



July 9, 2021

Mr. Karl Hagerman
Utility Director
Petersburg Borough
PO Box 326
Petersburg, AK 99833

Subject: PMPL Scow Bay Generation Design Study Request for Proposal

We are pleased to provide a cost proposal for professional services necessary for the development of a generation 10 year plan for Petersburg Municipal Power and Light (PMPL). The emphasis of the study will be to develop a long term generation plan that can be used for expansion of the existing power generation capabilities and long term planning for retirement of existing units, future expansion and generation infrastructure.

The borough owns and maintains their own backup diesel generation for planned and unplanned SEAPA outages. The existing backup power generation capability is at or near the system load peak. With the loss of a unit or future system growth, PMPL could be in a restoration situation that would put them short on generation, requiring rotating outages.

The purpose of this study is to evaluate the existing load, projected load growth, and existing diesel generation's ability to meet the City's requirements. Based on the evaluation, EPS will make recommendations for near and long term backup generation infrastructure. Below is the planned scope of work.

Scope of Work

- Site visit
 - Gather historical load growth and future load growth data
 - Document and evaluate existing diesel generation
- Develop a 10 year load growth projection for Petersburg based on the information gathered
- Develop a retirement plan for existing diesel generation
- Evaluate options for providing stand alone restoration of T62
- Make recommendations for near and long term generation needs
 - Conceptual one-line(s) for near and long term recommendations
 - 10 year plan for generation retirement and replacement
 - Rough order of magnitude (ROM) estimates for replacement recommendations
- Recommend path forward and construction options for near term generation additions as recommended in the study
- Final report detailing above findings and recommendations



Assumptions and Exclusions

- Historical load data will be provided by PMPL
- Anticipated load growth, future connections, etc will be provided by PMPL

Cost Estimate

PMPL Scow Bay Generation Design Study Request for Proposal		
Item	Description	Cost
1	Site Visit and Data Collection	\$ 6,664
2	Analysis and Report	\$ 22,794
3	Expenses	\$ 1,705
Total		\$ 31,163

Proposed Deliverable Schedule

No.	Task	Duration	Start Date	Finish Date
1	Site Visit	1 week	8/16/21	8/23/21
2	Review of findings with PMPL	1 day	8/30/21	8/30/21
3	Evaluation and Study	4 weeks	8/30/21	9/27/21
4	Draft report presentation to PMPL for review	1 week	9/27/21	10/1/21
5	Final report	1 week	10/4/21	10/8/21



Electric Power Systems, Inc.

3305 Arctic Blvd Suite 201 ▪ Anchorage, Alaska 99503 ▪ Tel: (907) 552-1953

EPS has extensive experience providing engineering and construction services to Alaskan utilities. We have recently provided engineering services for the Naknek power plant expansion. This work included evaluation of existing power generation infrastructure, recommendations for expansion, unit selection and evaluation and engineering services for a bid ready project for expansion of their existing diesel generation plant. EPS provided construction management and engineering support for the construction of the projects. EPS has also provided engineering and construction services to Nushagak Cooperative in Dillingham Alaska. This work included expansion options with different cost options, unit selection and evaluation, design build services as the new plant had to be operational in nine months from notice to proceed. The existing power plant had aging infrastructure, which was evaluated with different replacement options for switchgear and station auxiliaries. EPS also provided construction management and commissioning services for the existing facility and new facility. The project schedule and budget was maintained throughout the project and the project was completed on time.

EPS has provided engineering support to PMPL for over 20 years. EPS has provided distribution design, generation upgrades, troubleshooting, arc flash studies, coordination studies and other miscellaneous tasks as required. We look forward to working on this and other projects in the future.

Please contact me if you have any questions or concerns.

Sincerely,

David Buss, P.E.

dbuss@epsinc.com

(907) 523-3101