to be incurred by COBI and will determine a total financing requirement. DHA will assume that the new electric utility will be funded initial from revenue bonds or RUS loans and that all taxing agencies, including the City, will be made whole in such an ownership change. We will create a 20-year projection of costs and expenditures for the municipal utility along with revenue requirements.

A detailed projection of annual operating costs for the new utility for a 20-year period will be prepared. These costs will include power supply and transmission, operations and maintenance, administration and general, debt service, capital renewals, improvements and replacement. This projection of costs will be tied to the load forecast and the BPA cost analysis and will be used to determine revenue requirements in Task 11.

Task 11 Provide Projection of Revenue Requirements and Compare with PSE

The costs of operation including power supply costs and renewal and replacement expenditures will be projected for a 20-year period. The average cost of power to utility customers will be derived from the revenue requirement projection. PSE rates will be estimated based on public information as well as the history of PSE rate changes in the past. From our past studies we have a significant amount of information regarding PSE's current rate structure and a knowledge of the various factors that will affect PSE's rates in the future.

The projected cost of power for the COBI-owned system will be compared to the cost of power with continued service from PSE. The total net savings (or net cost) to electric consumers will be estimated for a 20-year period. The present value of the estimated costs to provide electric service by the new utility as compared to the estimated cost of electric service from PSE over the 20-year period will be used to define the net economic benefits of the new utility.

Task 12 Identify and Recommend Financing Options

Alternative means of financing the initial acquisition costs will be investigated. It is expected that for purpose of analysis, COBI-issued revenue bonds will be assumed as the primary source of funds. Use of RUS loans similar to Jefferson County PUD will be investigated as well. The annual debt service for these bonds and loans will be estimated based on appropriate financing parameters. We will discuss options with financial advisors familiar with COBI as well as with the financing of utility acquisitions and improvements as well. In addition, Don Cohen would provide input as needed on financing alternatives. He has served as issuer's legal counsel on a

number of financings of renewable energy, conservation, and telecommunications projects over the past 20 years.

Our evaluation of financing options will include necessary quantification of information such as interest rates, repayment periods and initial financing costs, all of which will be used in the estimation of the economic costs and benefits of the new utility. A recommendation of the preferred financing option will be provided.

Task 13 Provide Retail Rate and Governance Options

A compilation of retail rates for other municipalities and representative consumer-owned utilities will be prepared and used to compare with each other as well as with PSE and other regional investor-owned utilities. We typically will show this information on the basis of comparative charges for electric service for the same type of customer and the same amount of electricity used during a month. This allows for a quick comparison.

Along with the comparison of rates, the governance approach used by some of the regional municipal utilities along with advantages and disadvantages of each approach will be prepared.

Task 14 Provide a Comparison of Other System Acquisition Costs

A listing of other utility acquisition costs over the past ten years will be developed. This will be based on our experience and knowledge of such acquisitions as well as through discussions with utility organizations and regulatory agencies such as the Washington Utility and Transportation Commission. We will also obtain applicable information on a broader scale from the American Public Power Association (APPA). To the extent available, the comparative estimated book value, potential acquisition cost and actual acquisition costs will be provided.

Task 15 Define Operational Risks with a Municipal Utility

Safety, reliability and quality of electric service are critical to electric consumers and the community. It is important to understand the issues related to these factors and determine how best to address them for a new utility. We will define these issues and risks for the new CONI utility and indicate how they may reasonably be mitigated. At the same time we will identify how some of these issues may be of lower risk with the new utility as compared to with continued service by PSE.

Task 16 Provide List of Socially Responsible Initiatives

Many consumer-owned utilities provide discounts to low income residents and seniors. Lifeline rates, providing a low rate for minimal amounts of electric service have been used in the past by utilities to provide a low cost opportunity for people who can't afford full priced service but need to be assured that they can have enough power for the bare necessities. We will provide a list of some of these socially responsible programs that are in use in the region by other consumer-owned utilities. We will also note how the COBI utility, being locally controlled and based in the community can provide certain socially responsible programs more readily and more in-line

with the specific needs of the community. Ways in which retail rate structures can be configured in a way to address some of these issues will be identified.

Task 17 Synergies and Other Benefits

One of the typical claims by investor owned electric utilities is that a municipalization will destroy economies of scale provided by the investor-owned utility. However, studies have shown that the opposite is true. In particular local control can reduce complexity of regulation and the bureaucracy associated with a large organization with multiple regulatory body compliance conflicts (SEC, Washington Utilities Commission, Utility Management, FERC and principal owners).

A typical synergy often found by municipal utilities is in customer billing and invoicing, where water and/or sewer bills and meter reading costs can be combined with similar electric as a joint costs of City government that can allow savings to be apportioned between departments. Similarly, many of our city utility clients find that they can combine public works projects, such as road improvements, water and sewer line replacements with the undergrounding of electrical power lines as a way of enhancing reliability at a reasonable cost, while streets and trenches are open, again with a sharing of joint trenching or paving costs among departments.

Another aspect that many municipal systems learn about is that some PSE customer policies that result in very high connections costs for trivial loads (like cross walks or school crossing lights) are not required after municipalization.

Perhaps one of the biggest benefits is local control and local crews that are part of the community. This allows rates and other decisions to be made locally for the benefit of the customer owners and not in a distant board room, state regulatory hearing room, or in Washington DC. It also helps insure that ratepayer money spent is used to help the local economy where it makes sense.

We will list these factors and provide estimates of costs, as applicable. In addition, Don Cohen would provide legal counsel on publicly-owned broadband. He has consulted with and represented PUDs, consortiums of PUDs (including NoaNet), and municipal utilities on broadband and other telecommunications matters for 20 years.

Task 18 Provide “Carbon tax” Risk and Cost Analysis

An analysis of the risks and costs of a “carbon tax” on the COBI utility will be prepared and compared to the risks and costs of the carbon tax on PSE. It is expected that the impacts of the carbon tax should be lower on customers of BPA with its primarily hydroelectric power supply resources.

Task 19 Opine on Use of Municipal Utility Benefits to Invest in Renewable Energy

We will indicate how the COBI utility could potentially use its net benefit to invest in renewable energy. In general, the concept would be that if the municipal utility could provide electric service at lower rates than PSE, could it use the differential and build or acquire renewable energy resources and still maintain rates that would be somewhat lower, or at least no greater, than PSE's rates. We would opine as to how this could be accomplished.

Task 20 Identify Steps, Costs and Timeline to Form Municipal Utility

The timeline for forming a municipal utility will be defined. Costs, including legal fees, engineering fees and other up-front expenses will be defined and presented in a straight-forward manner. A range of values will be provided to include the costs of alternative approaches, such as acquisition through condemnation as compared with a negotiated purchase.

Task 21 Present Findings at Three Public Meetings

COBI has indicated that presentations at three public meetings will potentially be needed. We are proposing to make three public meeting presentations at locations arranged by COBI. Should additional meetings be desired, they can be added to the scope of work as additional services. Further, we will coordinate with COBI's legal and financial advisors as needed during the preparation of the assessment to assure accurate representation of information respective to the expertise of these advisors.

Task 22 Prepare Comparative Matrix for Consumer-Owned Utility Options

A comparative matrix of structures, advantages, disadvantages and other factors related to alternatives for consumer-owned utilities (municipalities, public utility districts, and cooperatives) will be prepared. We have prepared comparative charts of this kind for previous studies.

We would also expect to use Don Cohen to assist in analyzing different forms of not-for-profit utilities. This would include governance approaches used by municipal electric utilities and other not-for-profit electric utilities, local control, and legal support on the formation processes involved.

Task B Report

A report summarizing the results and findings of the feasibility study will be submitted to the COBI in draft form for review. Following the submittal of the report, a presentation of the results to the COBI management and Council will be made in a possible work session. Following receipt of comments from COBI, ten bound copies of the final report will be submitted. The final report will contain an executive summary that will be suitable for use as the basis of a news release by COBI in advance of the work session.

Much of the report will be developed and prepared throughout the course of the study effort. Each task is expected to produce both analytical and descriptive narratives. In this manner the final report will be a compilation of the individual task summaries, which in turn, will all build upon each other.

In addition to the report, we will provide preliminary results of the analysis to COBI staff for review and comment.

Task C Additional Legal Review and Assistance

Although not specifically included in the scope of work in the RFP, additional legal review and assistance can be provided by Don Cohen if deemed useful by COBI. Specifically, the following could be provided:

Public Entity Restrictions and Requirements – Don Cohen is experienced in statutory and administrative restrictions on the use of public funds, facilities, and employee time in municipalization efforts. His experience includes dealing with the Washington State Public Disclosure Commission on these issues, including with respect to complaints and proceedings brought by Puget Sound Energy. We believe that Don Cohen's familiarity with these issues will be of benefit to COBI its elected officials, staff, and consultants, as municipalization subjects are considered. Don would also bring a deep understanding of the Washington Public Records Act and Open Public Meetings Act, which will be important as the City analyzes data on rates, potential costs, and other business-sensitive issues.

Acquisition preparation – If the City decides to proceed with municipalization efforts after the feasibility analysis, experience in condemnation proceedings and pre-condemnation analysis and negotiations will be necessary. Don Cohen and GTH have significant background in this field, which will be important to keep in mind during the feasibility study phase. GTH has been involved in many condemnation matters involving public projects for utilities, highways, bridges, schools, parks, and other public facilities.

Schedule

It is expected that the scope of services would require about twelve to sixteen weeks to accomplish. The schedule can be adjusted as needed to accommodate COBI's time requirements.

Assuming a notice to proceed approximately the first of May 2016, the proposed schedule is summarized as follows:

Kick-off Meeting	Week of May 9, 2016
Present initial results	July 1, 2016
Submit Draft Report	July 15, 2016
Presentation	To be determined
Submit Final Report	August 5, 2016

References

Chad Stokes, Attorney
Cable, Huston, Benedict
Portland, Oregon
503-224-3092

John Weidenfeller, General Manager
Thurston County PUD
Olympia, Washington
360-357-8783

Forrest Reid, Attorney for City of
Millersburg
Reid Law Firm
Albany, Oregon
541-926-3823

Jim Lazar
Consulting Economist
Olympia, Washington
360-786-1822

Jim Parker, General Manager
Jefferson County PUD
Port Hadlock, Washington
360-385-5800

Alan Dashen
Northwest Municipal Advisors
Bellevue, Washington
425-452-9550

Tom Anderson, former General
Manager Whatcom County PUD
Bellingham, Washington
360-739-1968

Steve Johnson, former Executive
Director
Washington PUD Association

(Additional references available upon request)

Cost Estimate

The estimated costs to complete the study are shown in the following table. As shown at the bottom of the table, the cost of the total project without the Optional Tasks 16-19 is \$82,410. This amount includes \$5,500 of legal advisory services from GTH. With the Tasks 16-19 included, the total cost of the project is estimated to be \$97,620, including \$7,500 of GTH costs.

Task	Total Labor Hours	Total Labor Cost	Travel and Direct Expenses	Task Total
A Kickoff Meeting	10	\$ 1,730	\$ 60	\$ 1,790
1 Prepare map	34	4,370	160	4,530
2 Develop load forecast	18	3,150	160	3,310
3 Define facilities to acquire, construct	44	7,500	-	7,500
4 Identify applicable severance issues	14	2,390	-	2,390
5 Assess existing distribution facilities	48	6,770	240	7,010
6 Define BPA power & transmission issues	28	4,820	-	4,820
7 Describe energy efficiency programs & compare	32	5,520	-	5,520
8 Identify options and costs for operations	20	3,430	-	3,430
9 Estimate OCLD of facilities	24	3,980	-	3,980
10 Provide economic evaluation of municipal utility	14	2,320	-	2,320
11 Provide 20-year revenue reqs., compare with PSE	16	2,780	-	2,780
12 Identify and recommend financing options	8	1,390	-	1,390
13 Provide retail rate and governance comparison	13	2,805	-	2,805
14 Provide comparative system acquisitions	10	1,620	-	1,620
15 Identify operational risks with muni utility	16	2,750	-	2,750
Subtotal (Tasks A - 15)	349	\$ 57,325	\$ 620	\$ 57,945
16 Provide list of socially responsible initiatives	16	\$ 2,760	\$ -	\$ 2,760
17 Provide list of synergies and other benefits	25	5,415	-	5,415
18 Provide "carbon tax" risk and cost analysis	24	4,120	-	4,120
19 Opine on use of muni benefits to invest in renewables	17	2,915	-	2,915
Subtotal (Tasks 16 - 19)	82	\$ 15,210	\$ -	\$ 15,210
20 Identify steps, costs and timeline to form muni utility	19	\$ 4,865	\$ -	\$ 4,865
21 Present findings at three public meetings	36	6,240	360	6,600
22 Provide comparative matrix of alternative public utility	22	4,680	-	4,680
Subtotal (Tasks 20 - 22)	77	\$ 15,785	\$ 360	\$ 16,145
B Report	48	8,320	-	8,320
Total Project (Tasks A, 1 - 22, and B)	556	\$ 96,640	\$ 980	\$ 97,620
Total Project (Tasks A, 1 - 15, and B)	474	\$ 81,430		\$ 82,410
C (Optional) Legal Review services				\$ 10,000

We have also identified an additional \$10,000 of optional legal advisory services related to the study effort.

It is understood that COBI may choose not to undertake certain tasks and as such, the estimated cost of the study would be adjusted accordingly.

Conclusion

In conclusion, we would very much appreciate the opportunity to work with COBI on this very challenging and important assignment. We believe that our experience and understanding of the technical, economic, financial and policy issues affecting electric service in the Pacific Northwest would serve COBI well. Our objective is to assist COBI with evaluating electric service options that would provide reliable and cost effective electric service to the residents and businesses of Bainbridge Island.

If you have any questions or need additional information, please contact Bob Schneider or me at (425) 672-9651. Thank you for the opportunity to submit our proposal.

Sincerely,

A handwritten signature in blue ink, reading "John L. Heberling". The signature is fluid and cursive, with the first name "John" being the most prominent.

John L. Heberling, P.E.
Vice President
D. Hittle & Associates, Inc.

JOHN L. HEBERLING, P.E.
VICE PRESIDENT AND SENIOR CONSULTANT
D. HITTLE & ASSOCIATES, INC., ENGINEERS AND CONSULTANTS

Experience

Mr. Heberling has over 35 years of experience as a consultant to electric utilities, municipal, state and federal government agencies, private power developers, and banks and financial institutions involved with the funding of energy-related projects. With a strong focus on regulatory, economic and technical issues related to utility infrastructure systems, his practice has included development of numerous feasibility evaluations, planning studies, financial and economic analyses, rate studies, long-range operating projections, due diligence reviews and reports in the support of bond issuance and non-recourse loans. Much of his study work has been related to hydroelectric and thermal generating technologies and electric transmission systems. Mr. Heberling has been involved in a number of studies addressing various aspects of electric utility restructuring and competitive electric market issues.

Mr. Heberling's experience includes project management on numerous large planning studies, preparation of analyses and reports associated with the issuance of over \$4 billion of tax-exempt revenue bonds, evaluation of alternative ownership options for utility systems, estimation of the value of electric system facilities, economic evaluations of utility expansion and renewal alternatives, preparation of pro-forma projections of operating revenues and expenses for utility systems and development of analytical computer models. He has also written grant applications and helped with grant management for his utility clients. His focus is always on the bottom-line impact on rates and competitiveness.

Mr. Heberling is known for the clarity of his reports and his insights on publicly owned electric utilities and their strategic challenges. He is also known for his skills at presenting complex and technical analysis associated with both controversial and noncontroversial projects to elected policy makers and the management of his utility clients. In 2014 Mr. Heberling served as the Interim General Manager for Hermiston Energy Services, a city-owned utility. He has also provided electric utility management consulting studies, such as, a recent study of the metering and billing process for the City and Borough of Sitka, Alaska.

Representative Projects

Valuations, Rate Studies and Related Analyses

- Valuation of Municipal Electric System, Municipality of Anchorage, Alaska
- Valuation of Highland Hydroelectric Facilities (five projects), Sumitomo Bank, Redding, California
- Valuation of Hydroelectric and Transmission Facilities (four projects), Four Dam Pool Power Agency, Anchorage, Alaska
- Cost of Service Analysis and Rate Study, Peninsula Light Co., Gig Harbor, Washington
- Cost of Service Analysis and Rate Study, Ferry County PUD, Republic, Washington
- Cost of Service Analysis and Rate Study, Copper Valley Electric Association, Glennallen, Alaska
- Cost of Service and Retail Rate Study, Hermiston Electric System, Hermiston, Oregon
- Unbundled Rate Analysis, Anchorage Municipal Light & Power, Anchorage, Alaska
- Cost of Service Analysis and Rate Planning Model, City and Borough of Sitka, Alaska
- Management Assessment of Federal Hydroelectric System Assets, Bonneville Power Administration, Portland, Oregon

Power Supply Planning and Resource Evaluations

- Southeast Alaska Intertie Project Feasibility Study, Southeast Conference, Petersburg, Alaska
- Kake – Petersburg Transmission Line Feasibility Study, Southeast Conference, Petersburg
- Resource Evaluation and Strategic Resource Plan, City of Sitka, Alaska
- Power Supply Study, City of Riverside, California
- Generation Resource Analysis, City of Seattle, Washington
- Power Supply Planning Study, City of Ketchikan, Alaska
- Evaluation of Generating Alternatives, Copper Valley Electric Assn., Glennallen, Alaska

JOHN L. HEBERLING, P.E. (Continued)

- Evaluation of Power Supply Proposals, Cordova Electric Cooperative, Cordova, Alaska
- Development of Resource Screening and Selection Criteria, Snohomish Co. PUD, Everett, Washington
- Feasibility Assessment of Gas Field Acquisition, City of Anchorage, Alaska

Consulting Engineer's Reports in Support of Financing

- Anchorage Municipal Light & Power, Anchorage, Alaska
- Alaska Energy Authority, Anchorage, Alaska
- Benton County PUD, Kennewick, Washington
- Chelan County PUD, Wenatchee, Washington
- Columbia River PUD, St. Helens, Oregon
- Douglas County PUD, East Wenatchee, Washington
- Emerald People's Utility District, Eugene, Oregon
- Energy Northwest, Richland, Washington
- Franklin County PUD, Pasco, Washington
- Guam Power Authority, Guam
- State of Hawaii, Hawaii
- Intermountain Power Agency, Murray, Utah
- Ketchikan Public Utilities, Ketchikan, Alaska
- Snohomish County PUD, Everett, Washington
- Southeast Alaska Power Agency, Ketchikan, Alaska
- City of Tacoma, Washington

Strategic Plans and Other Utility Analytical Studies

- Southeast Alaska Energy Export Study, Southeast Conference, Juneau, Alaska
- Southeast Alaska Transmission Intertie Study, Southeast Conference, Juneau, Alaska
- Acquisition Assessment, Four Dam Pool Hydroelectric Projects, Alaska
- State of Alaska Energy Plan, Alaska Industrial Dev. & Export Authority, Anchorage, Alaska
- Feasibility Assessments of Regional Transmission System Expansion, Alaska Energy Authority
- Feasibility Study of Electric System Acquisition, Jefferson Co. PUD, Port Townsend, Washington
- Feasibility Study of Electric System Acquisition, City of Hermiston, Oregon
- Feasibility Study of Municipal Utility Formation, City of Millersburg, Oregon
- Feasibility Study of Municipal Utility Formation, Asotin Co. PUD, Clarkston, Washington
- Electric Load Forecast, City of Sitka, Alaska
- Electric Load Forecast, Orcas Power & Light Cooperative, Eastsound, Washington
- Electric Load Forecast, Nespelem Valley Electric Cooperative, Nespelem, Washington
- Joint Operational Effectiveness Study, Kootenai Electric Cooperative, Hayden, Idaho
- Electric Utility Strategic Operations Study, Town of Steilacoom, Washington
- Feasibility Study of Gas Distribution System, Homer Electric Association, Homer, Alaska
- Equity Management Plan, Copper Valley Electric Association, Glennallen, Alaska
- Cooper Lake Hydroelectric Project Relicensing, Chugach Electric Association, Anchorage, Alaska
- Columbia Generating Station Periodic Report, Energy Northwest, Richland, Washington

Registration

Professional Engineer – Alaska and Washington

Education

B.S. in Electrical Engineering, University of Washington
B.S. in Industrial Engineering, University of Washington

ROBERT K. SCHNEIDER, P.E.
SENIOR PRINCIPAL ENGINEER
D. HITTLE & ASSOCIATES, INC., ENGINEERS AND CONSULTANTS

Experience

Mr. Schneider has more than 40 years of experience as a professional engineer. A significant portion of this experience is in performing planning studies and economic evaluations associated with the use, distribution, transmission, generation and conservation of electrical power by publicly and cooperatively owned electric utilities.

He presented expert witness testimony before the Federal Energy Regulatory Commission on transmission issues; presented expert witness testimony before the Washington Utilities and Transportation Commission on reliability issues, and assisted a 40 utility group (Requirements Customer Coalition) with developing testimony in the BPA 1996 Rate Case. He testified before administrative law judges in multiple BPA rate cases. He has provided expert witness testimony in a reliability matter before the Oregon PUC regarding service to an Ore-Idaho potato processing plant. He was an expert witness in an arbitration case regarding ancillary services associated with a wind turbine project. He provided consulting services to the Oregon Department of Energy on reliability related planning criteria.

Mr. Schneider is a Principal Engineer and manager of the Puget Sound Office of D. Hittle & Associates, Inc. He became a professional engineer in 1975 and is registered in California, Washington and Alaska. He has Bachelor of Science, Masters of Engineering and Masters of Business Administration degrees all from the University of Washington. He is listed in Who's Who in Science and Engineering. He has served in leadership positions of a number of engineering societies, included serving as president of the Puget Sound Engineering Council and a Vice President of the American Society of Mechanical Engineers. Mr. Schneider also served on a Technical Advisory Committee related to Codes and Safety Rules to the Chief Electrical Inspector for the Washington Department of Labor and Industries. He is currently on the University of Washington Mechanical Engineering External Advisory Board and a Board member of the Electric League of the Pacific Northwest.

Representative Projects

- Power Plant waste heat mechanical piping, American Samoa Power Authority (ASPA), American Samoa. This was a study to capture diesel generator waste heat from the ASPA power plant, and determine if it could be economically used in a local fish processing/canning facility. The work included a preliminary design along with cost estimates and economic feasibility. Also included was an analysis of project risk to ASPA associated with the project. Bob was the project manager on this assignment.
- D. Hittle & Associates, Inc. worked for the Energy Northwest on economically evaluating contract alternatives for use of the Packwood Hydroelectric project. This included performing financial modeling of the project, negotiating a new transmission contract with Lewis County PUD and ultimately a power sale agreement to BPA. Mr. Schneider was the project manager on this assignment.
- D. Hittle & Associates, Inc. was the Project Engineer of record for the 25 MW CARES wind farm project. My Schneider advised the Conservations and Renewable Resources Energy System (CARES). CARES was a consortium of publicly and cooperatively owned utilities that worked with BPA on the development of a 25 MW wind farm. Mr. Schneider was the project manager that developed an RFP that wind farm developers responded to, evaluated the proposals, and negotiated contracts with BPA and the selected wind farm developer. He also assisted with the licensing, financing, and managing of the wind farm project for CARES.

ROBERT K. SCHNEIDER, P.E. (Continued)

- Electric Utilities Comprehensive Plan, City of Centralia, Centralia, WA. Bob was the project manager on this study. This included a detailed analysis of existing city electric utilities, zoning, and used State GMA supplied population figures and local zoning information to forecast future electric power needs and then determine the electric system necessary to reliably serve the loads.
- D. Hittle & Associates, Inc. performed a number of studies for the City of Centralia relating to the Yelm Hydro Electric Project. Mr. Schneider did a Vegetation Management plan for the Yelm Project that was in response to FERC license related questions. He updated the City's Yelm Emergency Action Plan that was also submitted to FERC. He further prepared a 10 year capital improvement plan for the City of Centralia's electric system and its Yelm hydro-electric project, which included evaluating upgrades of various Yelm project systems including electric, control, and piping systems.
- D. Hittle & Associates, Inc. performed a joint assignment with the NESCO Sumas 1 cogeneration plant and Whatcom County PUD on evaluation of the sale of the cogeneration project to the PUD for the purpose of supplying power to certain select industries, including Bellingham Cold Storage, Georgia Pacific and the Phillips-Conoco Refinery. An important aspect of the project was in evaluating natural gas reserves that were owned by the cogeneration project in light of market trends for natural gas.
- D. Hittle & Associates, Inc. was the lead consultant for Klickitat County PUD landfill gas to energy proposal the Roosevelt Regional Landfill. Mr. Schneider was the Project Manager on this assignment, which included identifying environmental, power generation and economic issues and proposing approaches to optimize the project for the PUD. Also included were estimates of the gas collection piping systems, generation, and electric utility interconnection costs as well as a pro-forma estimate of revenues and costs.
- Bob Schneider performed a feasibility analysis and inspection of the Bethel Utilities Corporation power and water heating system for the City of Bethel, Alaska. This study was to determine the condition of the BUC facilities as well as a likely range of purchase prices that could be supported by current rates for electric and heat. The work included discussions with Alaska State representatives over levels of grant funding that might be available and pro-forma cash flow analysis based on certain financing assumptions.
- Prior to joining D. Hittle & Associates, Mr. Schneider was the Director of Power Management at Snohomish County PUD. He was responsible for the operations and maintenance of a 112 MW hydroelectric and 340-cfs reservoir water supply project, all of the PUD's power supply and generation Participants' Agreement Contracts, as well as load forecasts and capital 5 year plans.
- Prior to working at Snohomish County PUD, Mr. Schneider worked for the Bechtel Power Corporation at their San Francisco Power Division Headquarters.

Registration

P.E. Mechanical, California, 1975, Washington, 1995, Alaska 1997
US Green Building Council LEED AP, 2009

Education

B.S. Physics, University of Washington, 1971
M.S. Eng. Nuclear, University of Washington, 1973
M.B.A. Business, Government & Society, and Finance, University of Washington, 1976



Experience

Mr. Valerio has over 20 years of electrical engineering experience including utility engineering, commercial and industrial building design. He has expertise in power and lighting system designs in commercial, industrial and municipal facilities, backup emergency power systems, electric utility service designs, power factor correction, nurse call systems, arc flash hazard analysis, power quality analysis, circuit protection, street lighting design and LAN/DATA designs.

In addition his utility expertise includes transmission and distribution line design, staking, easement acquisition, substation design and valuation, distribution and transmission line construction inspections, retail rate design, consumer class modeling, allocation of service costs and joint use contact evaluations. Mr. Valerio has been project manager on many utility engineering projects overseeing them through the concept, permitting, design development, contract administration and bidding and construction inspections.

He managed over 60 miles of distribution feeder rebuilds and designs for Grant County Public Utility District throughout a three and a half year period. While managing the projects, he also completed field work, quality control checks and helped develop an automated material summing spreadsheet that streamlined material data entry and pole spotting.

Mr. Valerio completed planning, routing and design of underground distribution feeders for utilities in American Samoa and the Marshall Island-Ebeye. The voltages varied and included overhead to underground conversions in a salt-water environment that was routed either along a sea wall or frequently flooded. Designs utilized fiberglass ground sleeves, stainless steel sector boxes and specialized trenching techniques.

He completed planning and easement coordination for over 30 miles of transmission line upgrades that required the filing and processing of a Certificate of Public Convenience and Necessity with the Oregon Public Utility Commission.

Mr. Valerio has completed several joint use pole evaluations that require field verification and pole loading calculations. He completed a system wide joint use pole evaluation for the City of Hermiston Energy Services that included inventory, coordinates and photographs of more than 1,500 poles utilizing electronic hand held equipment.

He has designed two substations for Benton Rural Electric Association. One design provided a typical design that will be used for all future construction projects. The design included ease of expansion, standard materials and compact design for rural substations.

Mr. Valerio completed retail rate adjustments for several utilities in the Pacific Northwest for both past and present wholesale power rate changes. These retail rate and cost of service allocations allowed each utility to meet their required revenues throughout the present rate case periods. Each retail rate adjustment recommendation was presented and approved by the respective utilities' Board of Directors.

He prepared substation valuations for several utilities in the Pacific Northwest interested in acquiring the facilities from Bonneville Power Administration. Part of the valuations included coordination with Bonneville Power Administration staff for purchase costs and options, equipment and maintenance condition reviews, allocation of plant costs and evaluation of accounting methods.

Mr. Valerio designed a six mile 34.5 kV to 115 kV overhead transmission line conversion for Benton Rural Electric Association utilizing a pole top unit of polymer arrestors (replacing the traditional static wire) and a Rural Utilities Service submitted and approved vertical and horizontal post delta configuration pole framing. The design allowed use of existing shorter poles resulting in significant pole replacement cost savings.

He completed a four mile, delta configured 115 kV transmission line to serve the Umatilla Chemical Incinerator Project. The design incorporated a future 10 year salvage and relocation scheme to minimize the financial impact to Umatilla Electric Cooperative.

Representative Projects

Comprehensive Planning and Work Plans

- Construction Work Plan, Clearwater Power Company, Lewiston, Idaho
- Comprehensive Plan, Clearwater Power Company, Lewiston, Idaho
17 Substations in three states
- Construction Work Plan, Umatilla Electric Cooperative, Hermiston, Oregon

Power Engineering and Design

- 3 Substation Designs, 115 kV to 12.47 kV, 8 MVA to 60 MVA, metal clad switchgear, open bay/open bus, remodels, bay additions, transformer change outs
- 115 kV and below transmission line design, rights of way, planning, self supported structures, construction services
- 15 kV and below distribution line designs, overhead, underground, standards development, work order inspections

Cost of Service, Rate Studies and Related Analyses

- Cost of Service, Retail Rate Design, Northern Lights, Inc., Sandpoint, Idaho
- Cost of Service, Retail Rate Design, Big Bend Electric Cooperative, Ritzville, Washington
- Cost of Service, Retail Rate Design, Flathead Electric Cooperative, Kalispell, Montana
- Cost of Service, Retail Rate Design, Clearwater Power Company, Lewiston, Idaho

System and Facility Valuation and Appraisal

- Purchase of BPA Delivery Substations, Valuation Study, Franklin County Public Utility District, Pasco, Washington
- Purchase of BPA Delivery Substations, Valuation Study, Benton County Public Utility District, Kennewick, Washington
- Purchase of BPA Delivery Substations, Valuation Study, Big Bend Electric Cooperative, Ritzville, Washington
- Purchase of BPA Delivery Substations, Valuation Study, Benton Rural Electric Association, Prosser, Washington
- Purchase of BPA Delivery Substations, Valuation Study, Hood River Electric Cooperative, Hood River, Oregon

Distribution

- Over 60 miles Feeder Rebuilds to 795 AAC, Grant County Public Utility District, Ephrata, Washington
- Beverly Bridge Crossing and Restoration, Kittitas County Public Utility District, Ellensburg, Washington

- 7th to 1st Street Feeder Tie-line, Umatilla Electric Cooperative, Hermiston, Oregon
- Overhead to Underground Conversion, 6 miles along sea wall, American Samoa Power Authority, Pago Pago, American Samoa

Substations

- Kennedy Substation, 40 MVA, 115 kV – 12.5 kV, Benton Rural Electric Association, Prosser, Washington
- White Swan Substation, 25 MVA, 115 kV – 34.5 kV bay addition, Benton Rural Electric Association, Prosser, Washington
- Sunnyside Port Substation Addition, 20 MVA, 115 – 12.5 kV, Benton Rural Electric Association, Prosser, Washington
- Tosco Substation Modification, 40 MVA, 115 – 13.8 kV, Whatcom County PUD, Ferndale, Washington
- South Slope Substation, 20 MVA, 115 kV – 12.5 kV, Benton Rural Electric Association, Prosser, Washington
- Substation Conversions, Standard 34.5 to 69 kV Substation Designs, Flathead Electric Cooperative, Kalispell, Montana

Transmission

- Sunnyside - Grandview, 8 miles, 556 ACSR, 115 kV with 12.47 kV Underbuild, Benton Rural Electric Association, Prosser, Washington. Close BPA coordination required. Interstate and rail crossings. Cost saving pole top design.
- Chemical Substation Loop, 4 miles, 556 ACSR, 115 kV, Umatilla Electric Cooperative, Hermiston, Oregon. All federal property and extensive environmental review. Cost saving pole top design.
- M-Line 69 kV Conversion, 12 miles with 24.9 kV Underbuild, Midstate Electric Cooperative, LaPine, Oregon. Design utilized existing right-of-way from existing distribution line throughout Deschutes National Forest.

Registration

P.E. Electrical – Washington, 1997; Oregon, 1998; Idaho, 2000, Maine, 2000, Montana, 2007, Minnesota, 2008 and Louisiana, 2009.

Education

B.S. Electrical Engineering
University of Nevada-Reno, Reno, Nevada, 1988

Affiliation

Tau Beta Pi National Engineering Society
National Society of Professional Engineer
I.E.E.E. Power Engineering Society



Donald S. Cohen, Partner

dcohen@gth-law.com

Phone: 206-676-7531

Primary Areas of Practice

Utilities & Municipal Law, Regulatory, Business Litigation

Education

J.D., Northwestern University School of Law, 1970 cum laude

Board of Editors, Northwestern University Law Review

Order of Coif

B.A. Psychology, Washington University, St. Louis, 1967

Phi Beta Kappa

Omicron Delta Kappa

Jurisdictions Admitted to Practice

Washington State Courts

Illinois State Courts ("inactive" status)

U.S. District Court, Western District of Washington

U.S. District Court, Eastern District of Washington

U.S. Court of Federal Claims

U.S. Court of Appeals, Ninth Circuit

U.S. Supreme Court

Professional History

Joined Firm, 1982

University of Puget Sound School of Law, Acting Dean, 1980, Associate Dean, 1979 and 1981, Associate Professor, 1978-82

University of Michigan Law School, Assistant Dean and Director of Graduate Studies, 1976-78

University of Tennessee College of Law, Assistant Dean and Assistant Professor, 1974-76

Private Business, 1972-74

Attorney, Jenner & Block, Chicago, 1970-72

Honors

Selected for the 2015 Washington Super Lawyer list

Best Lawyers - Seattle, 2015 Municipal Law

Named a "Best Lawyer" in the Best Lawyers in America

AV Preeminent Rated by Martindale Hubbell
Named Gordon Thomas Honeywell 2015 "Partner of the Year"
City of Mercer Island Citizen of the Year, 2000

Community Activities

Mercer Island Town Center Stakeholder Group (2015)
Mercer Island Sustainability Policy Task Force (Chair, 2012)
Board of Trustees, Mercer Island Open Space Conservancy Trust (2004 - 2012);
Chair, 2008-2010 Mercer Island Parks Levy Stakeholders Comm. (Chair, 2007-2008)
Mercer Island Planning Commission (1991-2001; Chair, 1996-2001)
Seattle University School of Law Board of Visitors (1997-2001)



ELECTRIC POWER SYSTEMS, INC.

Response to:
The City of Bainbridge Islands'
Request for Proposals
for the
Electric Utility Feasibility Study



CITY OF
BAINBRIDGE ISLAND

Submitted April 15, 2016

Electric Power Systems, Inc.
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Letter of Interest

Mr. Barry Loveless
Director of Public Works
City of Bainbridge Island
280 Madison Ave. N.
Bainbridge Island, WA 98110

April 15, 2016

Re: Electric Utility Feasibility Study

Electric Power Systems, Inc. (EPS) is pleased to present this proposal to deliver the services described in your recent "Electric Utility Municipalization Feasibility Study Proposal." Our team is not only uniquely qualified to deliver these services, but we also have a vested interest in this project.

Our firm is offering an extremely strong and experienced team to deliver this work. Mr. Rogers, an electrical engineer with over 30-years experience delivering all aspects of electric power systems planning, infrastructure, and maintenance, has teamed with a long-time collaborator, Mr. Tom Lovas, an economist and NRECA (National Rural Electric Cooperative Association) consultant who has been specializing in the economics of electric power and other utility services for more than 30-years. Together, this team can deliver results not imagined by other teams.

One of our team members and founders of EPS, Mr. Daniel Rogers, has a home on the island from which he and his family enjoy the many wonderful aspects of Bainbridge Island culture. Preserving and promoting this vibrant community is important to him and his family. They can often be found at the Madison Diner, the Harbor Pub, or enjoying an ice cream at Mora's. They are invested in the community, and would like to see this project deliver the maximum results to their island friends and neighbors.

We look forward to discussing how we might accomplish the COBI's goals. If you have any questions about our team, this proposal, or our capabilities, please do not hesitate to contact Mr. Rogers personally by email at drogers@epsinc.com, or by phone at (907) 244-7584.

Sincerely,

Electric Power Systems, Inc.
Dan Rogers, P.E.
Founder, Principal Electrical Engineer

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ELECTRIC POWER SYSTEMS, INC.

3305 Arctic Blvd. Suite 201 • Anchorage, AK 99503
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Executive Summary

Electric Power Systems, Inc. (EPS) is offering a highly experienced and complementary team to deliver the services requested by the City of Bainbridge Island (COBI). Our key leaders for this effort each have over 30-years' experience delivering the technical and policy aspects that will help the COBI determine if forming a municipal electric utility will provide the best service at the best value to the citizens of Bainbridge Island. The team we are offering has worked together throughout their careers on similar issues, and have a personal and professional interest in this project. EPS, the responsible firm for this project, recently upgraded, and continues to essentially run a critical utility with a Department of Defense national command authority mandate dictating high-availability at all times. Not only does our team have a vested interest in this project, but we also have a member that has not only helped create similar utilities, but also been tasked with operating the utilities they created during their initial years. Together, we are convinced this project can be completed within COBI's desired budget and time line, assuming we can productively work with Puget Sound Energy (PSE) and stakeholders to obtain the necessary information needed to develop realistic analyses relevant to the proposed work. Given the experience and industry expertise our team is offering; we are confident that we can provide the best possible services for the best possible value within the stated scope of work.

Mr. Rogers will be based out of his home on Bainbridge Island for the execution of this work. Other team members, when travel is required, will be based out of our Anchorage office. Cost impacts of travel will be minimized, to the largest extent possible.

List of Acronyms used in this proposal:

- **COBI:** City of Bainbridge Island
- **BIEU:** Bainbridge Island Electric Utility
- **PSE:** Puget Sound Energy
- **ERE:** Energy and Resource Economics
- **EPS:** Electric Power Systems, Inc.

Introduction

The EPS Team

EPS is proposing a simple but effective team to the City of Bainbridge Island (COBI). Mr. Rogers and Mr. Lovas each have over 30-years of relevant experience spanning all aspects of the electric power industry from infrastructure design, to system planning, strategic organization, and the development of rate structures.

Tom Lovas has spent much of his 38-year career in strategic and developmental planning for electric utilities. His academic background includes evaluation of planning and economic issues associated with the Bonneville Power Association and Seattle City Light. After several years working with electric utilities in the western United States (including work on western states and BPA operational and economic issues), he led the planning and rates section at Chugach Electric (the largest electric utility in Alaska, which has a service area comparable to PSE with less load). In this position, Mr. Lovas was responsible for strategic development. His efforts included: load forecasting; generation and transmission system planning; strategic development; wholesale power supply and sale agreements; revenue requirement; cost of service and rate design studies; and tariff implementation by application to the Regulatory Commission of Alaska, which provides economic regulation of utilities in Alaska. Based on his success in this position, he was later hired as the first Chief Executive Officer of the newly formed Four Dam Pool Power Agency, which took ownership and operational control of hydroelectric projects serving multiple public power entities.

Mr. Lovas currently works as a consultant, providing a range of services focused on electric system issues under the name of Energy & Resource Economics (ERE). A significant portion of his work includes providing assistance with renewable energy and strategic technology development on behalf of public power entities under contract to the National Rural Electric Cooperative Association (NRECA). NRECA represents the interests of over 900 independent electric cooperatives serving over 42 million people in 47 states. Additionally, his consulting practice has included economic and strategic planning for a number of individual public power electric providers and issues with organizational structures, and he has been involved with the technology innovations program of BPA, participated in Northwest Public Power Association Conferences, and has acquaintance with representatives of the Public Power Council and others relevant to this project. Mr. Lovas' connections within the electric power industry,

particularly within the electric power industry serving the PNW, will be a strong asset. They will help us overcome the greatest complication we see in this work, which is the lack of readily-available historical data about the electrical infrastructure and level of service on Bainbridge Island. We are confident that EPS is offering the right mix of experienced personnel to overcome this complication as quickly, effectively, and economically as possible.

Dan Rogers, P.E. Like Mr. Lovas, Mr. Rogers has spent his entire career of over 30-years in the electric power industry. He co-founded and continues to lead a successful international firm that specializes in all aspects of electric power systems. In this and previous roles, he has personally designed or overseen the design of distribution, transmission, substation, generation, and systems control infrastructure. Mr. Rogers began his career as an operations engineer working on technical and operating issues at Chugach Electric Association. During this period, he worked closely with Mr. Lovas and his planning group. Mr. Rogers is EPS' co-founding principal electrical engineer, one of our managing directors, and is a majority shareholder in EPS' parent company, The Engineered Solutions Group, Inc. (ESG). Further, he provides principal oversight for two of EPS' sister companies in the ESG, Specialty Engineering, Inc. (SEI; a specialty electrical maintenance firm based in Vancouver), and Electric Power Constructors, Inc. (EPC; a licensed electrical construction contractor). Mr. Rogers, with a background in the trades, is EPC's licensed electrical administrator, which gives him additional insight and perspective on the true cost of building, operating, administering, and maintaining a functional electric utility from not only an engineer's perspective, but also the perspective of industry trade and craft workers and project managers.

EPS is a multidisciplinary firm that has specialized in delivering all aspects of electric power systems engineering, design, and construction administration to public and private electric utilities since 1996. From studies, planning, and Right-of-Way (ROW); to design and construction of infrastructure; to ongoing maintenance, troubleshooting, and upgrades, our services are comprehensive, and specifically designed to the needs of electric utilities of all sizes. We deliver these services to national and international clients from three offices in Washington (Redmond, Olympia, and Vancouver), two in Alaska (Anchorage and Juneau), and one office in Kansas (Lawrence). We have historically placed strong emphasis, and have particularly strong experience in Washington, Alaska, and Hawaii, as well as other locations around the Pacific Rim. EPS was a founding member of our parent company, the ESG, a collective of six consulting engineer, licensed construction, and specialty maintenance firms that specialize in electric power systems design, construction, and maintenance, and often provide turn-key solutions to local, industrial, and government electric power utility operators and owners. ESG is a medium sized firm, with 2015 (last audited year) revenues in excess of \$50MM USD. All of EPS and ESG's staff are at Mr. Lovas and Rogers' disposal to support research for this project on an as-needed basis.

It will be difficult to find a firm more uniquely-suited to meet the needs of COBI. As electric power systems specialists, EPS is involved in all facets of utility design, administration, operation, upgrade, and maintenance. Our firm functionally operates the electric system for Fort Richardson (JBER). We perform this role as a subcontractor, but provide all line personnel, substation technicians, and other engineering and craft personnel supporting the operation of on-base transmission, distribution, and substation infrastructure. As Doyon Utilities, LLC's (Doyon) principal electrical utility consultant, we have had a major role in the upgrade of electrical infrastructure on military bases across Alaska since privatization of the military utility infrastructure in 2007. Our efforts on behalf of Doyon included major upgrades to all aspects of the utility system from distribution systems, to the complete design and construction of an innovative dual-fuel landfill gas-fired power plant. Much of the existing infrastructure when we began was installed in the 1950s (or earlier).

EPS commonly works closely with power utilities around the world, and are industry experts in small and islanded power systems. This experience results in a real-world understanding of facilities and operations that is difficult for other consultants to match. In addition to working with systems using traditional means of generation and traditional infrastructure, we have extensive experience integrating renewable and alternative forms of energy such as wind, hydro, geothermal, landfill gas, and solar with existing power grids and generation methods. We have been involved with alternative energy generation projects for many years. Some of our work can be seen on the Island of Kodiak, which began obtaining nearly 100% of its power from wind and solar nearly 6-years ahead of schedule, and in the State of Hawaii, where we have worked with utilities to integrate a wide variety of renewable and alternative production methods into an existing grid, and helped them solve some resulting storage and phasing problems. EPS and Mr. Rogers are regularly featured in Utility Wind Interest Group, and other renewable energy conferences and publications.

Mr. Rogers and Mr. Lovas will work closely with COBI to assess their needs, the condition of their infrastructure, options, and define short- and long-term goals. Using this information, we will gather the necessary missing information, and develop plans with options describing how COBI might programmatically develop an operating Municipal Electric Utility (MEU). We will

examine the costs and benefits of the city's preferred options, considering long term improvements and expenditures, and how these will affect the overall economics of forming and operating an MEU.

Specific Qualifications

Here we describe a subset of the skills and experience we have to offer relevant to the proposed work guided by information in the RFP.

These relevant skills and experience include:

Collection, Analysis, and Interpretation of Energy Data

Mr. Lovas and Mr. Rogers have been involved in the electric energy business for a combined total of over 60 years. Their work includes practically all aspects of utility regulation, operation, and development. The work they commonly deliver includes:

- Collecting energy data
- Evaluating contracts
- Reviewing and analyzing system assets
- Providing recommendations on physical and information systems
- Recommending, designing, and managing the installation of infrastructure upgrades
- Producing construction work plans
- Interfacing with other utility services and providers
- Delivering electric load forecasting
- Planning system resource needs and utilization
- Performing transmission system analyses
- Carrying-out planning and construction administration/management
- Specifying generation plant requirements
- Negotiating or supporting negotiations for fuels contracts
- Examining the economics of renewables and alternative forms of energy
- Designing and recommending energy storage systems

There is no team more capable of obtaining, analyzing and interpreting energy data pertinent to COBI than the one led by Mr. Rogers and Mr. Lovas.

Utility Formation

Mr. Lovas has been in the service of and delivered similar work to investor-owned utilities, rural electric cooperatives, public utility districts, municipalities and public power agencies across Alaska and the Northwest. With an academic background in public utility economics, his knowledge and practice has covered the full spectrum of possibilities. He fully understands the regulatory and practical aspects of alternative formation administration, rates and charges, and the operating conditions of electric utilities. This experience includes some utilities that combine electrical service with natural gas provision or other desired public utility services.

Mr. Rogers has served a wide variety of public agencies as an employee, as a consultant, and as a contractor. He understands not only how operating electric systems are built, operated, upgraded, and maintained, but also the politics and realities of operating and maintaining a functioning and economical electric utility. With experience as an employee, and as a consultant, he understands alternative utility structures, and has experience reporting to the variety of oversight bodies involved, as well as helping negotiate agreements that will help meet the needs and concerns of stakeholders. With this combination of experience, the EPS team is eminently qualified to help guide the COBI in their decision to form an MEU, remain a customer of PSE, or to pursue other potential options.

Distribution Facility Evaluation & Valuation

Early in his career, Mr. Rogers worked for Chugach Electric Association (CEA) as the manager of facilities engineering for nine

years. During this period, he was responsible for all distribution-level planning, and produced CEA's 5-Year Construction Work Plans (CWP). Upon approval, these plans detail all distribution-level capital projects for the following five years. His facilities group also identified and developed distribution designs that corrected code violations.

Since founding EPS in 1996, Mr. Rogers has continued to be closely involved with projects for utility and other clients. His work has included meeting their distribution planning, construction design, and specification needs as a professional consulting engineer. EPS is a specialist electric power consulting engineering firm committed to delivering the best possible products to our clients at the best possible value. In almost every case, members of our firm and our critical business activities depend on the smooth and economical operation of the very utilities we work with and on. Due to his previous experience, Mr. Rogers was our original distribution design group manager. Although our company has grown, Mr. Rogers still works with our distribution design group on overhead, underground, and subdivision projects on a regular basis.

Mr. Rogers also has over 30-years of exceptionally strong experience in distribution substation planning and design. He was one of the original engineers working with Schweitzer Engineering Laboratories (SEI) in Pullman, which is now the largest supplier of microprocessor-based relays in the world. While working at Chugach Electric, and as EPS' principal electrical engineer, Mr. Rogers regularly produced, and continues to produce, the physical designs for numerous distribution substations. Our firm designs and/or builds 3-5 distribution class substations per year. We have incomparable experience with new construction, as well as with the replacement and upgrade of 115 kV-12.5 kV facilities. As the licensed electrical administrator for EPC (our in-house electrical construction firm) and principal-in-charge of SEI (our in-house specialty electrical maintenance firm), Mr. Rogers has extraordinarily strong insight into the practicality and costs of constructing, upgrading, and maintaining overhead and underground distribution system facilities.

Although the EPS team does not anticipate a lot of effort regarding the PSE 115 kV system feeding the COBI substation, EPS has qualified and experienced staff who deliver transmission system infrastructure with wood, steel pole, and lattice structures. Washington requires special qualifications and certifications for any critical structures, and for those over 100-feet tall. EPS' principal civil/structural engineer, a transmission line designer with over 30-years of experience, is one of the few engineers who meets this requirement, and will be available to deliver services if needed.

Knowledge of State/Federal Laws and Studies of Municipal Acquisition Projects

The EPS team has a qualified group of regulatory attorneys identified that will be available to provide advice and counsel on all legalities associated with municipal acquisitions. This is primarily a task that Mr. Lovas will be addressing. EPS has numerous legal contacts within the Puget Sound area, and will rely on these, as necessary, to supplement Mr. Lovas in the process.

Knowledge of Regional Wholesale Power Suppliers, Transmission Availability, and Alternative Energy Policies

The team is quite knowledgeable on matters associated with Pacific Northwest wholesale power supplies, transmission and alternative energy policies. Mr. Lovas has spent a substantial amount of time involved directly in the Pacific Northwest, working on matters related to the Northwest Power Act, the Columbia River hydroelectric system, BPA's operating activities, and has relationships with regional cooperatives and NWPPA. As a technology representative on behalf of cooperatives nationwide, he is extremely knowledgeable about the energy policies regarding renewables technology, development and implementation. Mr. Rogers and his team at EPS have extensive experience in transmission planning and analysis, and participate in a variety of project associate with present and future transmission availability and improvements. Of specific interest for COBI is EPS' knowledge of submarine cable planning, construction, operation, and HVDC for system bulk supply.

As our client/partner Kodiak Electric Association can attest, EPS is a proven leader when it comes to deploying alternative energy technologies for extremely high penetration renewable energy systems. We have included a reference from this utility in the References section of this proposal. EPS delivered technical engineering and planning expertise to KEA for the construction of a hybrid hydro/wind and energy storage (combining batteries and a flywheel) system, which helped Kodiak meet its board-mandated goal of 98% renewable energy utilization. The development and realization of these technologies helped Kodiak Island realize a net savings in power production cost ahead of schedule.

Qualifications to Perform Economic Feasibility Analyses Related to Preferred Municipal and Supply Options

Mr. Lovas and Mr. Rogers have many years of experience in utility power supply options in the PNW and elsewhere. This

experience includes evaluating renewables integration, storage to enhance renewables penetration, system power flow and stability studies, the economics of traditional and non-traditional alternatives, and the evaluation of the risks and opportunities associated with each. This includes associated exposure to transmission and power supply cost fluctuations.

Project Approach

The proposed EPS team brings extraordinarily strong experience and the skills needed to assess the costs, legal, organizational, and technical challenges of forming a Bainbridge Island Electric Utility (BIEU). Mr. Tom Lovas, who has been involved in planning, rates, utility formation, power purchase agreements, and recently, assisting public utilities in developing managerial efficiencies, will be leading the organizational, power purchase, rate assessment, and utility formation questions associated with the RFP. Mr. Lovas is uniquely qualified, as he has performed utility formation work, and has also served as senior management at a number of the many utilities, as well as the CEO for effective formation of an operating public power agency.

Dan Rogers is the technical resource for the project. Mr. Rogers has personally designed, constructed, or provided design oversight for every part of a functioning electric utility, from power plants to the service entrance. He has worked as a utility engineer, and is the co-founder and principal electrical engineer Electric Power Systems, which for over 20 years has successfully specialized in all aspects of electric power systems planning, design, operation, upgrade, and maintenance. Mr. Rogers will provide the technical planning work, facilities costing, existing facilities assessment, and oversight of the IT systems work. Mr. Rogers is also the electrical administrator for EPS' construction arm, which has delivered the line crews, substation technical, and craft staff constructing and maintaining Joint Base Elmendorf-Richardson in Anchorage, Alaska. In this capacity, EPS has acted as the operations group for the privatized base electric utility serving a Joint Army/Air Force base that has one of the highest national command authority-dictated rapid deployment roles in the nation. Mr. Rogers and his staff at EPS and our sister companies have a unique "utility-centric" view of how to run a successful utility with a "no failures" requirement.

The pairing of Mr. Lovas and Mr. Rogers is not accidental. These two professionals have been working together since 1985, and have a long standing and successful relationship on projects.

Understanding

EPS has read and understands the RFP issued by the COBI. We have additionally asked and received acceptable responses to questions about this proposal from Mr. Barry Loveless, the COBI's Director of Public Works. According to our understanding, the COBI is seeking a qualified, responsive firm to deliver professional and technical consulting services, and assist COBI staff with economic and technical analyses to evaluate the potential costs and benefits of forming and operating a municipal electric utility serving the residents and businesses on the Island. The intent of these analyses, is to inform the Council of COBI about the relative costs and benefits of forming a municipal utility compared to continuing to have PSE deliver electric services. We understand our work will also be used to inform voters when separation from PSE is placed on the ballot.

Scope of Work

The proposed scope of work is well-defined in the RFP. As discussed throughout this proposal, developing a productive relationship with PSE will greatly increase the efficiency and efficacy of the requested work, while reducing the expense and time needed to complete requested tasks. The EPS team will work with COBI to establish and maintain good relations with PSE. PSE is aware of the COBI's interests in municipalizing the electric system. Having their cooperation will help provide a more accurate picture of the path forward. Some of the information we will seek from PSE includes:

- Island electric plant accounts
- Depreciation and depletion studies
- Historical Island load data
- Rate filing information specific to the COBI
- Supporting documentation for expected services to the Island that is not otherwise available through public record
- Island revenues and retail rate forecasts of PSE

We suggest that a good starting point for discussion will be to obtain and review the franchise documentation from the 2000

renewal, any associated terms and conditions of the franchise, and city guidelines for public works activities.

Our proposal addresses the tasks in the order they are defined in the RFP. We may reorganize the task reporting sequence, as the successful completion of some tasks depend on information gathered during subsequently listed tasks. In all cases we will maintain close contact with the COBI's project team, and ensure they have a clearly-defined schedule that includes scheduled deliverables.

Specific Approach

Engineering/Facilities/Network

Task 1: Boundary Map

EPS will diplomatically approach PSE with an information request early in the process for a system map identifying all facilities serving Bainbridge Island. This will likely require assistance from the COBI, signing a Non-Disclosure Agreement (NDA), and other requirements to meet current WECC/NERC practices. The COBI may want to consider the economic benefit of extending service beyond the island to capture commercial loads at the casino on the north side of Agate Pass Bridge.

Task 1 Deliverables:

- Bainbridge Island utility facilities/system map.

Task 2. Load Projections/Development

We will prepare a 20-year load projection for the COBI service area using available historical energy requirements information, Island electric end-use data, projections of economic activity, growth, and electric price impacts. We will work with the COBI team to acquire load data with adequate granularity to develop consumer class (residential, commercial, and industrial) (capacity and energy projections. Our work will include an evaluation of current and projected system losses, and an estimate of future system power requirements. The load forecast will include consideration of known or reasonably expected distributed energy resource development, energy efficiency and demand management programs underway, and likely expansion of these programs under current operating conditions. Future programs are addressed as *Task 7* in this proposal.

The EPS team will research City, County, and State resources for economic development activities that may affect the economic conditions of the COBI's electrical system municipalization over the planning horizon. We will additionally seek support from the Northwest Power and Conservation Council (the Council) for demand forecasting through their resources and regional experts.

Historical load data and load research studies prepared for the Island (or similarly situated load sectors) will be crucial for the preparation of a reasonable electric load forecast.

Task 2 Deliverables:

- Bainbridge Island Utility Load Forecast Report

Task 3. Facility Assessment and Utility Planning

Obtaining access to PSE's Construction Work Plan (CWP; usually a 2- 5-year plan) and Long Range Plan (LRP; usually a 20-30-year plan) is the most cost-effective manner of approaching Task 3. This further illustrates the need to develop a cooperative relationship with PSE. Ideally, the facility assessment discussed in Task 5 will have a role in the final deliverables of *Task 3*. Corrective action for aging facilities will have a substantial impact on capital program development as part of the utility planning process.

Although power flow studies (used to determine if load growth will require additional or upgraded facilities) are a normal part of the CWP/LRP process, we recommend addressing obvious overloads, but waiting to perform more detailed analyses until

the system is more clearly defined, and additional relevant data exists. Unless otherwise negotiated, we are assuming our efforts (described by this proposal) will not include power flow studies.

Short circuit and protection coordination studies are also generally performed as part of the planning process. We assume that PSE has coordinated the system adequately as part of normal operations. Provided we can gain access to the substations or substation drawings, we can assess the adequacy of the installed protection facilities, and capture most of the cost impacts of protection system upgrades without running a complete coordination study.

Moving forward, we recommend that the COBI develop three plans: a Five Year Construction Work Plan; a Long Range (20-year) Plan; and a Business Facilities Plan. These will address the upfront business costs of developing the infrastructure needed to run a dependable utility. We will discuss any potential for infrastructure, labor, management, and administrative cost savings that might come from integrating some functions and operations with the COBI Water Utility in the Business Facilities Plan Report.

Task 4. Boundary and Severance Issues

Deciding the physical boundaries of the potential COBI Electric Service Area should be fairly straightforward. There will be some additional requirements the future utility must meet with regard to owning transmission and substation facilities due to NERC/WECC (National Electric Reliability Council/Western Electric Coordinating Council) requirements. We will address these in the Utility Planning Document delivered as *Task 3*.

Task 5. Existing System Assessment

One of the greatest cost and schedule drivers is cooperation with PSE, and access to their existing documents. PSE has assessed the COBI system to justify some of their latest transmission projects serving the Island (i.e. Foss Corner to Port Madison, and the Port Madison 115 kV tap). If PSE chooses to be uncooperative, EPS will walk or drive the majority of the transmission and distribution system and selectively assess the wood poles (from ground-level only) for rot and insect damage. This method, while time consuming, will provide a reasonably accurate assessment of the transmission facilities, and a representative sample of the distribution facilities. Without PSE cooperation, we will only be able to observe their substations from outside the property line. Although this will give our team some information about the age and condition of the facilities, it will provide no details on loading, or the protection and controls technology present. We will be dependent on PSE's publicly available information to gather loading details and potentially gain insights into the protection and control technology. This will be of limited value.

Meter information can be provided by PSE, estimated, or surveyed. Based on current population ($\approx 23,000$ people), we expect $\approx 10K$ meters.

Task 5 Deliverables

- Existing System Assessment Report – Transmission, Distribution, and Service Equipment

Task 6. BPA Purchased Power and Wheeling Issues

BPA has provided the COBI with documentation concerning the general provisions BPA has for providing power to newly-qualified load serving entities. Working with COBI personnel, we will engage BPA to identify and characterize the power supply options and parameters. We will review and evaluate availability, transmission requirements and rights, and other considerations including: contract requirements; initial rates for service; and potential of potential future costs of service. We will comprehensively consider the character of ownership structure related to the provision of power by BPA, and the steps needed to make available and implement the BPA supply option. Further, we will research potential effects of the Council's 7th Power Plan, and how they may affect the possibilities of supply from BPA.

Task 6 Deliverables

- Assessment of BPA Power Supply and Transmission Services Report

Task 7. BPA Programs

Task 7 builds on the work of *Task 6*. We will assess energy efficiency, distributed generation, demand management, and other electricity utilization programs provided through BPA now, and into the future. This evaluation will consider how these programs, or programs implemented by the COBI independent of BPA, will impact the power requirements over the load forecast period of an independent utility. Consideration of the 7th Power Plan will be incorporated into our research, analyses, and discussion.

Our team will compare the potential impact on power requirements over the forecast period of PSE programs with those likely to be available through a BPA power supply relationship. This comparison may be limited by the extent of PSE planning data (such as Integrated Resource Plan documentation) that is available specifically in regard to programs that PSE anticipates implementing, or will make optional, for Bainbridge Island.

Task 7 Deliverables

- BPA Programs Report
- Operations/Finance/Economic Analysis

Task 8. IT Systems – Customer Billing, Outage, Crew Dispatch, and SCADA

A number vendors produce different systems that can handle the billing, outage, and SCADA functions of the utility. EPS will produce an assessment of the available options and reference other public utilities of similar size that use these systems. We will also investigate and discuss how some of these functions might be integrated with the small water system operated by the COBI using a similar platform to provide additional cost-savings and simplicity of operation.

Task 8 Deliverables

- IT Systems Report

Task 9. Island Electric Plant Valuation

The EPS team will research and use the best and most useful sources of information to estimate the value of PSE plant assets on Bainbridge Island that would likely be acquired by the City during the formation of an alternative utility ownership operation. The acquisitions of these facilities will ultimately be subject to valuation through negotiation between PSE and the COBI.

Traditionally, only Original Cost less Depreciation (OCLD) is used to develop regulated electric rates. Actual acquisition costs are used for rate-making if infrastructure is acquired and put into service by a non-regulated utility. Depreciation studies are prepared and supplied by utilities in support of rate filings, but often are developed on the basis of asset class, not by specific location. The only likely source of detailed plant records will be from PSE, unless this information is required to be supplied to the city under the terms of the franchise agreement.

Alternatively, based on the facilities assessment of Task 3, it may possible to use depreciation study information from PSE (directly, or from WUTC records) to estimate value and remaining life.

The most likely outcome of this task (*Task 9*) is a range of estimated values for electrical plant(s) used to provide service to Bainbridge Island.

Task 9 Deliverables

- Electric Plant in Service – Estimated Acquisition Value Report

Task 10. Economic Evaluation of Municipal Ownership

We will use the information obtained from completing other tasks combined with other reasonable assumptions and derivations to evaluate the general economics associated with acquiring the facilities and establishing a municipal utility. In addition to the start-up economics of acquiring and financing facilities, our work will include issues in staffing the utility, municipal shared services, the activity associated with establishing power supply and transmission arrangements, and other relevant economic impacts that will affect the overall economic feasibility of forming a municipal electric utility. Examples of other factors we will evaluate include lost property tax revenues and franchise revenues, as well as any other factors identified during our study that will affect the acquisition and startup.

In its final form, the economic evaluation will describe the economics of forming a municipal utility, and how this will impact City government. We will derive the longer-term benefits from the revenue requirement and rate studies, assuming the municipal utility will operate as an enterprise activity without subsidization from other municipal functions.

Task 10 Deliverables

- Municipal Utility Start-up Economics Report

Task 11. Municipal Utility Revenue Requirement/Comparison with PSE

We will prepare a revenue requirement model that develops the annual cost of providing electric service to COBI based upon the assumptions of acquisition cost, load forecasts, and operating expenses with all cost elements identified.

Our team will examine rate filings from PSE to estimate PSE revenue requirements over a comparable period, and the share that will be borne by the City's residences and businesses. A direct comparison of PSE revenue requirements with that of a Bainbridge Island municipal utility is not realistic unless PSE allocates costs uniquely to the island. Because there does not appear to be island-specific derivations by PSE (according to a response to one of our questions to this RFP), we must assume the expected revenues received by PSE from Island operations, and compare them to municipal requirements.

We will estimate retail rates for the Municipal Utility based on simplified cost of service allocations from whatever billing determinants are available. Estimates for PSE will be based upon the PSE IRP information, or other long-range revenue requirements information that may be provided or otherwise available for the PSE system. .

Task 11 Deliverables

- Municipal Utility Revenue Requirements and Comparisons Report

Task 12. Financing Options Report

Working in consultation with the COBI, our team will investigate and list the most likely range of financing options, including traditional municipal sources and pricing. Consultation with the COBI will be a fundamental component of this task. Based on our discussions with the City, we analyze likely preferred options and develop a narrative describing the relative advantages and disadvantages of each.

Task 12 Deliverables

- Financing Options Report

Task 13. Retail Rate Comparisons – Adjoining Service Areas

We will deliver a comparison of retail rates of neighboring representative investor-owned municipal electric utilities in the PNW region. This will generally cover the current operating period through contact with public power providers and tariff filings of investor-owned utilities. The goal will be to identify relative cost differentials as a function of organizational structure. We will also provide generalized observations about the practical differences in operation between public power providers, and discuss the advantages and disadvantages of each.

Task 13 Deliverables

- Rate Comparisons of Adjoining Service Areas Report

Task 14. System Acquisitions

Our team will research public records for information on electric system acquisitions over the past 10 years. The proceedings of the proposed NextEra acquisition of Hawaii Electric is expected to provide useful information on historical acquisitions, and the Jefferson County acquisition of the PSE service will be examined for relevant data on process and results.

Task 14 Deliverables

- System Acquisition Compendium Report

Task 15 - Operational Risks

As system planners and operators with 30 years plus of utilities operation experience, we are concerned about the single ROW transmission access to the Island across Agate Pass. Although there are two 115 kV lines, which many planner claim will provide sufficient redundancy, these lines are in close proximity to each other. There are a number of contingencies that could take both circuits out, leaving the island with no external source of power.

The more real and historically substantiated risk, is that of large-scale distribution outages. This problem is systemic in the Pacific Northwest due to the number of large trees in close proximity to power lines.

From a preliminary review of available information, we have a concerns that the ultimate capacity of the PSE substation infrastructure on the Island is sufficient to meet the Island's power needs during an N-1 contingency. PSE has discussed these issues, but it remains unclear if they have been adequately addressed from a facility improvement perspective.

We will address all three of these operational risks, and consider potential solutions or approaches while completing this task. Further, other potential risks noted during the system assessment will also be addressed and integrated into our the Operational Risks Report.

Task 15 Deliverables

- Operational Risks Report

Other Considerations – (Tasks 16 – 19 will be considered as alternative tasks based on cost of work)

Task 16. Social Initiatives

We will consider, identify, and discuss a wide range of potential socially responsible initiatives that may be considered by the COBI as a function of the Municipal Utility, but not directly associated with the start-up or operation of the utility.

Task 16 Deliverables

- Social Initiatives Report

Task 17. Synergies

Municipal services are often combined or provided under shared services agreements. Some electric utility functions have counterparts in other utility services, such as those providing communications, water and sewage. Assessment will be made of opportunities for the electric utility to work collaboratively with existing municipal utility activities to gain operating efficiencies, and we will report our findings. EPS will specifically look at any synergies between local Internet service and the BIEU, but also with the COBI water/wastewater system.

Task 17 Deliverables

- Synergies in Municipal Services Report

Task 18. Potential Carbon Tax Implications

The concept of a carbon tax on electric energy production and/or sales has gained attention. The inception of such a tax could have implications for a utility generating power using non-renewable resources. The impact of a carbon tax and the COBI's inclusion of renewable sources of energy in their power system will depend on the source of energy supply. If desirable, we will prepare a first order (or subjective) estimate of impacts using general assumptions about the level and structure of a carbon tax, or a derivation of the social cost of carbon.

Task 18 Deliverables

- Carbon Tax Implications Report

Task 19. Opportunities for Utility Improvements

Opportunities may arise for investment of savings, or issuance of a dividend from alternative ownership and supply arrangements for electric service to the COBI. Decisions will have to be made as to monetization of those savings, and why they would be invested. Essentially, the savings from an alternative form of utility ownership would accrue to the electric end user, but could be considered a value proposition, instead. That is, the savings could be invested in a higher quality of service, in effect providing "more for the money." The social issues associated with power quality and consumer cost will be addressed in order to provide a comprehensive feasibility assessment.

Task 19 Deliverables

- Considerations of Value and Quality of Service Report

Legal/Process/Policy

Task 20. Steps and Costs to Acquisition

All information available with respect to the most recent transfer of electric utility operations from an investor-owned utility to a public power agency in the Pacific Northwest may be drawn from the Jefferson Co. public utility district's successful purchase of Puget Sound Energy's distribution assets, the first new public electric utility established in Washington state in over 60 years. The steps and costs for a COBI acquisition of PSE facilities will most likely follow a somewhat similar path to success. The process of that transaction will be fully evaluated and considered in the context of COBI's proposed acquisition of PSE distribution assets, in combination with assessment of the power supply options that may be provided by BPA, or various combinations of power supply sources and to-be developed renewable resources. Information will be solicited on the net costs of the process, especially administrative and legal expenses that may necessarily be incurred by COBI if electing to move forward on acquisition.

Task 20 Deliverables

- Acquisition Process Report

Task 21 Presentations

Mr. Rogers and Mr. Lovas will be present on Island to present or assist COBI in the presentation of the findings of the work under contract. Both Mr. Lovas and Mr. Rogers have years of public hearing, Board, and technical conference presentation experience.

Task 21 Deliverables

- Three presentations at COBI Public Meetings

Task 22. - Comparison of Three Possible Utility Structures

We will prepare a matrix comparing three forms of not-for-profit utilities (municipal, public utility, district and cooperative), how they are similar to and/or differ from each other, and the relative advantages and disadvantages. Separately, the steps required for their formation and their relative availability to provide electric service to Bainbridge Island will be assessed by legal counsel.

Task 22 Deliverables

- Ownership Options Comparison Report

Experience on Similar Projects

Acquisition proposal – Electric Cooperative acquiring municipal (Chugach Electric/Anchorage Municipal Light & Power, early 1990's). Developed feasibility analysis based on financing requirements, staffing adjustments, plant upgrades and refurbishments, alternative resource options, structural operating arrangements involved with third party resources (acquired joint ownership of hydroelectric facility), determination of consolidated revenue requirements and rate impacts, and administrative structure analysis. Not successful, reverted to joint ownership relationship on resources and resource selection.

Acquisition proposal – Electric cooperative consolidation (Chugach Electric/Matanuska Electric, mid-1990's). Proposed acquisition of wholesale power purchaser with partial ownership of resources. Considered service area obligations, transmission requirements, power sales agreement revisions, and staffing and organizational arrangements. Not successful and ceased wholesale arrangement for alternative resources.

Acquisition proposal – Electric cooperative acquire municipal utility (Chugach Electric/Seward Electric System, mid-1990's). Assessment of municipal utility wholesale customer, evaluation of plant and equipment for standards and condition upgrade, alternative power supply for reliability, upgrade transmission requirements. Not pursued upon receipt of state funds for transmission upgrade and reliability improvements, including interruptible arrangement and on-site backup facilities for service continuity.

Privatization of major military installation – 2005. Successful, providing staffing for system operations, bulk power and landfill gas generation and distribution system reliability improvements. EPS currently provides line operations, substation operations, and all engineering support for the privatized utility.

Ownership opportunity consideration – 2015. Municipal utility considering negotiated sale of utility to cooperative or investor-owned utility, or remain municipal enterprise. Under discussion for potential transfer, in process, status not resolved.

Bulk power supply options – Numerous utility wholesale power arrangements, both purchase and sale negotiations and implementation, including new renewable (hydroelectric) resource development (1991), wholesale firm and interruptible agreements, relocation of units for combined-cycle efficiency gains with secondary industrial off-take, wind and solar power facility evaluation including storage, feasibility analysis and power cost studies through 2002.

Hydroelectric system staffing, financing, and refinancing of Four Dam Pool Power Agency 2002-3, serving three municipalities and two cooperatives, partially interconnected, coordinated major transmission addition and effective consolidated operations.

Work included early 1980's **implementation of Northwest Power Act**, relationships of IOU's and public power, power exchanges, rate structure revisions, wholesale power contract revisions and rate structure revision, hydroelectric system optimization and PNW regional power supply planning.

Schedule

Notice to Proceed - May 2, 2016

Data Request Into PSE - May 16, 2016

Data From PSE - June 1, 2016

30% Interim Report - August 1, 2016
60% Interim Report - September 1, 2016
Draft Final Report - October 3, 2016
Final Report - October 17, 2016

COBI Presentations as desired during the time line by the Owner. EPS recommends that periodic reports or working meetings be presented to the COBI Board during the course of the project.

Schedule is highly dependent on the availability of data from PSE or other sources. Generating all of the data (Estimate A Case) will extend the schedule significantly.

Cost

With the unknowns with regard to the cooperation COBI may receive from PSE, there is a wide variation to the cost of the project. In general, if the contractor has to “mine” all of the data, walk all of the lines, inventory all of the existing meters, EPS does not believe that COBI has the budget to complete the project as specified (Estimate A). If data is available from PSE (system maps, long range and construction work plans, meter and load data, etc.), the work requested in the RFP is highly do-able within a reasonable budget.

Alternatively, if the budget constrains the project, scope can be reduced to develop a “Reduced Scope Analysis” that will identify, within reasonable bounds, the issues associated with the acquisition of the PSE facilities on Bainbridge Island, and the costs associated with the formation of the electric utility, albeit with a larger degree of error. These cases are reflected in Estimate B.

These two estimates are provided here for the COBI’s information.

Estimate A - Generation of all System Data without cooperation from PSE

Task 1 - Boundary Map \$15,000 (72MH)
Task 2 - Load Projections/Load Development \$18,000 (88MH)
Task 3 - Facility Assessment/Utility Planning \$93,000 (488MH)
Task 4 - Utility Boundary \$1,500 (8MH)
Task 5 - Existing System Assessment \$51,500 (336MH)
Task 6 - BPA Purchased Power/Wheeling Issues \$9,500 (40MH)
Task 7 - BPA Programs \$7,000 (32MH)
Task 8 - IT Systems - Billing, Outage, Dispatch, SCADA \$6,000 (54MH)
Task 9 - Plant Valuation \$15,000 (72MH)
Task 10 - Economics of Acquisition \$5,000 (24MH)
Task 11 - Revenue Requirement Model \$13,000 (64MH)
Task 12 - Financing Options \$6,000 (24MH)
Task 13 - Rate Comparisons \$5,000 (24MH)
Task 14 - Other Acquisitions \$7,000 (24MH)
Task 15 - Operational Risks \$5,000 (24MH)
Task 16 - Socially Responsible Initiatives \$1,500 (8MH)
Task 17 - Synergies \$3,500 (16MH)
Task 18 - Carbon Tax Effect \$7,000 (32MH)
Task 19 - Economic Rent Analysis \$2,000 (8MH)
Task 20 - Steps to Acquisition \$5,500 (16MH)
Task 21 - Presentations \$17,000 (90MH)
Task 22 - Matrix Comparison - Utility Structures \$2,000 (8MH)

Total Cost (Effort) = \$296,000 (1552MH)

Estimate B - PSE Provided Data OR Reduced Scope/ level of investigation

Task 1 - Boundary Map \$10,500 (50MH)
Task 2 - Load Projections/Load Development \$7,000 (34MH)
Task 3 - Facility Assessment/Utility Planning \$49,000 (258MH)
Task 4 - Utility Boundary \$1,500 (8MH)
Task 5 - Existing System Assessment \$36,500 (224MH)
Task 6 - BPA Purchased Power/Wheeling Issues \$9,500 (40MH)
Task 7 - BPA Programs \$5,000 (24MH)
Task 8 - IT Systems - Billing, Outage, Dispatch, SCADA \$6,000 (54MH)
Task 9 - Plant Valuation \$5,000 (24MH)
Task 10 - Economics of Acquisition \$3,500 (16MH)
Task 11 - Revenue Requirement Model \$8,000 (40MH)
Task 12 - Financing Options \$6,000 (24MH)
Task 13 - Rate Comparisons \$3,500 (16MH)
Task 14 - Other Acquisitions \$7,000 (24MH)
Task 15 - Operational Risks \$5,000 (24MH)
Task 16 - Socially Responsible Initiatives \$1,500 (8MH)
Task 17 - Synergies \$3,500 (16MH)
Task 18 - Carbon Tax Effect \$3,500 (16MH)
Task 19 - Economic Rent Analysis 1,000 (5MH)
Task 20 - Steps to Acquisition \$5,500 (16MH)
Task 21 - Presentations \$17,000 (90MH)
Task 22 - Matrix Comparison - Utility Structures \$2,000 (8MH)

Total Cost (Effort) = \$197,000 (1019 MH)

Client References

Darron Scott - CEO, Kodiak Electric Association, Inc.
dscott@kodiak.coop
(907) 486-7739

Tuan Tran - Director of Engineering, Seattle City Light
Tuan.Tran@seattle.gov
(206) 459-0906

John Handeland, CEO/General Manager, Nome Joint Utility Systems
johnh@njus.org
(907) 443-6302

Attachments:

Letters of recommendation
Rates
Resumes

Dear Sir,

April 12, 2016

I am very pleased and honored to offer this letter of reference and recommendation for Electric Power Systems (EPS). I first started working with EPS in 2007 on the upgrade and change over of the electric power distribution system from 2400V Delta to 14.4K V Wye for Doyon Utilities on Fort Greely. This upgrade brought Fort Greely out of the 1940's in to the modern era with a new substation and the proper switchgear and protection relays needed, to new poles and transmission lines. At the same time that was being done there was an extreme make over to the power plant that was happening, providing 2 new Caterpillar generators and all the associated switchgear and equipment to match the new upgraded power distribution system so 3 of 5 worn out units that started Fort Greely could be retired. EPS also provided a new HVAC system for the power plant which helped with the cooling and heating of the plant, cooling for the new generators and also make up air for the steam boilers.

From that point on EPS has done numerous jobs to include 3 new generators and equipment at Black Rapids Training Site that is a remote site that runs solely on generation, new SCADA systems, upgrades to the 2 remaining generators at the power plant to help convert them to electronic governors and to change the voltage output to match the new generators in the plant, and so many more projects that could be listed.

All the people that I have worked with at EPS are high qualified and knowledgeable of what they do, they are all professional, courteous, detail oriented, and commitment to customer service. Their service is outstanding it has never been a time day or night when I have needed them that I have not been able to get a hold of one of them, they have even returned my calls even when they have been on vacation. I can not say enough about the support that EPS has provided. There has never been a company that I have worked with in my 20 years in the trade that even comes close to EPS. I would highly recommend them for any job any size without hesitation.

Sincerely,



Tim Castleberry

Power Plant/Substation Electrician

Doyon Utilities LLC

Fort Greely, Alaska

Office: (907)-869-4298

Cell: (907)-322-3777

PUBLIC UTILITY DISTRICT No. 1 *of Whatcom County*

P.O. Box 2308 • 1705 Trigg Road
Ferndale, WA 98248
P: (360) 384-4288 F: (360) 384-4849
email: info@pudwhatcom.org
www.pudwhatcom.org

December 8, 2015

RE: Letter of Recommendation for Electric Power Systems Inc.

To Whom It May Concern:

Public Utility District No.1 of Whatcom County (Whatcom PUD) has prepared and allowed public distribution of this letter as a confirmation and recommendation of the quality of the utility engineering, consulting and design services provided to Whatcom PUD by Electric Power Systems Inc. (EPS).

By way of background, Whatcom PUD supplies electric energy & process water to major industrial customers within Whatcom County, Washington. These customers include two oil refineries, an aluminum smelter, a major generating plant, and other smaller operations. On the electric utility side, we serve one refinery and self-serve our two large industrial water treatment plants. We are a continuous 24/7 operation. A highly reliable, non-interrupted supply of electric power and industrial grade water is critical to our customers' operations. Un-anticipated disruptions in supply are un-acceptable and, if they occur, can impact our customers' financially and potentially create life safety issues for their employees.

As a utility with a small number of staff, we rely heavily on the services provided to us by outside engineers, consultants, and contractors. The quality of these outside services providers' work greatly influences Whatcom PUD's ability to meet customers' high service reliability needs. With the above in mind, Whatcom PUD can, without reservation, recommend EPS.

Whatcom PUD initially contacted EPS to act as Owner's Engineer to assist the PUD's electric system personnel, who were dealing with design and constructability issues associated with a substation redesign project. This project was initially designed by another engineering firm. EPS was brought in under difficult circumstances, late in the project, to assist with troubleshooting analysis, consulting advice, and re-design of protective schemes.

EPS responded quickly to our request and sent a team of experienced, highly qualified personnel to the project site to assist PUD staff in coordination with the project general contractor and subs. The end result was successful completion of the project, which had been in danger of going off the rails. Since then, we have entered into a multiyear professional engineering services agreement with EPS. The company is currently engaged in a number of projects associated with the PUD's substations and 115 kV transmission line & structures.

1 | Page

Commissioners: Paul Kenner, Jeff McClure, Mike Murphy • Stephan (Steve) Jilk, General Manager

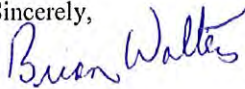
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email: info@pudwhatcom.org
www.pudwhatcom.org

We continue to be pleased with EPS's understanding and responsiveness to our needs; the quality and knowledge of their personnel; and the constructability of their design solutions.

If you have any questions regarding EPS's work for Whatcom PUD, please don't hesitate to contact me.

Sincerely,



Brian Walters

Director of Utility Operations
Public Utility District No.1 of Whatcom County
1705 Trigg Rd
Ferndale, WA 98248
360-384-4288 etx.25



NOME JOINT UTILITY SYSTEM

a component unit of **CITY OF NOME**

P.O. Box 70 • Nome, Alaska 99762 • (907) 443-NJUS • Fax (907) 443-6336

October 6, 2014

**RE: ELECTRIC POWER SYSTEMS
LETTER OF REFERENCE AND RECOMMENDATION**

To Whom It May Concern:

Nome Joint Utility System (NJUS), a component unit of the City of Nome, operates both the electric generation/distribution and water/wastewater utilities in our community. Electric Power Systems (EPS) has served as our engineer of record for more than a decade. While initially we utilized their services for electric distribution design, we were fortunate enough to be able to construction a new \$35 million power generation facility to replace our 50+ year old plant with a new integrated facility to serve all of our operational needs. EPS was selected to serve as lead designer for all facets of the project based on their knowledge of our system and the superior service, workmanship and support they had long provided. And, we then determined to use them for construction management to complete the project. The new plant has now been successfully operating for over 5 years.

As with all public entities, we are constantly under pressure to provide reliable service and curtail costs. EPS has been instrumental in us achieving these goals, and we continue to rely on their talent and expertise as we have developed additional infrastructure. The most recent addition to our generation mix was two 900kW wind turbines and the total replacement of control systems and switchgear in our standby diesel plant. EPS was enlisted to undertake all of the design, and the construction of the wind integration and switchgear replacements.

Additionally, we have begun using EPS extensively for solutions in our water/wastewater system. They have designed, built and replaced antiquated control panels for many of our lift stations. Many problems that we have simply lived with for years have been diagnosed and repaired by their capable team.

We are also extremely pleased with the work EPS has done in development of a SCADA system that integrates all facets of our operations. From monitoring water wells and the distribution and collection system to the operation of our power plant engines, air handling, switchgear and fuel farm – all can be controlled from a single point, and has resulted in enhanced operation, reduced personnel, and more immediate troubleshooting.

Above and beyond their design, construction and SCADA work, we have found EPS to be extremely responsive to providing immediate support during any time of system malfunction. They are readily available, and their personnel are knowledgeable, helpful and always courteous (even if the call is at 2am)!

It is without reservation, and actually with great pleasure, that I endorse EPS and its family of companies. While I would like to think we get special service, I know our experience is shared by each and every client in their portfolio. You will be most pleased with the services and support they can provide and I would be happy to further discuss our experience and their attributes. Feel free to contact me directly – (907) 443-6302, or by e-mail: johnh@njus.org.

Sincerely,


John K. Handeland
General Manager/Chief Operating Officer
NOME JOINT UTILITY SYSTEM

*Providing reliable utility services to system rate payers efficiently and economically by
prudently operating and maintaining system assets in a fiscally responsible manner*



Electric Power Systems, Inc. Fee Schedule

Valid through 12/31/16

Testimony, deposition/expert witness	\$416.00
Engineer XII	\$221.00
Engineer XI	\$205.00
Engineer X	\$190.00
Engineer IX	\$174.00
Engineer VIII	\$167.00
Engineer VII	\$160.00
Engineer VI	\$154.00
Engineer V	\$148.00
Engineer IV	\$139.00
Engineer III	\$124.00
Engineer II	\$111.00
Engineer I	\$103.00
Project Manager VI	\$205.00
Project Manager V	\$190.00
Project Manager IV	\$174.00
Project Manager III	\$167.00
Project Manager II	\$160.00
Project Manager I	\$154.00
Engineer Tech VI	\$167.00
Engineer Tech V	\$154.00
Engineer Tech IV	\$133.00
Engineer Tech III	\$115.00
Engineer Tech II	\$101.00
Engineer Tech I	\$86.00
ROW Manager	\$170.00
ROW Senior Agent	\$147.00
ROW Agent	\$106.00
ROW Assistant	\$78.00
Professional Land Surveyor	\$159.00
Expeditor	\$86.00 ST / \$113.00 OT
Clerical	\$59.00
Office Manager	\$73.00

1. The above listed rates are per hour.
2. The fee schedule is subject to review on January 1, 2017, and on January 1 of each year thereafter.
3. Expenses incurred, as necessary part of engineering services under this contract will be billed at cost plus 10%. Incidental expenses, such as computer usage, local phone service, and copying are included in the above rates. If Per Diem is utilized (vs. expenses and markup), it will be at the Federal Rates.
4. Services and materials purchased by Electric Power Systems, Inc. at the request of the owner will be billed at cost plus 10%.
5. Services and materials provided by other Engineered Solutions Group, Inc. companies will not be subject to intra-company markup, and are subject to the above fee schedule.
6. Interest at the rate of 1.5% per month (less, if restricted by law) may be charged for invoices greater than 60 days past due.

Electric Power Systems, Inc.
 A division of Engineered Solutions Group, Inc.
 3305 Arctic Blvd., Suite 201, Anchorage, AK 99503
 Phone (907) 522-1953, Fax (907) 522-1182, www.esgrp.net



Energy & Resource Economics

Alaska Business License No. 721653

Professional Services Fee Schedule – Effective January, 2016

Principal Consultant:	Thomas A. Lovas	
	Economic Consultation	\$185/hr.
	Testimony, Depositions, Expert Witness	\$233/hr.
Associates:	As required	
	Modeling, Finance, Engineering & Other	\$180/hr.
Assistants:	As required	
	Accounting/Data Analysis	\$153/hr.
	Billing/Accounting/Administrative	\$ 67/hr.
Direct Expenses:		
	Travel, incidentals, non-labor expenses and materials	Actual Cost + 10%.

Rates subject to change annually.

5840 Azalea Drive
Anchorage, AK 99516-4362

(907) 345-5116
(907) 351-7846



Daniel C. Rogers, PE

4020 148th Ave NE
Redmond, WA 98052
(907) 244-7584 (Voice)
(907) 522-1182 (FAX)
drogers@epsinc.com

Professional Registration

Electrical Engineer - Alaska EE-7959, Washington EE-37065

Electrical Adminsitrator – EA1208 (assigned to Electric Power Constructors)

Professional Experience

Electric Power Systems, Inc.

Anchorage, AK

Principal Consulting Engineer, Co-Founder

Principal with Electric Power Systems, Inc. An engineering consulting firm with offices in Anchorage, and Juneau, Alaska and Redmond, Olympia, and vancouver, Washington. EPS has over 150 employees in electrical and mechanical engineering and provides consulting, design and construction services to utility and industrial customers in Alaska, Washington, Hawaii and the South Pacific.

Project manager for various system studies on 34.5 kV – 230 kV kV transmission systems involving transmission losses, metering stability, voltage control and realibility assessments..

Project manager on load flow, coordination, and loss study for the Alyeska Pipeline Marine Terminal in Valdez, Alaska.

Project manager for over 50 substation designs from 12.47 kV through 230 kV.

Completed the feasibility design and analysis for a 1,100 MW IPP development in the State of Washington for Tacoma Power.

Completed the design and construction of 24 MW power plant in Nome, Alaska, a 3 unit (6 MW) unit replacement in Naknek, Alaska, and an 8 MW, 2 unit replacement in Kodiak, Alaska.

Completed power system studies, analysis, design and construction management. Completed power system protection and control designs, substation design and automation and integrated control designs and long range plans.

Project Manager for over 200 distribution line extensions for subdivisions and utility system improvements.

Analyzed transient stability events, investigated Bradley Lake Governor modeling and reactions. Defined transient stability cases for verifying EPS governor model.

Completed relay coordination studies for the Kodiak, AEL&P, Copper Valley Electric, Sitka, THREA, Nome, Cordova, Chugach Electric, Homer Electric and Agrium.

Integrated Power Technologies, Inc..

Anchorage, AK

Design Engineer

Developed a microprocessor-based relay hardware and software system and applications that was licensed to Cooper Power systems, and is currently being marketed as the Form 6 recloser and ProView realy system.

1996 to Present

1994 to 1996

1992 to 1994	Chugach Electric Association, Inc. Anchorage, AK <i>Manager, Facilities Engineering</i> Responsible for engineering support for 12.47 kV - 230 kV distribution/transmission system. Developing and reviewing operating guidelines for distribution, transmission and interconnected system, Five-Year Work Plan and Long Range Plan project identification and review. Substation design and construction. Protective relaying projects and settings. System stability studies, 12.47-230 kV outage and trouble analysis. Sectionalize studies, NESC code violation investigations and corrections.
1989 to 1982	<i>Station/Protection Engineer</i> Responsible for REA Two Year Work Plan, voltage drop studies, sectionalizing studies, short circuit studies, and substation design construction and operation support. Transmission and subtransmission design and operation support. Relay settings and fuse coordination, 34.5 kV-230 kV disturbance analysis.
1985 to 1987	<i>Site Engineer</i> Responsible for construction management and design during construction of two 138/230 kV, 300 MVA substations, miscellaneous substation projects.
1987 to 1989	Schweitzer Engineering Laboratories, Inc. Pullman, WA <i>Electrical Engineer</i> Responsible for the specification, design, and implementation of microprocessor-based protective relays, including the 221G/121G variations, 221/121C, 221/121F, 221/121D, and the initial specification of the 3xx series of relays. Provided customer service and application support as a part of an engineering staff of 4.
1979 to 1985	Education University of Alaska, Fairbanks Fairbanks, AK Masters, Electrical Engineering - 1985 B.S., Physics - 1985 B.S., Electrical Engineering - 1983

THOMAS A. LOVAS

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Anchorage, Alaska
99516-4362

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(907) 351-7846 (cell)
tlovas@acsalaska.net

OVERVIEW: *Mr. Lovas has served the energy industry for nearly three decades, providing expertise in a wide range of activities in electricity and natural gas. His experience includes: electricity production by hydro, coal and natural gas; power transmission and distribution; power and fuel contracts; regulatory processes; energy research; and, administrative services.*

EMPLOYMENT HISTORY

Energy & Resource Economics, Anchorage, AK Present

Consulting services for the energy and resource industries, providing business planning, rate studies, financial and economic analysis for administrative and operating purposes.

The Four Dam Pool Power Agency, Anchorage, AK Nov. 2002 – June 2004

Chief Executive Officer: Administrative officer of newly-formed public power agency for the ownership of four Alaskan hydroelectric facilities providing 74 MW of non-interconnected priority power to two electric cooperatives and three municipal utilities. Established agency headquarters, developed all financial reporting and analysis systems, prepared the fixed asset allocation and depreciation methodology for acquired plant (booked at \$68 million) and coordinated facility operations while accomplishing all federal and state regulatory requirements. In addition:

- Successfully transferred to the Agency the ownership and construction management of a major (\$90M) transmission interconnection project
- Developed new indenture of trust and official statement for public debt offering
- Demonstrated financial strength and stability to support expanded credit facilities

Chugach Electric Association, Inc., Anchorage, AK Dec. 1985 – Nov. 2002

Manager, System Development and Corporate Planning: Prepared strategies for General Manager and Board of Directors to achieve dependable, low-cost electricity with financial integrity. Business planning for \$180 million in revenue from sales of 2.27 billion kWh to 73,000 retail meters, three distribution cooperatives and two municipalities.

- Strategies for fuel and power purchase and sale, negotiation and administration
- Capital improvement criteria and evaluation, financial analysis and forecasting
- Generation and transmission resource alternatives, FERC licensing
- Natural gas, coal and alternative fuels contracts and analysis
- Advanced technology evaluations for efficiency and reliability
- Inter-utility coordination, transmission and reliability arrangements
- Board advisories, association, legislative and regulatory agency testimony
- **Vice-Chair:** Solid-Oxide Fuel Cell Commercialization Association

Thomas A. Lovas

- **Chair:** Reliability Criteria Committee, Alaska Systems Coordinating Council
- **Chair:** Policy, Planning and Communications Task Force, Cooperative Research Network (CRN) of NRECA & Member, Cooperative Research Committee

Director, Energy Supply: Executive responsibility for all operations and maintenance of natural gas and hydroelectric generation facilities (512 MW) and jointly owned hydroelectric facilities (47 MW). Administered \$57 million budget for facilities, personnel, fuel (natural gas) supply and purchased power. Labor contract negotiation, workforce reliability management, power station upgrades and maintenance service to others, initiated non-traditional energy programs (fuel cells, microturbines, battery storage, wind).

- **EPRI Research and Development Award** for 1 MW fuel cell commercialization
- **Chair:** Power Supply Task Force, CRN/NRECA

Manager, Planning and Rates: Prepared and supervised wholesale and retail rate applications and regulatory proceedings while developing planning/forecasting models.

- **Member and Chair:** Alaska Intertie Operating Committee
- **Budget Subcommittee Chair:** Hydroelectric Project Management Committee
- **Member:** Integrated Resource Planning Subcommittee, G&T Managers Assoc.

The Montana Power Company, Butte, MT

May 1980 – Dec. 1985

Supervisor, Planning Economics: Advised senior management and provided regulatory liaison for resource and power rate matters, regional power planning, power contracts and rates, planning objectives, reliability and cost-effectiveness criteria.

Pacific Gas and Electric Company, San Francisco, CA

Sept. 1978 – May 1980

Analyst for Vice-President, Rates and Valuation, Electricity and Natural Gas Services

Washington State University, Pullman, WA

Feb. 1970 – Sept. 1978

Operations Manager, Reactor Supervisor and Technician

Nuclear Regulatory Commission License #SOP 2044

EDUCATION

Master of Arts, Economics (Public Utility) – June 1977

Bachelor of Arts, Economics (with Distinction) – June 1973

Washington State University, Pullman, Washington

NRECA Management Internship Program – May 1992

University of Nebraska – Lincoln/National Rural Electric Cooperative Association

AFFILIATIONS

Resource Development Council for Alaska

Junior Achievement of Alaska

Alaska Chapter, Intl. Assoc. for Energy Economics

Rotary Club of Anchorage

A Proposal for

City of Bainbridge Island, WA

Electric Utility Municipalization Feasibility Study

Date 04/13/2016

From Schneider Electric



Empowering the
Utility of Tomorrow with the
Smartest Scalable Solutions,
Products and Services
Today.

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Electric™

Cover Letter

April 13, 2015

Barry Loveless
Director of Public Works
City of Bainbridge Island
280 Madison Ave N
Bainbridge Island, WA 98110

Dear Mr. Loveless:

Schneider Electric appreciates the opportunity to participate in the City of Bainbridge Island's request for proposal for an electric utility municipalization feasibility study. My colleagues and I look forward to helping the City, its leaders and citizens assess the potential costs and benefits of taking direct control of Bainbridge Island's electric utility.

Schneider Electric provides independent utility consulting and energy management services across the US leveraging more than 1,500 professionals. In addition to Schneider Electric's local resources in our Mercer Island office, our team also includes Steve Marshall, former assistant general manager of Snohomish County PUD and former chief counsel to Puget Sound Energy and Baker Tilly, a respected accountancy specializing in utility accounting and valuation. This group brings the best experience across regulatory, financial, operational and technical aspects of forming and running an electric utility. As you and your colleagues review our submittal we would like to draw your attention to a few of specific areas:

- 1) **Depth and breadth of experience** - Our team has demonstrated experience to effectively address all the tasks identified in your request. The team has first-hand experience with projects similar to what is requested by the City of Bainbridge Island.
- 2) **Global expertise complemented with local knowledge & support** - This project team leverages the global experience of Schneider Electric and local familiarity with Washington and Bainbridge Island's energy challenges. Our team is participant in the Pacific Northwest's energy conversations and offers our contacts at the Bonneville Power Administration, other utilities and elsewhere.

3) **We are excited about your project** – Schneider Electric has been following the citizen initiatives on Bainbridge Island and is eager to participate in the process. Our firm works with both municipal and investor-owned utilities. We help both address the challenges created by a rapidly changing energy sector. Cities like Boulder, Colorado and others have turned to Schneider Electric to address the same questions facing Bainbridge Island. We know the challenges and opportunities the City of Bainbridge Island will face during a municipalization process. Given this experience and independence, Schneider Electric is in the best position to perform this feasibility study accurately and efficiently.

Upon review of our response, please feel free to follow up with me as your point of contact for questions or additional information. We look forward to speaking with you and we hope to serve the City of Bainbridge Island in the near future.

Best regards,

Austin Collins

Austin Collins
Principal,
Schneider Electric Utility Consulting Services,
5725 SE 24th St, Suite 470
Mercer Island, WA 98040
Austin.Collins@Schneider-Electric.com
1-512-648-0067

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Summary of Qualifications and Experience

Schneider Electric has more experience and resources applicable to the City of Bainbridge Island's electric utility questions than any other firm. Here is a brief summary of our relevant qualifications:

"Qualified to obtain, analyze and interpret key energy data pertinent to COBI"

The most reliable and efficient means for obtaining COBI energy data will be from Puget Sound Energy (PSE) or from a direct field survey of the electric utility infrastructure. The Schneider Electric team is qualified to execute either approach.

Our team's access and contacts at PSE and the Washington Utilities and Transportation Commission (UTC) provide the best chance of obtaining the relevant system information (such as continuous property records).

If system records are unavailable or unreliable, Schneider Electric's local operations and engineering team has the tools and experience necessary to safely and accurately survey the COBI system. The City's electrical footprint is modest compared to other utilities modeled and maintained by the Schneider Electric team.

"Qualified to make recommendations for preferred alternatives related to municipal electric utility formation options"

Schneider Electric works with all forms of public and private electric utilities. Our team includes a former public utility district general manager, investor-owned utility general counsel, and municipal electric utility executive. Our team includes lawyers, accountants, managers and engineers who have provided utility formation options to communities like Boulder, Colorado and Plymouth, Wisconsin (similar in size to Bainbridge Island).

In our recommendations we will also provide operational alternatives such as asset sharing and mutual aid agreements with nearby utilities like Tacoma Power and Seattle City Light.

“Qualified to evaluate and value electric distribution facilities”

The combined experience and qualifications of Schneider Electric’s local engineering staff and Baker Tilly’s accountants is unmatched in the assessment and valuation of distribution facilities. Either through direct survey or review of PSE property records, our team knows what to look for to reliably estimate the book value of the current system and to determine the need for any future upgrades. Our in-house data of comparable systems, values and acquisition costs will increase the confidence in our valuation and reduces the City’s cost to obtain it.

“Qualified to opine on applicable state and federal laws and studies of municipal acquisition projects”

Project members Steve Marshall and Jeff Stanek each have over a decade of experience in Federal and Washington state regulations and legislation affecting the power industry. Mr. Stanek recently completed a comprehensive analysis of Federal regulations and statutes affecting transfer of ownership of traditional and distributed energy infrastructure. Similarly, Mr. Marshall’s work with Washington’s UTC and public power associations keep him abreast of relevant trends and filings.

“Have thorough knowledge of regional wholesale power suppliers, transmission availability and alternative energy policies”

Schneider Electric provides energy management services to hundreds of large industrial customers with facilities in the state of Washington. Wholesale rates, transmission availability and alternative supply are core to our energy management services. Through this offer we actively monitor wholesale markets within the Western Electricity Coordinating Council including the BPA. We have the data and tools necessary to conduct the long-term modeling requested in the City’s RFP.

“Qualified to perform economic feasibility analysis related to preferred municipal and supply options”

Schneider Electric routinely provides complex long-term economic and business case models to our utility customers. Our team brings experience and perspective from large public power entities like Seattle City Light, Snohomish County PUD, Eugene Water & Electric Board (EWEB), CPS Energy, Austin Energy and others.

List of completed municipalization feasibility studies:

Contact company	City of Boulder Colorado
Project	Electric System Municipalization Analysis
Year completed	Ongoing
Acquisition Outcome	Outcome Pending
Contact company	Village of Rockton, IL
Project	Electric System Municipalization Analysis
Year completed	2009
Acquisition Outcome	Acquisition not completed
Contact company	City of Plymouth, WI
Project	Analysis of Sale of Municipal Electric System to Investor-Owned Utility
Year completed	2010
Acquisition Outcome	Citizen-Proposed sales was deemed not economically advantageous
Contact company	Milwaukee Regional Medical Center
Project	Hospital acquired local infrastructure from investor-owned utility
Year completed	2016
Acquisition Outcome	Successful Acquisition

Additional references provided in reference appendix.

Project Approach

Task	Month Week	June				July				August				September			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
0	Kickoff																
1	Boundary Map																
2	20yr load forecast with DG, EE, DR with BPA																
3	Local facility needs and PSE improvement forecast																
4	Severance issues at boundaries																
5	Distribution facility assessment, smart meter count																
6	BPA availability and rates																
7	EE, DR, DG requirements/programs from BPA vs PSE																
8	Utility business systems and costs																
9	Book value estimate																
10	Economic evaluation of municipal ownership																
11	Revenue requirement forecast																
12	Financing mechanisms																
13	Benchmarking: Rate analysis and governance																
14	System acquisition comparisons																
15	Operational risks																
16	Social initiatives																
17	Local synergies																
18	BPA vs PSE Carbon cost																
19	Rate differential investment options																
20	Legal and regulatory steps and timeline																
21	Public meetings																
22	Utility entity comparison																

The above graphic is Schneider Electric's initial estimate for our project schedule based on the COBI RFP. If during discussion with project stakeholder our understanding changes, we will adjust the project resource and delivery plan accordingly.

Project Management

Kickoff meeting

The kickoff meeting will set the tone for the project. It will establish benchmarks for completion of project segments and facilitate discussion of project issues, cost-of-service, rate design philosophies, and outline specific project requirements. Points of responsibility will be established within the project team, City management, and stakeholders to help the project run smoothly and provide maximum value.

Project workplan approval

This proposal includes a preliminary project plan that we have developed based on our experience performing similar studies. As part of the project kickoff, we will discuss our proposed work plan with management, revise as needed, and obtain management's concurrence with the final draft prior to initiating project fieldwork.

The detailed project steps include:

1. Attend project kick-off meeting with management and other stakeholders
2. Establish points of contact and responsibility for team members
3. Agree on project milestones
4. Establish communication protocols and frequency
5. Discuss project logistics
6. Initiate web-based project tool protocols
7. Finalize project workplan with management's approval
8. Discuss the initial data request

Proven project management methods

Our proven project management methodology has been successfully performed many times on projects of all sizes by our experienced team. Our project management approach is driven by the work plan for this project and includes regular internal team meetings, status updates, commitment to timelines, and frequent, structured communications with the client.

Data management tools and sharing of documentation

We utilize a client secure file transfer protocol (FTP) tool which provides a firewalled data management solution for all project working papers. This internet tool allows sharing by project team members no matter their location, and access to working papers can only be made by individuals pre-approved by the project manager so the security of the project files is assured. We will provide the COBI project manager with system access to our working papers so that individuals can access our working papers in real-time as needed through the project management tool.

Our combined team welcomes ongoing COBI staff participation, with an emphasis on upfront project planning and data gathering and also on back-end reporting and analysis activities.

Communication plan

We believe that communication is a key ingredient to project management and overall project success. We have developed a range of tools on past successful projects that facilitate communication among the project team, project stakeholders, and executives. Our communication plan will be tailored to this project. An example of a communication plan proven successful in the past and one we propose for this project is shown as follows:

Communication tool	Weekly reporting	Monthly reporting	Other reporting and information
Project kickoff meeting and charter			√
Communication plan			√
Status reports (at to-be-confirmed intervals, bi-weekly minimum) via phone conference or e-mail	√	√	
Project issues log (as needed) supplied to the Commission project manager for delays or other project risks			√
Information request logs			√
Preliminary report discussions and meetings			√
Final report presentation and meetings			√
Project close meeting			√

Task Descriptions

Engineering/Facilities/Network (Tasks 1-7)

Task 1 – Prepare a boundary map of the proposed service area.

Approach:

Schneider Electric (Schneider) Geospatial Services partners with ESRI and is a leader in utility graphical information systems (GIS). Our ArcFM™ Solution is currently in use at public and private utilities worldwide, such as:

- Truckee Donner Public Utility District
- Beaches Energy Services
- Benton Public Utilities District
- Dakota Electric Association
- DONG Energy
- Green Mountain Power
- Intermountain Rural Electric Association
- Jackson Energy Authority
- Jacksonville Electric Authority
- City of Peoria Municipality
- Maine Fiber
- City of Colorado Springs
- Digital West
- Kissimmee Utility Authority
- City of Loveland Water and Power (CLWP)



Schneider will work with City of Bainbridge Island (COBI), PSE and third-parties to obtain relevant graphical information system (GIS) data to create a boundary map. Local Schneider engineers will confirm the accuracy of key elements of the data during field verification. The boundary map will identify transmission, substation and distribution system facilities within the boundary as well as nearby sources of possible interconnection. If PSE GIS information is not available, a direct field survey will be used to locate and document infrastructure.

Project Deliverable: The boundary map described above will be available in printed and electronic (ArcGIS Online, KML/KMZ or similar) format. Schneider will work with COBI to determine the appropriate level of detail and most cost effective platform depending on COBI's expected use cases for the map.

Task 2 – Prepare 20-year projections of electrical load and number of customers

Approach:

Schneider will work with COBI to obtain the relevant clients that are currently served in the load zone by COBI. Schneider has extensive experience with major investor owned utilities (IOU) in gathering unique data sets from very disparate systems including account and meter numbers, customer identifiers unique to each IOU (such as bill codes and rate classes), and other load information.

Schneider will then use its databases to “map” accounts to client segments, using such attributes as North American Industry Classification System codes and other building information, to create a footprint of similarly situated customers. This allows unique baselines to be tailored for each individual segment which are subsequently aggregated to develop a utility profile.

In addition to the current footprint, Schneider will create a series of scenario analyses that also incorporate various supply (distributed generation, renewables) and demand (energy efficiency, demand response) options and allow COBI to best determine how various programs can affect these profiles.

In the last several years, Schneider has worked with different entities from large investor-owned utilities (Duke Energy) to similarly situated municipalities (City of Boulder, Fort Collins) that have had challenges pulling existing data from their own systems (or that of others) while trying to gauge the impacts of new initiatives. In each instance, our clients have commended Schneider for its ability to gather, analyze and provide reporting, as well as work collaboratively to incorporate utility planning into such models.

Project Deliverable: Schneider will deliver an MS Excel based model projecting customer meter counts, energy and capacity loads, distributed energy resource (DER) penetration, and load shapes for 20 years by customer category.

Task 3 – Identify necessary facilities, required improvements and ownership implications for future five (5) and fifteen (15) year periods.

Approach:

Schneider will leverage its access at PSE and the Washington Utilities and Transportation Commission (UTC) to obtain the property records and capital improvement plans for assets within the COBI territory. If not available, local Schneider electric engineers will build on work in Task 1 to document the relevant facilities.

Schneider electric will use industry-standard maintenance and asset life schedules to confirm and augment the PSE capital improvement schedule. In addition to the capital budget forecast mentioned in the RFP, Schneider Electric recommends including an operations and maintenance expense forecast for the relevant assets and facilities.

Project Deliverable: Schneider will deliver an MS Excel based inventory of the facilities described above. The model will include a forecast of expected improvement, replacement and operating costs. Results will be summarized in the written MS Word based report.

Task 4 – Identify potential severance issues at the boundaries of the acquisition area.

Approach:

Building on Task 1, Schneider will utilize its local power system engineering and modeling resources to identify any distribution severance issues at the boundary of the proposed acquisition area. If adequate GIS electrical connectivity data is provided by PSE, this task can be accomplished without direct field survey. If such data is not available, Schneider will conduct the survey if not already done as part of Tasks 1, 3 or 5.

If desired by COBI, Schneider Electric can also recommend remediation for severed customers and estimate the cost of reconductoring and other alternatives. This will include engineering and electrical drawings as part of an electrical separation plan. Given the City of Boulders experience the importance of this step cannot be understated.

Project Deliverable: Schneider will identify severance issues on the boundary map created in Task 1 on engineering drawings and summarize results in the written MS Word based report.

Task 5 – Assess existing distribution facilities.

Approach:

Building on Tasks 1, 3 and 4 Schneider will review PSE property records where available and conduct field surveys or verifications to assess the age, condition, and effectiveness of distribution facilities within COBI territory. With respect to inventorying smart meters, our team's expertise in metering systems will allow quick confirmation of the smart meter populations and their effectiveness on Bainbridge Island.

Schneider Electric will leverage its industry leading utility asset management expertise and other Geospatial services to document the findings and summarize results.

Project Deliverable: Schneider will assess the distribution infrastructure within COBI and document conditions and document results to COBI. Schneider Electric will summarize results in the written MS Word based report.

Task 6 – Assess BPA power and transmission availability and forecast rates for 20 years

Approach:

Schneider will create generation costs models with BPA (as well as potential other suppliers, including renewable developers) and provide both immediate and long-term forecasts based upon fuel generation mix, known/anticipated grid improvements, regulatory requirements, etc. Schneider will also directly engage with BPA to learn of any specific capital upgrades required to support a BPA tie-in as well as the terms of service on any long-term PPA. Schneider can serve in either a direct interface or consulting mode capacity depending upon COBI preference.

The Smart Utility

Connecting utilities with customers, bridging supply & demand for greater efficiency



Schneider has worked with the City of Boulder on its ongoing municipalization program to find alternatives to its existing IOU provider that included the purchase of generation via third party provider agreements as well as the necessary Transmission & Distribution assets to ensure such deliveries are reliable and economical. The approach required an ongoing analysis of current costs (and associated projected increases) to the proposed alternate provider approach. Also, due to increasing interest in renewables, Schneider believes best approach is to contact a wider portfolio of potential suppliers.

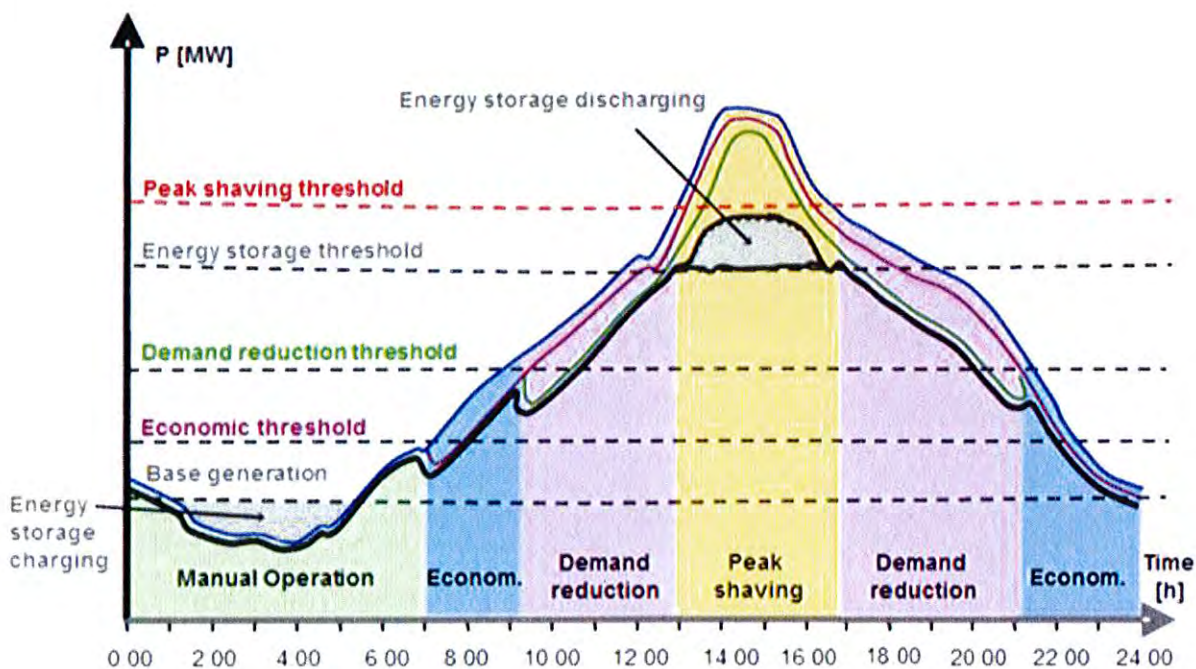
Project Deliverable: Schneider will deliver MS Excel based models described above and summarize their output as part of a written report in MS Word.

**Task 7 – Describe BPA energy efficiency program availability and expectations.
Compare PSE vs public utility levels of energy efficiency, distributed generation
and demand response resources that are likely to be achieved over 20 years**

Approach:

Schneider will not only provide a comparative analysis of existing EE programs, but will leverage the expertise and experience of its own Energy Incentives team (which monitors EE incentives throughout North America) to advocate for other incentives on a “best practices” basis, working to ensure BPA is encouraging innovative EE solutions not necessarily included in current programs. This will also be applicable to DR programs as well as distributed generation (including on-site renewables). Again, Schneider believes the best practice is to challenge the upstream provider to not only include existing programs into any structured agreement, but work to incorporate goals of COBI and make them part of any upstream provider agreement.

Schneider will create a comparison analysis between current and estimated load/capacity reduction opportunities between BPA and PSE, which can be updated as each provider modifies programs. This will be based upon program availability, incentives, projected adoption rates and load forecasts created in Task 2.



Our suggested approach for COBI is similar to our previous work with the City of Boulder. Boulder is considering disengaging from Public Service of Colorado (Excel). Schneider delivered recommendations on various types of load/capacity reduction programs and how they might compare with existing alternatives.

Project Deliverable: Building on Tasks 2 and 6, Schneider will provide a written summary of the analysis described above in MS Word format.

Operation/Finance/Economic Analysis (Tasks 8-15)

Task 8 – Identify and recommend options and costs for a municipal utility to develop and/or contract for business systems to handle customer service, billings, collections, and systems that may be needed to perform operation and maintenance, such as crew dispatch and SCADA.

Approach:

Schneider Electric will leverage its body of knowledge as a developer and innovator of utility systems to illustrate the legacy PSE systems in place and options for replacing or improving on those systems. For example, there are likely operational and cost efficiencies in leveraging new platforms that combine separate legacy systems into fewer platforms such as eliminating redundant outage and billing systems into a single customer information system.

Increasingly many platforms are now available as a software as a service or hosted, thus reducing cost and required in-house expertise for small to mid-sized utilities.

Schneider Electric will leverage contacts with other nearby utilities such as Tacoma Power and Seattle City Light to explore the feasibility and cost savings of leveraging their systems and operations where practical.

Project Deliverable: Conceptual connectivity map of critical and ancillary utility systems and options for acquiring or sharing systems with other utilities.

Task 9 – Provide a reliable estimate of book value (OLCD) of the facilities likely needed to be acquired

Approach:

We will provide a reliable estimate of book value (OCLD) of the facilities that would likely need to be acquired by a municipal utility to provide electric service to Bainbridge Island, and an enumeration of the financial and operational risks that PSE may confront over a 20-year horizon.

We will perform this task through the following steps, following the Original Cost Less Depreciation (OCLD) valuation approach:

1. Utilizing available Continuous Property Record (CPR) data from PSE or an electric system inventory of the transmission and distribution (T&D) assets serving Bainbridge Island, we will organize and categorize these assets in accordance with their appropriate FERC accounts
2. Based on the age (vintage) and estimated replacement costs of all T&D assets, we will utilize the Handy-Whitman Index to determine the computed cost for each asset
3. Using the calculated computed cost for each asset and age of each asset, we will calculate the overall accumulated depreciation of those assets
4. With the computed cost and accumulated depreciation for each asset, we can calculate the net book value (NBV) of each asset
5. We will aggregate the NBV for all assets to determine the overall book value (OCLD) of the facilities likely needed to be acquired
6. We will also provide an assessment of financial and operational risks that PSE may confront over a 20-year horizon, including as an example: Severance and re-integration, if any, for PSE to make Bainbridge Island's electrical system independent of others; impacts to equity ownership factor for PSE.

Project Deliverable: Schedules of inventory of assets showing computed cost, accumulated depreciation, and NBV of for each asset, summary of potential financial and operational risks.

Task 10 – Identify and recommend options and costs for a municipal utility to develop and/or contract for business systems to handle customer service, billings, collections, and systems that may be needed to perform operation and maintenance, such as crew dispatch and SCADA.

Approach:

We are proposing to create an analysis of the potential costs necessary to purchase, own and operate a municipal electric entity from an IOU. This analysis will offer various options or scenarios of what can be expected for the transactions involved. We will also include the opportunity cost to the citizens of Bainbridge of paying for IOU rates compared to a municipal organization. This evaluation will consist of summarizing costs as follows:

- Initial purchase considerations including determining net book value of assets being purchased relative to age of assets, regulatory and administrative costs to convert to a municipal organization
- Development of cost estimates to operate the utility for all cost types: purchased power, transmission, distribution, administration, non-operating, and stranded
- Develop a forecasted capital budget based upon relative infrastructure age of purchased assets
- Determine load and power purchase requirements for customer base
- Create estimate of annual Payment in Lieu of Taxes (PILOT) estimate that would be owed to the local government for operating a tax-exempt entity.
- Develop cost savings estimates associated with leveraging an additional utility with current municipal services

Project Deliverable: Cost estimate scenarios for each phase of the process; initial purchase, ownership of a municipal electric utility and operation, maintenance and capital outlay expectations.

Task 11 — Provide expected annual revenue requirement for rates for first 20 years of operation

Approach:

We are proposing to develop a 20-year revenue requirement needed to fund and operate a municipal electric utility, including identification of all major cost elements, which will include these key cost considerations:

- Impact of future capital improvements
- Amortization of “start-up” utility costs
- Forecast of capital additions and retirements, including decommissioning of coal-fired generation
- Forecast of system operating and maintenance costs
- Forecast of regional purchased power costs from BPA at Tier 1 and 2 rates
- Administrative and general (A&G), customer service, and other forecasted costs
- Recommended levels of cash reserves for operations, capital improvements, and purchased power
- Analysis and discussions regarding other costs or income
- Debt service and bond coverage requirements

Using the forecasted 20-year annual revenue requirement for the municipal electric utility and PSE’s forecasted retail rates for the same time-frame, we will provide a comparison of forecasted retail rates for the municipal electric utility and PSE for a 20-year period. In order to perform the retail rate forecasts, we will also consider:

- Forecast of Bainbridge Island’s load over 20 years to determine appropriate billing determinants to apply to revenue requirements, using forecasts based on demographic drivers, and escalation based on Consumer Price Index (CPI) forecasts, power market forecasts, and other available data.
- Timing of recommended rate increases

Project Deliverable: Tables and graphs that show 20-year revenue requirement and cash flow forecast; tables and graphs that compared forecasted retail rates for the municipal electric utility versus PSE’s forecasted retail rates

Task 12 — Identify and recommend options for potential financing mechanisms, including an evaluation of their relative advantages and disadvantages

Approach:

Using the projected costs identified in Tasks 9 and 10 Schneider Electric will suggest and model various financing means and their impacts on electric customers and tax payers as applicable. Schneider Electric and its Baker Tilly partners regularly provide expert testimony for rate case filings related to similar financings. We can provide contacts to public and private sources of financing as well as outline seller-financed solutions.

Project Deliverable: Schneider Electric will work with city finance officials and involved citizens to understand financial objectives and constraints and to determine an applicable set of financing mechanisms for modeling. The results will be summarized in the written MS Word based report.

Task 13 — Provide a comparison of the retail rates for municipalities with electric utilities

Approach:

We will perform the following steps associated with this task:

1. We will provide a comparison of the retail rates for other Washington electric municipal utilities (such as the cities of Port Angeles, Ellensburg, Milton, Cheney and Steilacoom), public utility districts, and investor-owned utilities (e.g., Puget Sound Energy) through careful review of published rate tariffs and reliance on other industry resources (e.g., SNL Energy databases)
2. Based on our experience working with several municipal utilities, we will be able to provide an assessment of the governance structure of municipal electric utilities, pointing out some of the key advantages and disadvantages of each governance approach

Project Deliverable: Tables and graphs that compare retail rates; Summary of governance structure of municipal electric utilities

Task 14 —Provide a comparison of system acquisitions within the past 10 years showing the estimated book value, potential acquisition cost, and actual acquisition cost for each system

Approach:

Schneider Electric will work with COBI to determine the appropriate comparison criteria by utility location, size, and ownership type. Leveraging our contacts within the APPA and other associations we will leverage past accounting and audit work as well as conduct direct research where desired. The objective will be to build confidence around an actual acquisition cost for the proposed distribution assets within COBI.

Project Deliverable: Tables and graphs that compare estimated book value, potential acquisition cost, and actual acquisition cost for relevant comparable utility acquisitions.

Task 15 — Identify the known or potential operational risks or concerns that should be considered by the COBI (such as response to major outages following a windstorm).

Approach:

The Schneider Electric team includes former operating executives of municipal electric utilities. Their experience combined with our firms thought leadership on smart utility operations will allow our team to efficiently identify and propose mitigation to operational risks. Examples of operational risks include: outages from severe weather and natural disasters, cybersecurity, malicious physical attacks, regulatory compliance, worker safety, and theft.

This task will identify industry best-practice mitigation techniques and suggest partnerships and mutual aid agreements with nearby utilities such as Tacoma Power.

Project Deliverable: Summary of potential risks in MS Word based written report.

Other Considerations (Tasks 16-19)

Task 16 — Provide a list of potential socially responsible initiatives that COBI may consider as part of creating a municipal power entity, e.g. low interest loans, supplementing power to certain lower income homes, senior programs, etc.

Approach:

Schneider Electric's sustainability practice will inventory popular socially responsibility utility initiatives and their impact on other communities. In addition to the programs listed in the RFP other may include community solar programs, energy efficiency rebates and incentives, and others

Project Deliverable: Summary of potential socially responsible initiatives in MS Word based written report.

Task 17 — Provide listing of synergies and other benefits that might accrue to COBI, its residents and businesses, from the formation and operation of a municipal electric utility by COBI (such as the installation of broadband).

Approach:

Schneider Electric's smart cities team specializes in the interaction between city and utility technology. Synergies exist in the areas of: communications, transportation, public safety, economic development and others.

Project Deliverable: Summary of potential public synergies in MS Word based written report.

Task 18 — Do a comparative risk and cost analysis including a “carbon tax” or a proxy “social cost of carbon” for a prospective COBI electric utility, assuming reliance on a BPA power supply, and a similar analysis for PSE and its power resources

Approach:

Schneider Electric’s sustainability services group would conduct a comparative risk and cost analysis of carbon emissions mitigation as part of this effort. SE would work with COBI in assessing state, regional and federal carbon emissions mitigation measures required by legislation in association with BPA, PSE and related power supply options. We would recommend a short, medium and long-term assessment as to potential carbon emissions requirements (such as the EPA’s Clean Power Plan and state renewable portfolio standards) in order to incorporate as part of the assessment criteria for municipalization.

Project Deliverable: MS Excel based model of carbon costs for BPA vs PSE supplied power. Results summarized in MS Word based written report.

Task 19 — If Task 12 demonstrates that a municipal utility would likely provide service to Bainbridge Island at retail rates lower than those of PSE for comparable service, opine on whether such rate differential or “dividend” could be used by the municipal utility to pursue investment in or development of renewable resources, undergrounding and/or enhanced reliability.

Approach:

Building on Task 12, Schneider will suggest possible capital projects within the determined savings differential. Distribution upgrades focused on reliability improvement will include undergrounding, distribution automation, micro grid development and others. Generation programs will include on-island project development, private project development, and backup sources for reliability.

Project Deliverable: Summary of possible projects and high-level cost requirements summarized in MS Word based written report.

Legal/Process/Policy (Tasks 20-22)

Task 20 — Identify the steps and costs required, along with a projected timeline, for COBI to form a municipal utility and acquire the electric distribution plant (including substations) currently operated by PSE, including all necessary approvals and/or permitting requirements.

Approach:

Schneider Electric team member Steve Marshall will leverage past experience and contact at the relevant parties and regulators to summarize the necessary legal and regulatory processes.

Task 21 — In cooperation with staff, prepare and present findings of the foregoing analyses at three (3) COBI scheduled public meetings.

Approach:

Schneider Electric understands the importance of community awareness and stakeholder involvement. Our experts will work with COBI to understand the stakeholders and be an active participant in community communications both in person at meetings and in responding to counsel's and citizen questions. Our local presence provides flexibility to be present in the community whenever necessary.

Task 22 — Provide a comparison of the three forms of not-for-profit utilities

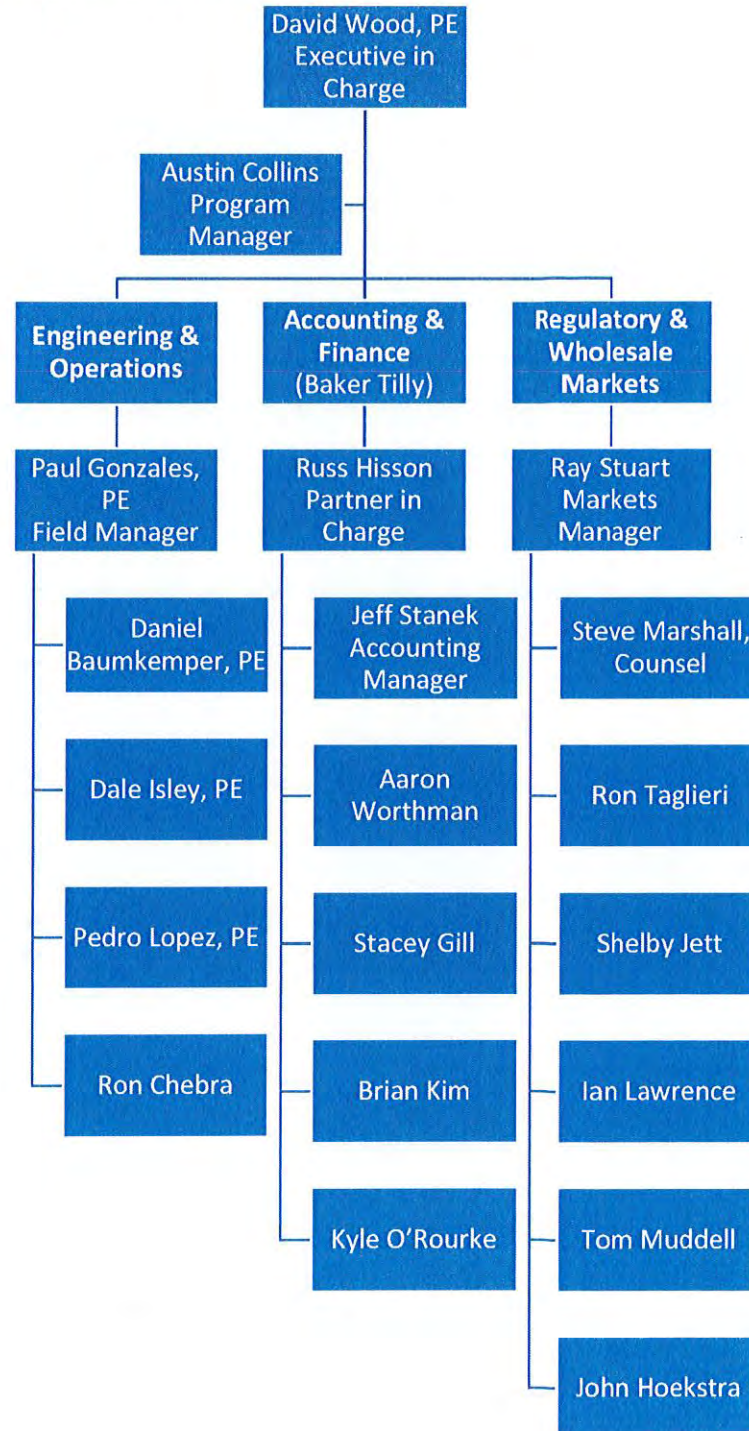
We will provide a comparison in matrix format of the three forms of not-for-profit utilities (municipal, public utility district and cooperative), how they are similar to and/or differ, the relative advantages and disadvantages of each, and the steps required for their formation and their relative availability to provide electric service to Bainbridge Island.

We will perform the following steps related to this task:

1. Review all relevant Washington state laws pertaining to the different forms of not-for-profit utilities (e.g., Title 35.92 Revised Code of Washington on Municipal Utilities)
2. Summarize different forms of not-for-profit utilities in matrix form, pointing out similarities and differences with description of categories such as:
 - a. Debt Service/Financing purchase of the electric system
 - b. Shared services through City or other municipal utilities
 - c. Tax laws and rules
 - d. Governing body (e.g., Utilities Board, City/County Commission)
3. For each category, we will provide an assessment of the relative advantages and disadvantages of each form of utility structure
4. We will provide an overall comparison/assessment of the relative advantages for the three forms of not-for-profit utilities, in relation to the present condition of COBI's current water & sewer utility structure
5. Develop a high-level roadmap with required steps to forming the various forms of not-for-profit utilities and their relative availability to provide service to Bainbridge Island

Project Deliverable: Matrix comparison of three forms of not-for-profit utilities; Roadmap listing steps required for formation

Project Team Organization



Resumes

Engineering and Operations Team Resumes



Project Team Member Resume

David L. Wood
Professional Engineer

Project Role:

Project Sponsor

Education:

BSEE, dual concentration in Electric
Power Systems and Electric Control
Systems, Mississippi State
University

Utility Executive Course, University
of Idaho

Professional Registration:

Texas # 77262

Professional Organizations & Accomplishments:

Member, Eta Kappa Nu Electrical
and Computer Engineering Honor
Society

Summary

At Schneider Electric, David is the Director of Utility Consulting Services where he manages a team of Consultants focused upon all aspects of electric utility strategy development. Prior to Schneider Electric, David worked for Austin Energy for over 20 years where he retired as the Senior Vice President of the Transmission and Distribution Organization. He has over 30 years of experience focused on management, engineering, project management, construction, maintenance, and operations of electric utilities.

Selected Project Experience

- Project Manager for Schneider Electric's engagement with CPS Energy in San Antonio, TX where he is leading an effort to review and make recommendations on CPS Energy's Distribution Automation and Smart Grid Strategy and Programs.
- Project Manager for Schneider Electric's engagement with the City of Boulder, CO where he led the development of a comprehensive IT and OT Roadmap for the new municipal utility.
- Primary executive sponsor of Austin Energy's Smart Utility Program. Defined Austin Energy's Smart Utility Vision. Led effort to define strategic and tactical plans to implement the Smart Utility Program across Austin Energy.
- Executive sponsor for Smart Utility Programs at Austin Energy including the deployment of an Advanced Distribution Management System, the deployment of a Meter Data Management System, and the upgrade and conversion of Austin Energy's Automated Meter Reading System to an Advanced Metering Infrastructure System.

Austin Collins

Project Role:
Consulting Principal

Education:

B.A. Economics/Spanish
Davidson College

M.B.A. Darden Graduate School
University of Virginia

Contact Information

Email:
Austin.collins
@schneider-electric.com

Phone:
512.648.0067

Project Team Member Resume

Summary

- Austin Collins is a Consulting Services Principal. As an expert in utility and utility finances, he has served clients throughout the US including: U.S. power & gas utilities, retail energy providers, power equipment manufacturers, investors, U.S. Department of Defense, and independent system operators.

Selected Project Experience

- **Operations Data Warehouse Project, Austin Energy, TX:** Retained by Austin Energy's Electric Service Delivery group to plan for the replacement of data historian used by the utility's Energy Management System (EMS). Assessed current and future state of utility's data warehousing requirements. Assembled replacement technology options from vendor presentations and proposals. Scored replacement scenarios based on criteria developed in cooperation with Electric Service Delivery group. Presented recommendation to EMS team and to senior leadership.
- **Electric Vehicle to Grid Market Sizing, BMW Munich, Germany:** Built market sizing model for U.S. vehicle to grid revenue based on regional ancillary service markets.
- **Strategic Plan, Electric Reliability Council of Texas (ERCOT), Taylor, TX:** Composed ERCOT strategic plan and worked with ERCOT staff to interview stakeholders, identify external challenges, and update strategic pillars.

Paul Gonzalez, PE

Project Role:

Senior Engineer

Education:

B.S. Electrical Engineering,
Indiana Institute of Technology
2004

M.S. Electrical Engineering,
Portland State University
2006

Professional

Registration:

Oregon # 82235PE

Contact Information

Email:

*paul.gonzalez1@schneider-
electric.com*

Phone:

360.281.2425



Project Team Member Resume

Summary

Paul Gonzalez is a Senior Engineer in the Power System Engineering group of Schneider Electric. His 10+ years of experience includes power system studies, power system field data collection, utility applications, and SCADA design layouts.

Selected Experience

- **REpower:** Review of arc flash hazard studies, provided training on turbine capabilities and characteristics, researched transmission grid codes and NEC to confirm REpower turbine compliance, designed SCADA layouts (patch panel, hardware layouts, attenuation studies).
- **PacifiCorp:** Main grid planner conducting power flow and stability studies for main grid system; constructed and/or reviewed stability studies for generation interconnects; transmission planning for new construction.
- **PacificCorp:** Engineer responsible to construct network engineering studies including: power flow, fault duty, switching duty, contingency analysis, and network capital growth needs; produced stability studies for generation interconnects and system disturbance scenarios in study areas. Tracked and documented electrical load growth history and future projections.

Daniel V
Bauerkemper, PE

Project Role:
Consulting Engineer

Education:
B.S. Electrical Engineering
University of North Florida 2004
B.A. Music
University of North Florida 2004
M.B.A. Accounting
Florida Institute of Technology
2014

Professional
Registration:
Florida #75498

Project Team Member Resume

Summary

Daniel V Bauerkemper is a Principal Engineer in the Power System Engineering group of Schneider Electric. His 12+ years of experience includes municipal distribution system design (4kV-26kV), financial reporting, training development, relay

Selected Project Experience

- **City of Boulder, CO:** As a subject matter expert, co-developed strategic requirements and GAP analysis for City of Boulder's new municipality.
- **Phelps St 4kV-13kV Voltage Conversion:** Responsible for the design, construction package creation, BOM, permitting and construction oversight.
- **MTA East Side Access:** Team lead for the oversight of over 100 construction packages in support of this multiple substation, \$10B project.
- **Overland Bridge Conversion:** Lead engineer for the design, permitting, scheduling and construction in Overhead to Underground municipality conversion. This project was done in cooperation of the FDOT's Overland Bridge \$227M initiative.
- **PSE Training:** Provides course and curriculum development for the PSE's North American engineering team.
- **Managerial Experience Includes**

Dale Isley, PE

Project Role:

Principal Engineer

Education:

B.S. Electrical Engineering
North Dakota State University
1990

Professional

Registration:

Florida # 54338

Contact Information

Email:

Dale.isley@schneider-electric.com

Phone:

904.563.4083



Project Team Member Resume

Summary

Dale Isley is a Principal Engineer in the Power System Engineering group of Schneider Electric. His 26+ years of experience includes municipal design and executive management, MV and HV substation design, and municipal

Selected Experience

- **Municipal:** Served as a manager and director for the nation's 7th largest municipality, JEA. Oversaw the design of transmission, distribution and substation facilities (managers, engineers, drafters and construction inspectors). Responsible for the engineering and construction of \$50-60 Million of infrastructure annually.
- **HV and MV Substation Design:** Substation design expertise includes all aspects of electrical design, one lines, protection schemes, raceway and cable design, schematic and wiring diagram development.
- **Electric System Planning:** Responsible for 230kV-69kV transmission system, 26kV distribution system and generation capacity needs. This role included municipal master presentations to State Governmental Agencies.
- **Additional Engineering Experience Includes:**
 - Studies Consultation (TCCs, short circuit, arc flash analysis)
 - Power quality studies
 - Power plant engineering
 - QC inspections for switchyard work (150kV)

Pedro L Lopez, P.E.

Project Role:

Power System Engineer

Education:

B.S. Electrical Engineering
Rose-Hulman Institute of
Technology 2003

M.B.A. Management
University of Wisconsin 2010

Professional

Registration:

Wisconsin # 39760-006
Illinois # 062.065009

Contact Information

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Pedro.lopez
@schneider-electric.com

Phone:

630.796.1364

Project Team Member Resume

Summary

Pedro Lopez brings over 8 years of utility industry experience to our Schneider Electric team and currently conducts power system studies. These studies include short circuit analysis, protective coordination analysis, and arc flash analysis. His utility background includes distribution system planning and substation upgrades.

Selected Experience

- Performs power system analysis, recommends solutions based off of analysis and develops settings for overcurrent protective devices. This insures customer's compliance with NFPA 70E.
- Made distribution system improvements via system studies to reduce issues related to capacity, voltage and reliability.
- Made recommendations for new distribution lines and upgrades for a substation due to capacity and voltage issues.
- Calculated relay settings for substations, coordinating high and low sides of transformers.
- Created switching sequences for substations under contingency operation.
- Coordinated feeders with low side of the transformer to ensure protective devices were sized correctly
- Replaced electromechanical relays with microprocessor relays to improve efficiency

Ron Chebra

Project Role:

Project Engineer

Education:

B.S. Electrical Engineering,
New Jersey Institute of
Technology

Notable Events:

Multiple US Patents (Telemetry
and Communication Systems)
Frequently published author.

Contact Information

Email:

Ron.chebra

@schneider-electric.com

Phone:

+1 509-279-5822



Project Team Member Resume

Summary

Ron Chebra is a key member and thought leader in Schneider Electric's Utility Consulting group. His tenured career has resulted in utility subject matter expertise within the energy industry. His breadth of experience includes: Smart Grid development, strategic road map creation, and the successful

Selected Experience

- Ran Smart Grid and AMI Practice in North America, including: opportunity identification, capture, and delivery execution for business unit.
- Oversaw multiple delivery teams executing planning, evaluation, economic assessment and delivery of AMI programs.
- Developed a "Smart Grid" strategic roadmap planning tool for an investor owned utility seeking directions toward implementing smart meters, and distribution automation functionality
- Invited by NYPSC and ICC commissions to address the value proposition of smart meters
- Evaluated the requirements and provided a report on the efficacy of using a common communication network to deliver AMI, Distribution Automation and Demand Response to a large Investor Owned Utility in the ERCOT marketplace.

Accounting & Finance Team Resumes (Baker Tilly)

Russell Hissom, Partner, CPA, CIA, CISA
Baker Tilly Virchow Krause, LLP

Professional background: Russ is a partner on Baker Tilly's Energy and Utilities team and has been with the firm since 1983. Russ has extensive experience with revenue requirement, cost of service and rate design studies, contract compliance audits under jointly owned electric generation contracts, overhead cost allocation studies, enterprise risk management implementation projects, benchmarking studies, work order asset management implementation projects, financial and compliance audits of electric utilities, and specialized risk management and operational and financial training for utilities.

Current and past relevant experience:

- Analyzes revenue requirement, cost-of-service studies, and rate design for electric, water, wastewater, gas, and communications utilities
- Performs benchmarking analysis, overhead cost allocation studies, and utility financial performance projects
- Evaluates energy procurement and trading practices and recommends policy and process improvements
- Partner-in-charge of financial audits for electric, water, wastewater, gas, and communications utilities
- Serves as an expert witness before regulatory bodies in utility rate proceedings
- Performs work order asset management and FERC/NARUC accounting implementation projects
- National speaker and author for the public power industry on enterprise risk management, work order business processes, and industry accounting topics

Education

University of Wisconsin–Milwaukee
Bachelor of Business Administration in Accounting

Directly relevant projects of a similar nature as Partner-in-Charge

- Snohomish County Public Utilities District (SNOPUD) – Financial statement and A-133 audits
- Bonneville Power Administration (BPA) – Accounting advisory and consulting services
- Rochelle Municipal Utilities (RMU), Illinois – MISO Attachment O Rate Tariff Revenue Requirement Analysis; Electric revenue requirement, cost of service, and rate design study and cash flow forecast
- Village of Rockton, Illinois – Electric System Municipalization Analysis
- Long Island Power Authority (LIPA), New York – Quality Assurance and Analysis of Contract Compliance of LIPA's Transmission and Distribution Contracts

Aaron Worthman, Partner, CPA
Baker Tilly Virchow Krause, LLP

Professional background: A partner on Baker Tilly's Energy and Utilities team, Aaron has been with Baker Tilly since 1998. He specializes in serving municipal utilities and joint action agencies. His experience includes performing financial audits and agreed-upon procedure reviews, as well as preparing rate studies, cost of service studies, rate designs, and financial forecasts.

Current and past relevant experience:

- Prepares electric, water, sewer, and stormwater rate filings; cost of service studies; and rate design
- Testifies as an expert witness before regulating agencies and local governing bodies to support utility rate adjustments
- Manages financial audits of numerous municipal electric, water, sewer, and stormwater utilities, as well as joint action agencies
- Provides A-133 compliance audits of federally funded programs
- Analyzes the financial impact of construction projects on utility customer rates, borrowing needs, and operational results
- Prepares annual budgets and long-range financial forecasts for municipal utilities
- Assists with retail utility service agreement negotiations related to large industrial developments and intergovernmental agreements
- Teaches American Public Power Association's utility education courses
- Authors nationally and regionally published articles on utility regulation and accounting issues

Education

University of Wisconsin–Eau Claire
Bachelor of Business Administration

Directly relevant projects of a similar nature as Partner-in-Charge

- Seattle City Light (SCL) – Financial statement and A-133 audits
- City Public Service of San Antonio (CPS Energy), Texas – Financial statement and A-133 audits
- Colorado Springs Utilities (CSU) – Financial statement and A-133 audits

Jeffrey Stanek, Manager
Baker Tilly Virchow Krause, LLP

Professional background: Jeff Stanek, Manager on the Energy and Utilities Team, has been with Baker Tilly Virchow Krause, LLP since 2007. He specializes in providing auditing, accounting, and consulting services. Jeff also assists with financial and capital forecasts, rate studies, and impact fees.

Current and past relevant experience:

- Provides financial audits of water, sewer, electric, and communications utilities.
- Compiles financial statements and annual reports of municipal utilities to regulatory agencies.
- Assists clients with implementation of new accounting standards including Governmental Accounting Standards.
- Provides consulting services to public utilities including financial capital forecasts, economic evaluations, billing reviews, compliance audits and implementation of industry best practices.
- Analyzes and conducts utility rate studies.
- Teaches courses on utility industry-related topics for various associations.

Education

University of Wisconsin-Eau Claire

Bachelor of Business Administration in Accounting and Finance

Directly relevant projects of a similar nature

- Snohomish County Public Utilities District (SNOPUD) – Financial statement and A-133 audits
- Seattle City Light (SCL) – Financial statement and A-133 audits
- Sacramento Municipal Utilities District (SMUD), California – Financial statement and A-133 audits
- Eugene Water & Electric Board (EWEB), Oregon – Project management support for Oracle Work Asset Management (WAM)/ Mobile Work Management (MWM) enterprise solution implementation

Stacey Gill, Consulting Manager
Baker Tilly Virchow Krause, LLP

Professional background: Stacey Gill, Manager with Baker Tilly Virchow Krause, LLP, joined the firm in 2011 after three years with a national CPA and consulting firm. Stacey is a member of the Energy and Utilities Team and specializes in providing compliance consulting services and information technology audit assessments.

Current and past relevant experience:

- Manages Service Organization Controls (SOC) report examinations including testing the design and effectiveness of key IT controls for a multi-billion dollar IT products and service provider
- Performs business process reviews to help clients identify gaps in efficiency/effectiveness and controls, and provide recommendations aligned with best practices and risk mitigation
- Provides pre-implementation assistance and implementation project management services related to enterprise resource planning (ERP) systems and work order asset management systems
- Performs compliance reviews as part of energy and utility consulting projects
- Provides outsourced internal audit services including Sarbanes-Oxley, fraud mitigation, contract compliance, financial, operational, IT and business process audits
- Performs testing of IT controls around change management, backups, physical access, user access and security, monitoring and logging, incident management
- Conducts performance and compliance reviews of generating ownership and power supply services contracts

Education

Louisiana State University
Bachelor of Science in Business Management
LSUCIA Internal Auditing Program

Directly relevant projects of a similar nature

- Long Island Power Authority (LIPA), New York – Quality Assurance and Analysis of Contract Compliance of LIPA's Transmission and Distribution Contracts
- Eugene Water & Electric Board (EWEB), Oregon – Project management support for Oracle Work Asset Management (WAM)/ Mobile Work Management (MWM) enterprise solution implementation

Brian Kim, Senior Consultant
Baker Tilly Virchow Krause, LLP

Professional background: Brian is a Senior Consultant on Baker Tilly's Energy and Utilities team and joined the firm in 2013. He has over four years of experience providing client services in the energy and utilities industry. Prior to joining Baker Tilly, Brian spent two years at a national consulting firm where he provided services relating to utility customer strategy and regulatory matters for both investor-owned electric and gas utilities and public service commissions.

Current and past relevant experience:

- Performed cost-of-service/rate studies and financial forecasts for several municipalities and public utilities that provide services to consumers in electricity, natural gas, water, and wastewater/sewage. These studies also included updates to connection charges for new utility accounts, indirect Administrative and General (A&G) overhead cost allocations, and rate design structures to mitigate effects of water and energy conservation/efficiency programs
- Assessed key Operating Service Agreement metrics to support and enhance the customer and operational functions for a Northeast municipal electric utility
- Prior to joining Baker Tilly, delivered client services relating to customer care and billing, demand response, distributed generation, energy efficiency, general rate cases, revenue decoupling, and other rates/regulatory matters

Education

University of California, Berkeley

Bachelor of Science in Civil and Environmental Engineering

Directly relevant projects of a similar nature

- Muscatine Power and Water (MPW), Iowa – electric cost of service and rate design study and cash flow forecast
- Gainesville Regional Utilities (GRU), Florida – electric, water, wastewater and gas utility cost of service and rate design studies and cash flow calculation
- Manitowoc Public Utilities (MPU), Wisconsin – electric cost of service study
- Massachusetts Municipal Wholesale Electric Company – Electric rate consultation and policy support
- Long Island Power Authority (LIPA), New York – Quality Assurance and Analysis of Contract Compliance of LIPA's Transmission and Distribution Contracts

Kyle O'Rourke, Senior Consultant, CIA, MPA
Baker Tilly Virchow Krause, LLP

Professional background: Kyle is a Senior Consultant with Baker Tilly Virchow Krause, LLP. He has three years of experience working with government entities to provide business process improvement and enterprise system procurement. Kyle also has experience working as a researcher with the Indiana Complex Operation Partnership, analyzing economic activity generated by Indiana National Guard Facilities and also ascertaining qualitative effects.

Current and past relevant experience:

- Consults with utility providers, governments, and higher education clients on various projects including business process improvement, economic impact analysis, grant compliance, and enterprise system procurement
- Enterprise resource planning (ERP) system selection services for local governments including conducting needs assessments, documenting function and technical requirements, developing the RFP, and serving as project manager through the selection phase of the procurement process
- Leads annual risk assessments and execute internal audit plans for not-for-profit and membership organizations, local governments, and higher education clients
- Plans and executes GAGAS compliant financial and compliance audits on behalf of Federal entities including USAID and SIGAR
- Performs project management tasks including monitoring subcontractors, preparing weekly reports, and presenting findings and recommendations to executive level management and Audit Committees

Education

Indiana University at Bloomington

Master of Public Affairs, Concentration in Public Financial Management

Bachelor of Science in Public Affairs

Directly relevant projects of a similar nature

- Riverside Public Utilities (RPU), California - Management/Performance audit (focus on Electric Utility T&D Asset Management practices)
- Long Island Power Authority (LIPA), New York – Quality Assurance and Analysis of Contract Compliance of LIPA's Transmission and Distribution Contracts
- Manitowoc Public Utilities (MPU), Wisconsin – electric cost of service study



A Proposal for
City of Bainbridge Island



Regulatory and Wholesale Markets and Sustainability Team Resumes

Ray Stuart, Sr.

Project Role:

Senior Project Manager

Education:

B.S. in Mathematics
University of Louisville

Masters of Divinity
Southern Baptist Theological
Seminary

Contact Information

Email:

Raymond.stuart
@ems.schneider-electric.com

Phone:

502.753.3196



Project Team Member Resume

Summary

Raymond Stuart, a 10 year Schneider Electric member, is currently a Senior Project Manager. His experience includes working alongside end-use clients in understanding rates, tariffs, regulations and programmatic opportunities. Past roles have included specialization as a Regulated Markets expert for Ohio, and as a Regulated Markets Manager for the West and Central U.S.

Selected Experience

- Sr. Project Manager for the past five years in managing and overseeing special and cross-departmental projects
- Ray has served as the project manager in the following energy segments:
 - Residential energy aggregation
 - Renewable energy development
 - Long-term natural gas procurement
 - Utility interconnection negotiation
 - Direct connect feasibility studies
 - Developing electric utilities

Steven C. Marshall

Project Role:

Subject Expert

Education:

University of Washington BA
Harvard Law School, JD

Washington Bar Association
#5272

Contact Information

Phone:
206.909.2019



Project Team Member Resume

Summary

Steve Marshall is an attorney and consultant on energy and infrastructure issues.

Selected Experience

- Consultant and attorney for various energy and transportation projects including:
 - Senior Fellow and coordinator of the Cascadia Project
 - Washington State Economic Development Commission on energy and transportation
 - Puget Sound New Energy Solutions
 - West Coast Corridor Coalition
- Assistant General Manager, Power and Transmission Services, Snohomish County Public Utility District No. 1 (2003-2006). Responsible for all power, conservation and transmission issues; including coordination with Energy Northwest and BPA.
- Lawyer and Partner at Perkins Coie Law firm. Served as chief counsel to Puget Sound Power and Light and was responsible for all corporate governance, regulatory, contract and litigation matters, including BPA power and transmission rate cases. Served as member and vice chair of the Edison Electric Legal Committee.

Ian Lawrence

Project Role:

Business Analyst

Education:

B.S. Mechanical Engineering
Virginia Tech

Masters of Divinity
Southern Seminary

Contact Information

Email:

Ian.lawrence
@ems.schneider-electric.com

Phone:

502.614.2317



Project Team Member Resume

Summary

Ian Lawrence is Business Analyst for Schneider Electric. Ian Joined Schneider Electric in 2009 as a member of the Data Analysis team and joined the Solutions Consulting team in 2009.

Selected Experience

- As a member of the Data Analysis team Ian gained expertise in both US and Canadian natural gas and power markets performing invoice-to-contract validations.
- He also served as the resident expert in process efficiency and special projects.
- Ian has experience in working with utility rates and tariffs for multiple commodities as well with third party supplier contract and billing structures.
- Prior to entering the energy industry, he worked in both civil and industrial engineering.

Ron Taglieri

Project Role:

Regulated Markets Executive

Education:

B.S. in Economics and Finance
Marquette University

Juris Doctorate and M.B.A.
University of Illinois

Professional

Registration:

Licensed Attorney, Illinois

Contact Information

Email:

Ron.taglieri

@ems.schneider-electric.com



Project Team Member Resume

Summary

Ron Taglieri is a Vice President at Schneider Electric. In his role, he leads the Regulated Markets Team. His experience also includes a 25+ year career in the energy industry, including experience in utility and power generation trading.

Selected Experience

- As the leader of the Regulated Markets team he led a team responsible for rate analysis, budget development, infrastructure opportunity and implementation, and invoice reconciliation for all clients.
- Served as a regulatory attorney in the energy industry in 1991 with EnTrade Corporation/Tenneco Gas Marketing, where he was a Capacity Management Specialist.
- At Wickford Energy/Black Hills Energy Resources, he was responsible for utility and power generation trading and later worked as a marketer responsible for large utility accounts at Texex Energy Partners.

Shelby Jett

Project Role:

Director in Regulated and
Emerging Markets

Education:

Studied Agricultural Economics
and Business Administration
University of Kentucky

Contact Information

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electric.com*

Phone:

502.753.3157



Project Team Member Resume

Summary

Shelby Jett leads Schneider Electric's procurement and operations teams in the Latin America, Africa and Asia Pacific regions. He is also responsible for Schneider Electric's North American regulated markets team which harvests value for our clients in their regulated

Selected Experience

- Shelby has spent the last 13 years leading a variety of operational efforts beginning with the Western US Sourcing team during the California Energy Crisis in 2000.
- Instrumental in Schneider Electric's global expansion beginning with leadership of our first European acquisition in 2006 including his long-term relocation to Europe.
- While leading our European procurement division for 6 years, he was responsible for a team with annual energy purchasing responsibility in excess of €8 billion.
- Shelby also led Schneider Electric through significant expansions of both operational capabilities as well as physical office locations outside of North America.

Tom Muddell

Project Role:

Sourcing Manager Central Plains
& West

Education:

Bachelor of Arts
Colgate University

Juris Doctorate
University of Louisville

Contact Information

Email:

Tom.muddell
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Phone:

502.753.3041



Project Team Member Resume

Summary

Tom Muddell has been a member of Schneider Electric's EMPS team for over 12 years. In his current role as a Sourcing Manager, he leads teams responsible for energy procurement in the Central Plains and West regions, encompassing 17 states

Selected Project Experience

- His teams are responsible for maintaining regional and state-specific market expertise while strategically positioning Schneider's client base in de-regulated markets.
- Tom is also a leader in product and service innovation and also leads Schneider's service offerings for Smart Grid and Transactive Energy.
- Tom initially joined Schneider Electric in 2003 as a Sourcing Analyst for Texas electric power, eventually managing a client portfolio worth over \$500 million.
- Prior to joining Schneider Electric, Tom worked as a procurement specialist for Vogt Power, an engineering firm that designs and manufactures heat recovery steam generators.

John Hoekstra, P.E.

Project Role:

Director of Sustainability

Education:

B.S. Chemical Engineering
University of Louisville

Contact Information

Email:

John.hoekstra
@ems.schneider-electric.com

Phone:

502.753.3056



Project Team Member Resume

Summary

Director of Sustainability (Americas) at Schneider Electric, John Hoekstra leads companies through the processes of strategic planning, greenhouse gas emissions reporting, renewable procurement, carbon position management and other

Selected Project Experience

- Hoekstra has been with Schneider Electric since 2005, during which time he has worked with clients around the world, including those with exposure on the European Union's carbon trading system.
- Before joining Schneider Electric, Hoekstra was an environmental engineering consultant serving a variety of Fortune 500 companies including those in the chemical, automotive, packaging, and food and beverage industries.
- In addition to consulting, he has experience in the environmental affairs and corporate governance departments at Dell Computer Corporation and Brown-Forman Corporation.

Experience and Background

Schneider Electric has been in the business of supplying products and services to the electric industry for over 175 years. Our Consulting and Engineering Services organization brings electric utility knowledge and experience ranging from strategy, planning, economic evaluation and deployment of advanced technologies.

Baker Tilly is one of the oldest and largest certified public accounting and consulting firms in the US. Baker Tilly was founded in 1931 with a commitment to deliver innovative financial solutions and solid business strategies to our clients.

To help you respond to and prepare for change, we are actively involved in local and national associations, keeping us at the forefront of what's happening in the industry. Our memberships in the following organizations, and our involvement as authors, speakers, trainers, and promoters of public utility accounting and auditing means we can better assist you:

- American Public Power Association (APPA)
- Edison Electric Institute (EEI)
- American Water Works Association (AWWA)
- American Gas Association (AGA)
- American Wind Energy Association (AWEA)
- Many state electric and water industry associations

We are sought out by organizations such as the APPA, EEI, AGA, and state utility associations to speak, teach courses, and represent the industry. We are instructors for the APPA Work Order Asset Management and Advanced Utility Accounting courses, teaching these courses quarterly at various locations across the United States. With our depth of experience, industry-specific knowledge, and commitment to your success, you can count on our proven ability to deliver quality services.

The following represent just a sampling of other related projects. Reference information for these clients is included later in the proposal.

- **Rochelle Municipal Utilities (RMU), Illinois:** Baker Tilly assisted RMU with reporting its transmission revenue requirements as a transmission owner to the Midwest Independent System Operator (MISO) through developing an Attachment O rate tariff. The tariff developed followed a cost-based methodology, which involved gathering details of RMU's transmission and distribution of the

individual asset level (i.e., quantity, age/condition) and determining a replacement price of the asset using the Handy-Whitman Index. Further, we have also performed an electric revenue requirement with a cash flow projection, cost of service and rate design study for RMU.

- **Village of Rockton, Illinois:** For the Village of Rockton, Baker Tilly prepared a physical inventory of the electric distribution system, system valuation review, cash flow analysis, cost/benefit assessment of municipalization discussion, rate comparison projections, revenue projections, expense projections, staffing analysis to provide service, and power supply option evaluations.
- **Long Island Power Authority (LIPA), New York:** LIPA is a New York state agency charged with supplying electric retail service to over 1.1 million customers on Long Island. Baker Tilly serves LIPA with reviews of contractual compliance by PSEG-Long Island (PSEG) (formerly National Grid (NG)) as the operator of LIPA's electric transmission and distribution system. Our work also includes reviewing metric and benchmark data that are used in financial and customer service operations and in determination of contract payments.
- **Muscatine Power and Water (MPW), Iowa:** Baker Tilly performed an electric revenue requirement, cost of service and rate design study for the Muscatine Power and Water (MPW) for the 2015 and 2016 test years. The rate design addressed considerations of impacts on MPW's large industrial customers and an energy adjustment clause for MISO wholesale power purchases and other fuel costs.
- **Gainesville Regional Utilities (GRU), Florida:** Baker Tilly performed an electric, water, wastewater, and gas utility revenue requirement, cost of service and rate design studies and cash flow calculation for Gainesville Regional Utilities. The electric rate study included an assessment of rate design options to mitigate the impact of increased distributed generation (DG) and a separate analysis of GRU's purchase power agreement as a potential capital lease accounting treatment under GASB 62 in lieu of recovery of purchased power costs through a fuel adjustment.

We provide services to a number of Pacific Northwest clients including:

- Bonneville Power Administration (BPA)
- Chelan County Public Utility District (Chelan County PUD)
- Energy Northwest
- Eugene Water & Electric Board (EWEB)
- Northern Wasco County Peoples' Utility District (Northern Wasco PUD)
- Seattle City Light (SCL)
- Snohomish County Public Utilities District (SNOPUD)
- City of Valdez

References

Reference projects similar to the scope of this project include:

Contact company Project	City of Boulder Electric System Municipalization Analysis
Year completed	Ongoing
Contact name	Heather Bailey
Contact title	Executive Director of Energy Strategy
Telephone Email	303 441 1923 baileyh@bouldercolorado.gov
Contact company Project	City of Plymouth, WI Analysis of Sale of Municipal Electric System to Investor-Owned Utility Citizen-Proposed sales was deemed not economically advantageous
Year completed	2010
Contact name	Brian Yerges
Contact title	City Administrator/Utilities Manager
Telephone Email	920 893 1471 byerges@plymouthgov.com
Contact company Project	Village of Rockton, IL Electric System Municipalization Analysis
Year completed	2009
Contact name	Mr. Dale Adams
Contact title	Mayor/Village President
Telephone Email	815 624 7600 adams@rocktonvillage.com
Contact company Project	Milwaukee Regional Medical Center Hospital acquired local infrastructure from investor-owned utility
Year completed	2016
Contact name	Robert W. Mlynarek
Contact title	Vice President of Finance
Telephone Email	414 778 5921 rmlynarek@mrmcfl.org

Contact company Project	Rochelle Municipal Utilities (RMU), Illinois MISO Attachment O Rate Tariff Revenue Requirement analysis; Electric revenue requirement, cost of service, and rate design study and cash flow forecast
Year completed	2015
Contact name	Mr. Chris Frye
Contact title	Finance Manager
Telephone Email	815 561 2043 cfrye@rochelleil.us
Contact company Project	Long Island Power Authority (LIPA), New York Quality Assurance and Analysis of Contract Compliance of LIPA's Transmission and Distribution Contracts
Year completed	Ongoing since 2002
Contact name	Mr. Ken Kane
Contact title	Managing Director of Finance
Telephone Email	516 719 9880 kkane@lipower.org
Contact company Project	Muscatine Power and Water (MPW), Iowa Electric revenue requirement, cost of service, and rate design study and cash flow forecast
Year completed	2015
Contact name	Mr. Jerry Gowy
Contact title	Director of Finance and Administrative Services
Telephone Email	563 262 3303 jgowey@mpw.org
Contact company Project	Gainesville Regional Utilities (GRU), Florida Electric, water, wastewater and gas utility revenue requirement, cost of service, and rate design
Year completed	2015
Contact name	Ms. Diane Wilson
Contact title	Rates and Economic Analysis Manager
Telephone Email	352 393 1282 wilsondm@gru.com

Rate Schedule and Estimated Costs

Rate Table

<i>Level / Role</i>	<i>Hourly Rate</i>	<i>Discount (Government Customer Project Rate)</i>
Partner / VP	\$400	\$360
Senior Subject Matter Expert	\$325	\$293
Managing Consultant / Director	\$325	\$293
Principal Consultant	\$275	\$248
Principal Engineer	\$250	\$225
Consultant / Manager / Solution Architect / DBA	\$225	\$203
QA Testing / SW Engineer / Staff Power Systems Engineer	\$200	\$180
Consultant Analyst	\$175	\$158
Analyst / Jr. Power Systems Engineer	\$150	\$135
Jr. Analyst / 3D Modeler	\$100	\$90
Administrative Support	\$85	\$77

Base-Case Budget Estimate

<i>Task</i>	<i>Estimated Labor Hours</i>	<i>Estimated Cost</i>
Engineering/Facilities/Network		
1-Boundary Map	90	\$ 15,000
2-20yr load forecast with DG, EE, DR with BPA	110	\$ 21,000
3-Local facility needs and PSE improvement forecast	140	\$ 28,000
4-Severance issues at boundaries	140	\$ 8,000
5-Distribution facility assessment, smart meter count	150	\$ 8,000
6-BPA availability and rates	80	\$ 16,000
7-EE, DR, DG requirements/programs from BPA vs PSE	100	\$ 19,000
Operations/Finance/Economic Analysis		
8-Utility business systems and costs	140	\$ 32,000
9-Book value estimate	80	\$ 20,000
10-Economic evaluation of municipal ownership	290	\$ 60,000
11-Revenue requirement forecast	50	\$ 10,000
12-Financing mechanisms	50	\$ 12,000
13-Benchmarking: Rate analysis and governance	150	\$ 29,000
14-System acquisition comparisons	150	\$ 30,000
15-Operational risks	70	\$ 16,000
Other Considerations		
16-Social initiatives	10	\$ 2,000
17-Local synergies	10	\$ 2,000
18-BPA vs PSE Carbon cost	110	\$ 20,000
19-Rate differential investment options	40	\$ 10,000
Legal/Process/Policy		
20-Legal and regulatory steps and timeline	100	\$ 22,000
21-Public meetings	20	\$ 4,000
22-Utility entity comparison	40	\$ 10,000

Total base-case costs for all above tasks is estimated to be \$394,000.

Alternate Budget Estimates

Task	Estimated Hours		Estimated Cost	
	Low	High	Low	High
Engineering/Facilities/Network				
1-Boundary Map	80	100	\$16,000	\$21,000
2-20yr load forecast with DG, EE, DR with BPA	90	120	\$18,000	\$25,000
3-Local facility needs and PSE improvement forecast	100	150	\$20,000	\$31,000
4-Severance issues at boundaries	100	150	\$20,000	\$31,000
5-Distribution facility assessment, smart meter count	120	170	\$24,000	\$35,000
6-BPA availability and rates	70	90	\$14,000	\$19,000
7-EE, DR, DG requirements/programs from BPA vs PSE	90	110	\$18,000	\$23,000
Operations/Finance/Economic Analysis				
8-Utility business systems and costs	120	150	\$24,000	\$31,000
9-Book value estimate	70	90	\$14,000	\$19,000
10-Economic evaluation of municipal ownership	240	320	\$49,000	\$65,000
11-Revenue requirement forecast	40	60	\$8,000	\$13,000
12-Financing mechanisms	40	60	\$8,000	\$13,000
13-Benchmarking: Rate analysis and governance	130	170	\$26,000	\$35,000
14-System acquisition comparisons	130	170	\$26,000	\$35,000
15-Operational risks	60	80	\$12,000	\$17,000
Other Considerations				
16-Social initiatives	10	10	\$2,000	\$3,000
17-Local synergies	10	10	\$2,000	\$3,000
18-BPA vs PSE Carbon cost	90	120	\$18,000	\$25,000
19-Rate differential investment options	30	40	\$6,000	\$9,000
Legal/Process/Policy				
20-Legal and regulatory steps and timeline	90	110	\$18,000	\$23,000
21-Public meetings	10	20	\$2,000	\$5,000
22-Utility entity comparison	30	40	\$6,000	\$9,000

These low and high alternative budget estimates are based on the availability of PSE system information, access to relevant facilities, and responsiveness and requests by project stakeholders.

The low-case cost for all the above tasks is \$351,000 and the high-case is \$490,000.

About Schneider Electric

HISTORICALLY IN FRONT

Not many 175 year-old companies can boast being designated one of the Top 20 most progressive U.S. companies shaping the transformation of the power industry*. As the global leader in sustainable energy management and industrial automation, Schneider Electric has continuously kept in step with historical megatrends over the span of two centuries. From our beginnings in the steel industry through today's energy focus, our deep expertise in energy management, automation, software and services allows us to integrate and connect IT and operational technologies in ways not possible just a few years ago.



WITH INNOVATIVE SOLUTIONS

Our innovative solutions help customers achieve greater productivity while consuming fewer resources and consistently setting new sustainability standards for energy efficiency. In addition to significantly reducing energy usage, our energy management solutions, software and services enable our customers to monitor, control, manage and automate their products and processes. Our wide range of electrical distribution and critical power and cooling solutions make electricity safe and reliable, while our R&D programs cover the spectrum from electrical components and materials to advanced software and analytics.

Diversified End Markets – FY 2014 revenues¹



COMPREHENSIVELY COVERING THE UTILITY VALUE CHAIN

Over the years, Schneider Electric has acquired a number of the world's leading brands and can provide integrated IT and OT solutions that address reliability, efficiency and sustainability all across the utility value chain. As a global energy leader with extensive experience and knowledge in the utility segment, the Schneider Electric team has a distinguished history of providing engineering, services, installation and program management for many various utility projects. Most importantly, we understand that each challenge, from energy management and network reliability to modernization and smart grid enabling requires its own unique solution.

A Proposal for
City of Bainbridge Island



TO MEET YOUR CHALLENGES TODAY

In the U.S. alone, we can leverage thousands of engineering professionals along with our vast partner network that will listen, respond, support and work with you on the ground to resolve any issue you are currently facing. Because in addition to being committed to safety, sustainability and reliability in everything we do, we are committed to solving your problems and challenges. We know that to get to where you need to be tomorrow you have to start where you are today.

Ranked #1:

SCADA
Low Voltage
Weather Intelligence
Power Meter



GARTNER'S
MAGIC
QUADRANT

2015 Grid Edge 20: One of the Top 20 U.S companies shaping the power industry's transformation

2015 Ethisphere Institute's World's Most Ethical Company

2015 Gartner Magic Quadrant: A Leader in Advanced Distribution Management Systems

2015 Gartner Magic Quadrant: A Visionary in Geographic Information Systems Solutions supporting electric, water and gas utility networks

#1 Industry Ranking in SCADA, Low Voltage, Weather Intelligence, Power Meters

About Baker Tilly

Baker Tilly is one of the top 12 largest accounting and advisory firms in the United States, and we have strong roots in serving utilities. Our central objective is to use our industry specialization to help our clients improve their businesses. We employ more than 2,500 skilled employees, including 292 partners, serving clients from 29 offices throughout the United States.



Candor. Insight. Results.

We currently provide consulting and attest services to nearly 400 utilities nationwide. We know the issues faced by public utilities in their desire to provide economical rates to their ratepayers and in the challenges they face in today's operating environment. We regularly teach courses for the American Public Power Association on utility rates, advanced accounting, and governance. We will use this industry knowledge to effectively serve the City and COBI.

We pride ourselves on proactive, responsive service to public utilities. We see the critical link between being up-to-date on emerging regulatory issues and being able to successfully guide you in the right direction. Baker Tilly's clients come to us for our deep industry knowledge and stay with us for our commitment to client service.