Alaska Department of Corrections

PART **A**

REQUEST FOR PROPOSALS PACKAGE

(Procurement per Article 3 of AS 36.30)

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ISSUING OFFICE

Agency Contact & Phone No.....: Michael Lim, Procurement Specialist, michael.lim@alaska.gov (907) 465-6014
Contracting Division .....: State of Alaska, Department of Corrections, Facilities Management
Issue Date.....: July 26, 2024

PROJECT

RFP NUMBER ..... : 230000534-3
Project Numbers-State/Federal..... : 230000534-3
Project Site (City, Village, etc.)..... : Statewide, Alaska
Project Title & Contract Description ..... : DOC Statewide Backup Power System – Design Services

The Alaska Department of Corrections (DOC) is seeking proposals for professional design services for backup power upgrades at seven (7) institutional facilities. The scope of the design will be taken from , but not limited to an evaluation report of the backup power system that was completed in 2023. Some of the facilities may include both mechanical and electrical design.

SCHEDULE & PAYMENT

Anticipated period for performance-Begin/End: September 15, 2024 through October 31, 2025.

Estimated amount of proposed contract:

☐ Less than $200,000 ☐ $200,000 to $250,000
☒ $250,000 to $500,000 ☐ $500,000 to $1,000,000 ☐ $1,000,000 or greater

Proposed Method(s) of Payment:

☒ Firm Fixed Price (FFP) ☐ Cost Plus Fixed Fee (CPFF)
☐ Fixed Price Plus Expenses (FPPE) ☐ Other: T&E (Bidding and Construction Services)

SUBMITTAL DEADLINE AND LOCATION

OFFERORS ARE RESPONSIBLE TO ASSURE DELIVERY PRIOR TO DEADLINE (2 AAC 12.250).
ONLY PROPOSALS RECEIVED PRIOR TO THE FOLLOWING DATE AND TIME WILL BE OPENED.

DATE: **August 23, 2024** PREVAILING TIME: **2:00 PM Local Time**

HAND DELIVER ONLY DIRECTLY TO FOLLOWING LOCATION (and person, if named):

Department of Corrections
802 3rd Street, Rm 221
Douglas, Alaska 99824
Attn: Erin Messing
Email: erin.messing@alaska.gov

(When submitting proposals, please make sure to identify the project title and the RFP number on the outer envelope of the submittal package.)

IMPORTANT NOTICE: If you downloaded this solicitation from the State's Website, you must self-register for the Plan Holders list to receive subsequent addenda. Failure to register may adversely affect your proposal. It is the Offeror's responsibility to ensure that he has received all addenda affecting this RFP.

PART

A

SELECTION PROCEDURE

1. Competitive Sealed Proposals will be evaluated by a committee (2 AAC 12, Article 4). Evaluation of responses to criteria set forth in Part C results in a numerical score for each proposal. Each criterion in Part C has an assigned weight for this RFP which demonstrates its relative importance. The total of all weights is 100 (100%). Each one- percent weight equates to a range of 0-5 points per Evaluator. The maximum points (score) obtainable for any proposal is equal to the product of 500 multiplied by the number of Evaluators.

2. Scoring of proposals will be accomplished as follows:

2.1 Each Evaluator will individually read and rate each Offeror's response to each criterion described in Part C - Section I - Technical Proposal. Ratings will be based solely on contents of proposal and in compliance with the Contracting Agency's standard Instructions for Evaluation Committee. Except as may be stated within any criterion description in Part C, a rating of "5" = Best Response from all Offerors; “4” to “1” = Progressively Less Responsive; “0” = Non-Responsive. Ratings are multiplied by the assigned weights for each criterion to obtain criteria scores.

2.2 After completion of individual ratings in Part C, Section 1, Technical Proposal, the Evaluation Committee will meet to discuss proposals. Evaluators may then alter their ratings; however, any changes shall be based solely on the criteria set forth in Part C.

2.3 After scoring Part C - Section I - Technical Proposal, criteria scores for Part C - Section II - Preferences, and Section III - Price (if applicable), will be calculated based on criteria descriptions.

2.4 The total score for each Offeror will be obtained by summing the scores determined for each criterion in Sections I, II and III of Part C. The order of ranking for negotiations shall be as follows: highest scored Offeror will be ranked first, next highest scored second, and etcetera.

3. Evaluators may discuss factual knowledge of, and may investigate Offerors' and proposed Subcontractors' prior work experience and performance, including projects referenced in proposal, available written evaluations, etcetera, and may contact listed references or other persons knowledgeable of a Contractor's and/or a Subcontractor's past performance. Factors such as overall experience relative to the proposed contract, quality of work, control of cost, and ability to meet schedules may be addressed. If any issues of significant concern to the proposed contract are discovered, the Committee may:

3.1 Provide written recommendations for consideration during contract negotiations;

3.2 Conduct discussions in accordance with paragraph 4, below.

4. The Committee may decide to conduct discussions (or "interviews") with responsible Offerors whose proposals are determined to be reasonably susceptible of being selected for award for the purpose of clarification to assure full understanding of, and responsiveness to, the solicitation requirements (AS 36.30.240 & 2 AAC 12.290). Offerors selected by the Committee for discussions may be permitted to submit Best and Final Offers (BAFO) for final Committee Evaluation. After discussions and any BAFOs, Evaluators will determine the final scoring and ranking for contract negotiations by evaluating written and oral responses using only the criteria set forth in Part C of this RFP (2 AAC 12.260(b)).

5. All Offerors will be advised of the Offeror selected for negotiation and, after completion of negotiations, a Notice of Intent to Award will be provided to all Offerors. If contract negotiations are unsuccessful with Offeror(s) selected for negotiation, the Contracting Agency may either cancel the solicitation or negotiate with other Offerors in the order of ranking.

PART A

NOTICES

1. The Contracting Agency is an equal opportunity employer.

2. Copies of contract documents are available for review at the Contracting Agency's office. Offerors located outside the general vicinity of the Contracting Agency's office may telephone the Agency Contact identified on page one of this Part A for a discussion of such items.

General Conditions of the Professional Services Agreement are contained in the Small Procurement Standard Provisions Booklet, which is located on the Department's website under "Procurement."

The General Conditions are the **same** for both Competitive Sealed Proposals and Small Procurements.

3. Offerors are specifically advised that a contract shall not be in effect until a written agreement is executed by an authorized agent of the Contracting Agency. The Contracting Agency shall not be liable for any cost incurred by an Offeror in response to this solicitation, including any work done, even in good faith, prior to execution of a contract and issuance of a Notice to Proceed.

4. The Contracting Agency expressly reserves the right to waive minor informalities, negotiate changes or reject any and all proposals and to not award the proposed contract, if in its best interest. "Minor Informalities" means matters of form rather than substance which are evident from the submittal, or are insignificant matters that have a negligible effect on price, quantity, quality, delivery, or contractual conditions and can be waived or corrected without prejudice to other Offerors (2 AAC 12.990).

5. All proposals shall be open for public inspection (AS 36.30.230) after a Notice of Intent to Award is issued. Offerors should not include proprietary information in proposals if such information should not be disclosed to the public. Any language within a submittal purporting to render all or portions of a proposal confidential will be disregarded. Proprietary information which may be provided after selection for contract negotiations will be confidential if expressly agreed to by the Contracting Agency (AS 36.30.230).

6. Substitution for any personnel named in a proposal may result in termination of negotiations.

7. If it is discovered that a selected Offeror is in arrears on taxes due the State of Alaska, a contract may not be awarded until the Alaska Department of Revenue approves the payment provisions for the contract.

8. **Offerors and proposed subcontractors shall be in compliance with the statutory requirements for Alaska business licensing and professional registrations included in the certification statement on Page 2 of Part D in this RFP package.**

9. **PRICE COMPETITION**: Price cannot be an Evaluation Criterion in accordance with Article 3 of AS 36.30 for services that must be performed only by Architects, Engineers, Land Surveyors, or Landscape Architects (A/E, LS or LA)) licensed in the State of Alaska, UNLESS the provisions of AS 36.30.270(d) apply; i.e., unless the services required are repetitious in nature, and the nature and amount of services required are thoroughly defined by measurable and objective standards to reasonably enable firms or persons making proposals to compete with a clear understanding and interpretation of the services required. If price is a factor, a majority of the evaluation committee must be registered in Alaska to perform architectural, engineering, or land surveying services.

9.1 If the services performed do not require an A/E, LS or LA, then all Offerors including any A/E, LS or LA must provide Price Proposals in accordance with AS 36.30.270(b) and 2 AAC 12.260(c).

9.2 Price (or any estimate of labor hours) cannot be an Evaluation Criterion for contracts that will receive Federal-aid highway program funding per 23 CFR 172.7 and FAA Airport Improvement Program funding per AC 150/5100-14E, 2.1. For FAA exceptions: see AC 150/5100/14E, 2.4.

10. An audit of the selected Offerors' and proposed Subcontractors' cost accounting systems and business records may be required to ascertain if systems are adequate for segregating contract costs; to establish a maximum allowable Indirect Cost Rate for the Agency's negotiator; and to investigate the accuracy of proposed labor rates and unit prices. In order not to unduly delay contract negotiation or award, be prepared to submit Pre-Audit Statement, DOT&PF Form 25A257 immediately for your firm and any subcontract that may exceed $250,000.

PART **A**

For contract amounts less than $250,000, the Contracting Agency may require the Offeror and proposed Subcontractor to submit the Pre-Audit Statement if deemed necessary to determine allowable costs under Title 23 CFR requirements. If selected for negotiation, failure to submit properly completed Pre-Audit Statement(s) in a timely manner may disqualify an Offeror from further consideration. Information from Pre-Audit Statements and any Audit conducted for the Contracting Agency is considered proprietary and will be confidential.

11. Standard insurance provisions for Worker's Compensation, General and Automobile Liability, and Professional Liability are contained in DOT&PF Form 25A269, Indemnification and Insurance. Coverages may be modified under very limited circumstances. Offeror should not assume any modification of coverages.

12. Professional Liability Insurance for the proposed contract: ☐ is not required

☒ is required as shown on DOT&PF Form 25A269.

13. The proposed contract ☐ will ☒ will not be a Federally Assisted Program of the U.S. Department of Transportation. If it will be an assisted program, then the Offeror shall insert the following notification in all subcontract solicitations for bids or proposals pertinent to this RFP:

"In accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 USC 2000d to 2000d-4 and Title 49, CFR, U.S. Department of Transportation (U.S. DOT), Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. DOT issued pursuant to such Act, in any Subcontract entered into pursuant to this RFP, Disadvantaged Business Enterprise firms will be afforded full opportunity to submit bids or proposals and will not be discriminated against on the grounds of race, color, sex, or national origin, in consideration for an award.

14. Pre-proposal Conference: ☒ None ☐ As follows:

No Pre-proposal conference unless upon bidder request.

14.1 Questions should be in writing and received by the procurement officer no later than close of business **August 13, 2024** to allow adequate time for the issuance of an addendum if needed.

15. Special Notices:

15.1 Per Alaska Statute (AS) 36.30.210(e): An Alaska Business License is required of Contractors who do business in Alaska at time of award. To qualify for the Alaska Offerors' Preference, under AS 36.30.321, an Offeror shall have a valid Alaska business license as a prerequisite to proposal. Information regarding applying for an Alaska Business License can be found on-line at https://www.commerce.alaska.gov/web/cbpl/BusinessLicensing.aspx or by calling 1-907-465-2550. The business license must be in the name of the company under which the proposal is submitted.

15.2 Effective May 8, 2015, the Department, in coordination with the U.S. Department of Transportation, adopted a Race-Neutral Disadvantaged Business Enterprise (DBE) Program for its federal-aid program. The Race-Neutral DBE program applies to federally-funded construction-related professional services solicitations, with the exception of FAA-funded projects located within the boundaries of the Department's Northern Region, which remain under a Race-Conscious DBE program. The Department encourages contractors to utilize DBEs in all Federal-aid projects to ensure the Department meets its overall DBE Utilization Goal. All DBE participation will count towards the Race-Neutral program. If you have any questions about this notice or the Department's DBE program, please contact the Civil Rights Office at (907) 269-0851 or refer to their website http://www.dot.alaska.gov/cvlrts/index.shtml

15.3 In light of the current health situation, the Department will accept an electronic (email) submission of proposals for this solicitation. Proposals should be submitted to erin.messing@alaska.gov prior to the date and time shown on Page 1. Offerors are responsible to assure timely delivery, and receipt of their proposal. The state is not responsible for unreadable, corrupt or missing attachments. Offerors are cautioned that due to mailbox restrictions, we cannot receive proposals over 20MB in size. The Contracting Agency will either print out proposals in color for distribution, or email a PDF to the Evaluation Committee.

PART

B

SUBMITTAL CHECKLIST

Offeror may use left margin to check off items when completed.

An Alaska Business License is required of Contractors who do business in Alaska at time of award (AS 36.30.210(e)).

[ ] 1. Offerors must carefully review this RFP Package for defects and questionable material and become familiar with submittal requirements. Submit written comments to the address shown under "Submittal Deadline and Location" on page 1 of Part A - RFP. Substantive issues will be addressed in a written addendum to all RFP recipients on record. Failure to comply with directions may result in lower score and may eliminate a submittal from consideration. Protests based on alleged improprieties or ambiguities in a solicitation may be disallowed at the discretion of the Contracting Agency if the protest is not received in writing at least ten Agency work days prior to the Submittal Deadline (AS 36.30.565).

[ ] 2. Review Part A - RFP and the proposed Statement of Services and any other attached or referenced materials. If no Statement of Services is attached, telephone the Agency contact person identified on page 1 of Part A.

[ ] 3. Review Part C - Evaluation Criteria. Read each criterion in light of the proposed Statement of Services. Note any project specific criteria which may have been added or any changes to standard criteria descriptions which may have been made. Be aware of the assigned weight for each criterion. If a weight is not entered for any criterion on Part C, notify the Agency contact person. Plan your proposal to address the applicable criteria. Criteria Responses shall not exceed the number of pages stated below. **Note:** If weight is applied to Criterion #11, Alaska Bidder (Offeror) Preference, that box must be checked on page 1 of Part D, rfp-d.

[ ] 4. Prepare a distinct Response for each criterion that has a weight more than zero. Failure to respond directly to any criteria weighted more than zero will result in an evaluation score of zero for that criteria. Any Responses to criteria weighted zero will be disregarded. Acceptable Responses must be specific and directly related to the Contracting Agency's proposed Statement of Services. Marketing brochures, federal SF330s, marketing resumes, and other non-project specific materials will be discarded without evaluation and should not be submitted.

[ ] 5. ***Each criterion Response must be titled, numbered and assembled in the order in which the criteria are listed in Part C***, so the criterion to which information applies shall be plainly evident. Material not so identified or assembled may be discarded without evaluation.

[ ] 6. Price ☐ is ☒ is not an evaluation criterion for the proposed contract.

If Price is a Criterion, prepare ***Billing Rates and/or Price Proposals*** as described in Criteria #12 and/or #13.

[ ] 7. Complete all entries on Part D - Proposal Form. Note the statutory requirements for Alaska business licenses and professional registrations, and be sure to sign and date the Certification. Copies of licenses and registrations may be provided with submittal, and will not count in the requirements of #8 below.

[ ] 8. Attach Criteria Responses (***except any Billing Rates or Price Proposals***) to Part D - Proposal Form. The maximum number of attached pages (***each printed side equals one page***) for Criteria Responses shall not exceed: **10 pages**. Attached page limit does not include the four-page Part D - Proposal Form, or any Billing Rates or Price Proposals.

Criteria Responses shall be presented in ***8-1/2" X 11" format***, except for a minimal number of larger sheets (e.g., 11" x 17") that may be used (e.g., for schedules) if they are folded to 8-1/2" X 11" size. Large sheets will count as multiple pages at 93.5 square inches or fraction thereof per page, unless otherwise noted.

CAUTION: Criteria Responses which do not comply with the required page limit or presentation size, may result in disqualification. Further, small print or typeface that is difficult to read may negatively influence evaluation of your submittal and affect scoring for "Quality of Proposal."

CHECKLIST IS CONTINUED NEXT PAGE

[ ] 9.

[ ] 10. Parts A, B and C of Form 25A270 and the proposed Statement of Services shall not be returned to the Contracting Agency. ***Submittals shall consist of the following applicable items assembled as follows and in the order listed:***

[ ] 10.1 Completed Part D - Proposal Form (generally at least one copy with original signature) and Responses to all evaluation criteria -- ***except Billing Rates, Price Proposals*** – attached. Each copy shall be fastened with one staple in the upper left corner. No other form of binding shall be used and no cover and no transmittal letter will be included. **CAUTION**: Failure to comply with this instruction will negatively influence evaluation of Submittal.

[ ] 10.2 Number of copies of Part D (***all pages***) and Criteria Responses (***except Billing Rates, and Price Proposals***) required is: **4 copies.**

[ ] 10.3 If ***Billing Rates and/or Price Proposals*** are required, ***one copy*** bound with one staple in the upper left corner separately enclosed in a sealed envelope marked on the outside to identify it as a ***Billing Rates or Price Proposal*** and the names of the Project and Offeror. Each ***Billing Rates or Price Proposal*** must be signed and dated by the person who prepares it (may be different signatures for each Subcontractor).

[ ] 10.4 If Item 9, above, is completed for this RFP Package, any submittal items described therein. Unless otherwise stated, one copy only, bound appropriately.

[ ] 10.5 Pre-Audit Statement, DOT&PF Form 25A257, shall ***not*** be provided with Submittal. (See Notice #10 on page 3 of Part A - RFP.)

[ ] 10.6 **CAUTION:** If you replicate (other than by photocopy) Part D or any form in lieu of completing the forms provided by the Contracting Agency, provide a signed certification that lists such forms and attests that they are exact replicas of that issued by the Contracting Agency. Changed forms may result in rejection at the Contracting Agency's discretion. Any alteration – other than completion of the required entries – may be cause for rejection without recourse.

[ ] 11. Deliver ***submittals in one sealed package*** to the location and before the submittal deadline cited in Part A - RFP. ***Mark the outside of the package*** to identify the Project and the Offeror. Proposals must be received prior to the specified date and time. Late proposals will not be opened (2 AAC 12.250).

PART C

EVALUATION CRITERIA

Criteria with a weight of zero are not applicable and should be disregarded. If a weight is not indicated for any criterion, telephone the Agency Contact person identified at the top of page 1 of Part A - RFP.

SECTION I - TECHNICAL PROPOSAL

1. Objectives and Services — **1. Weight: 10**

Response must **demonstrate your comprehension of the objectives and services** for the proposed contract. Do not merely duplicate the Statement of Services provided with this RFP. Also, consider if Statement of Services is sufficiently explicit; are expressed or implied schedules attainable/economically feasible; etcetera? Explain. **Define any assumptions made** in formulating Criteria Response. If design services for a construction project are included, express any opinions regarding alternative design considerations that could impact construction costs.

2. Methods — **2. Weight: 15**

Response must outline the methods for accomplishing the proposed contract or, if methodology is contained in the proposed Statement of Services, address its adequacy. Describe what, when, where, how, and in what sequence the work will be done. Address how proximity to the Project site, *particular* geographic familiarity, experience, and capabilities of your firms (Offeror and Proposed Subcontractors) and Project Staff might *specifically* contribute to the proposed methods. Identify the amount and type of work to be performed by any Subcontractors. Consider how each task may be carried out; what services or interaction required from/with the Contracting Agency; etcetera. Suggest alternatives, if appropriate. Identify any **distinct and substantive qualifications** for undertaking the proposed contract such as the availability of specialized equipment or unique approaches or concepts **relevant to the required services** which the firms may use.

3. Management — **3. Weight: 5**

Response must describe the administrative and operational structures that will be used for performing the proposed contract. For example consider: who will have overall responsibility for the contract? Who will have direct responsibility for specific disciplines? What will the lines of authority be? For any individual who would be in "responsible-charge" (reference AS 08.48) as an Architect, Engineer, Land Surveyor or Landscape Architect, so state and list his/her Alaska professional registration number. A graphic depiction is preferred in your response to this criterion. Additionally, the Contracting Agency may want to inspect work products in progress and have a close ongoing working relationship with your Project Staff. Accordingly, your response should also identify where the various contract services will be performed, *in proximity to the Contracting Agency's office* and how communications will be maintained between your Project Staff, the Contracting Agency, and (as applicable) any other government agencies or the public.

4. Proposed Project Staff — **4. Weight: 15**

Response must name the individuals to perform the following **FUNCTIONS** plus any other professional/technical functions you deem essential to perform the services:

1. Contract Management (contract compliance)
2. Project Management (single point-of-contact directly engaged in contract performance)
3. Lead Engineer

*All personnel acting in responsible charge for all Architectural, Engineering, Land Surveying, and Landscape Architecture functions require an Alaska Registration and must be identified in your proposal.

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C

Describe the work to be performed by the individuals you name to perform essential functions and detail their specific qualifications and substantive **experience directly related to the proposed contract.** A response prepared specifically for this proposal is required. Marketing resumes often include non-relevant information which may detract from the evaluation of proposal. Lists of projects are not useful. Focus on individual's specific duties and responsibilities and how project experience is relevant to the proposed contract.

For each person named, identify their: employer, professional discipline or job classification and state of residency. List at least 3 professional references (contact persons and telephone numbers) for each person. **Please do not use any current DOC staff as reference.**

5. Workload and Resources	**5. Weight: 20**

Response must: (1) discuss both current and potential time commitments of your proposed Project Staff to all clients; (2) discuss the projected workload of each firm (Offeror and Proposed Subcontractors) for all clients; and (3) demonstrate adequate support personnel, facilities and other resources to provide the services required. Provide a list of current contracts with the Contracting Agency in which your proposed Project Staff are participating. Include all contracts statewide with regions, divisions, etc., of the Contracting Agency.

Briefly address capabilities for providing additional services and/or services under an accelerated schedule. Address capacity to reassign personnel, equipment and facilities whenever the proposed contract would not require such capabilities or was delayed.

6. Past Performance & Quality Control	**6. Weight: 20**

Response must describe previous projects the project team has worked on that are related in size and scope to this project. Describe the dollar amount of the projects and a brief narrative of the successes of the projects. Address how the experience will help your team to perform under this contract. Provide references (contact name and phone number) for each project. Indicate which of the proposed firms and project staff was involved in each project. The State reserves the right to investigate referenced projects, contact references and research other projects that the respondent has worked on.

Include in your response a description of your firm's quality control process and how this process has affected the quality of your deliverables. Use specific examples.

7. Quality of Proposal	**7. Weight: 5**

Offerors do not respond to this criterion. Committee members will rate this criterion based on their perception of the clarity, completeness and presentation of submittal. Note: This criterion is **NOT** used to evaluate color, graphics or other visual techniques except as they may detract from legibility.

8. N/A	**8. Weight:**

9. N/A	**9. Weight:**

PART

C

SECTION II - PREFERENCES

10. Disadvantaged Business Enterprises **49 CFR 26** | **10. Weight: 0**

Option #1

This solicitation is being conducted under the Department's Race Neutral Disadvantaged Business Enterprise (DBE) program for construction related professional services solicitations. Therefore, there is no DBE goal for this solicitation and the criterion has a weight of zero (0).

See rfp-a, section 15. Special Notices, paragraph 15.2.

11. Alaska Bidder (Offeror) Preference
23 CFR 172.7(a)(1)(iii)(C), AC 150/5100-14E, and 2 AAC 12.260(e)
Weight shall be "0" if any federal funding, otherwise weight shall be at least "10".

11. Weight: 10

To be granted this preference:

Offeror must claim the Alaska Bidder (Offeror) Preference on page one of Part D Proposal Form. In claiming the Alaska Bidder (Offeror) Preference on page one of Part D, the Offeror is certifying that they meet the following requirements per AS 36.30.990:

(A) Firm holds a current Alaska Business License;

(B) Proposal is submitted under the name as appearing on the Firm's current Alaska Business License;

(C) Firm has maintained a place of business within Alaska, staffed by the Firm or an employee of the Firm, for a period of six months immediately preceding the date of the offer;

(D) Firm is incorporated or qualified to do business under the laws of the State of Alaska, is a sole proprietorship, and the proprietor is a resident of Alaska, is a limited liability company organized under AS 10.50 and all members are residents of Alaska, or is a partnership under AS 32.06, or AS 32.11 and all partners are residents of Alaska; and

(E) If the Firm is a Joint Venture, it is composed entirely of entities that qualify under (A) - (D).

Alaska Bidder (Offeror) Preference will be scored: Rating x Number of Evaluators x Weight = Criterion Score.

Rating will be as follows:

An Alaska Offeror's preference (i.e., a Rating of 5) will be assigned to the proposal of an Offeror who certifies (by claiming the preference on page one of Part D) that they are an Alaska Bidder (Offeror) as described above.

No Alaska Offeror's preference (i.e., a Rating of 0) will be assigned to the proposal of an Offeror who does not certify (by failure to claim the preference on page one of Part D) that it qualifies as an Alaska Bidder (Offeror) as described above.

No narrative response to this criterion is required within the Offeror's Proposal.

PART **C**

SECTION III - PRICE

If price is <u>not</u> an Evaluation Criterion, weights for <u>both</u> Criterion #12 and #13 shall be "0". If price is an Evaluation Criterion, the sum of weights for Criterion #12 and #13 shall be at least "10", and all Offerors shall submit Price Proposals in the specified format(s).

See item #9, under Notices in Part A – RFP, regarding statutory and regulatory provisions about price competition and item #10.3, in Part B – Submittal Checklist, regarding procedure for submittal of Billing Rates and/or Price Proposals. Cost terminology is explained on page 2 of the Pre-Audit Statement (DOT&PF Form 25A257).

CAUTION: Submittal of Offeror's or Subcontractor's "standard" rate schedules or other pricing documents which are not in required format will be non-responsive if they do not allow direct comparison with other responsive proposals.

Rates and costs proposed by the Offeror selected for contract negotiations may be investigated for reasonableness and allowability in accordance with AS 36.30.400, .420 & .480, 2 AAC 12.550 and the contract cost principles in 48 CFR Part 31. Unsupported rates and costs may be disallowed or result in termination of negotiations, or contract award. All proposed rates and the negotiated contract rates will be public information.

12. Labor Billing Rates (<u>Required</u> Format) | **12. Weight: 0**

Provide a proposed total hourly Billing Rate (i.e., inclusive of Direct Cost of Direct Labor, all Indirect Costs, and Fee) only for each of the job **FUNCTIONS** listed below. Note: Some of these functions may be performed by one or more employees of the Offeror or Subcontractors; consequently, an individual might be billed under the contract at different rates appropriate to the functions performed. ***Only the maximum rate paid to any individual for each listed job function*** – regardless of employer (Offeror or Subcontractor) – ***must be provided and will be considered for this response***. Rates for lower paid individuals or for other job functions, if any, will be addressed during contract negotiations.

1.	Contract Management	(Estimated at	% of total labor effort)
2.	Project Management	(Estimated at	% of total labor effort)
3.		(Estimated at	% of total labor effort)
4.		(Estimated at	% of total labor effort)
5.		(Estimated at	% of total labor effort)

*In accordance with the submittal Checklist ('rfp-b'), item 10.3, *Billing Rates must* be signed and dated by the person who prepares it (may be different signatures for each Subcontractor)

Response will be scored as follows: The maximum hourly rates proposed for the job functions listed above will be multiplied by the percentage of total labor effort (estimated above) and then summed to obtain an aggregate rate for each Offeror. If more than one rate is provided for any job function, only the highest rate will be used. Each Offeror's score will be calculated using the following equation – except that the ***score will be zero if a rate for each listed function is not provided by an Offeror.***

$$\frac{\text{(Lowest aggregate rate from all Offerors)} \times \text{(MPP*)}}{\text{(Offeror's aggregate rate)}} = \text{Offeror's Criterion Score}$$

**MPP = Maximum Possible Points = (5) x (Number of Evaluators) x (Weight)*

If no federal funding, then per AS 36.30.250(b), aggregate rates shall be reduced for the above calculation by the following applicable percentages when the rates are from Offerors that ***designate preferences on page one of Part D.***

- ALASKA BIDDER (OFFEROR) PREFERENCE [2 AAC 12.260(d)]..... 5%
- ALASKA VETERAN-OWNED BUSINESS PREFERENCE [AS 36.30.175] (maximum $5000)..... 5%

and only ONE of the following:

- EMPLOYMENT PROGRAM PREFERENCE [AS 36.30.170(c)] 15%
- DISABLED SOLE PROPRIETOR <u>OR</u> 50% DISABLED EMPLOYEES [AS 36.30.170(e & f)]..... 10%

To claim employment or disabled preference, Offeror must be on the appropriate Alaska Division of Vocational Rehabilitation list at the time designated for opening (i.e., receipt) of proposals.

PART

C

13. Total Price Proposal (Required Format) | **13. Weight: 0**

Provide proposed costs for all labor, subcontracts, equipment, expenses, etc., and a proposed amount for Fee. Submit a separate price proposal in the following format for the Offeror and for each Subcontract (first, second, third tier, etc.) that may exceed $25,000. Each price proposal must be signed and dated by the person who prepares it. Note that the PRICES of the next lower tier subcontracts must be listed as COSTS in Item #4 (Other Direct Costs) of the price proposal for the next higher tier contractor so that the price of all subcontracts "roll-up" into the Offeror's total price proposal.

1. Show project title, project number, and Offeror or Subcontractor Name.

2. **Direct Costs of Direct Labor (DCDL)**
   Show the estimated costs for each job classification of employees proposed for the contract. List under the following headings. Names required only for key staff and/or persons in "responsible-charge" (Ref: AS 08.48). ***Hourly Rates must not include Indirect Costs or Fee.***

Job Classification	Name	Total Hours	Rate($/hr)	Proposed Costs ($)

   Total DCDL: $ _____

3. **Indirect Costs (IDC)**
   These costs include what are generally referred to as 1) Fringe Benefits and 2) Overhead (including direct and indirect costs of Indirect Labor). Show the Proposed IDC Rate as a percentage of Direct Costs of Direct Labor and the product (IDC Amount) of that Rate multiplied by the total DCDL.
   IDC Rate: _____ % IDC Amount: $ _____

4. **Other Direct Costs (ODC)**
   These costs include: subcontracts, equipment (company owned or rented), and reimbursable expenses (e.g., transportation, food and lodging, reproduction) – if not included in Indirect Costs. List proposed costs under the following headings. If multiples of an item required, list the proposed quantity, unit rate, and total cost for each. ***Costs must be based on actual costs to the offeror or the subcontractor, without any profit or other markup.***

Item	Quantity	Cost ($/Unit)	Proposed Costs ($)

   Total ODC: $ _____

5. **Total Proposed Cost**
   Sum of DCDL + IDC + ODC — Total Cost: $ _____

6. **Proposed Fee**
   List a proposed amount (Contract Fee is generally negotiated using a structured Fee analysis of proposed costs).
   Proposed Fee: $ _____

7. **Total Proposed Price**
   Sum of Total Proposed Cost plus Proposed FEE. — Total Price: $ _____

8. In accordance with the Submittal Checklist ('rfp-b'), item 10.3, Price Proposals must be signed and dated by the person who prepares it (may be a different signature for each subcontractor).

Response will be scored as follows: $\frac{\text{(Lowest Total Proposed Price) x (MPP*)}}{\text{(Offeror's Total Proposed Price)}} = \text{Criterion Score}$

**MPP = Maximum Possible Points = (5) x (Number of Evaluators) x (Weight)*

If no federal funding, then per AS 36.30.250(b), total price shall be reduced for the above calculation by the following applicable percentages when the prices are from Offerors **designate preferences on page one of Part D.**

- ALASKA BIDDER (OFFEROR) PREFERENCE [2 AAC 12.260(d)] 5%
- ALASKA VETERAN-OWNED BUSINESS PREFERENCE [AS 36.30.321(f)] (maximum $5,000) 5%

and only ONE of the following:

- EMPLOYMENT PROGRAM PREFERENCE [AS 36.30.321(b)] 15%
- DISABLED SOLE PROPRIETOR [AS 36.30.321(d) / (k)] 10%

To claim employment or disabled preference, Offeror must be on the appropriate Alaska Division of Vocational Rehabilitation list at the time designated for opening (i.e., receipt) of proposals.

Alaska Department of Corrections
PROPOSAL FORM

PART D

THIS FORM MUST BE THE FIRST PAGE OF PROPOSAL. Attach criteria responses as explained in Part B - Submittal Checklist. No transmittal letter or cover sheet will be used.

PROJECT

Project Numbers-State/Federal ..... : 230000534-3
Project Title ..... : DOC Statewide Backup Power System – Design Services
RFP No. ..... : 230000534-3

OFFEROR (CONTRACTOR)

Contractor ..... :

Street ..... :
P.O. Box ..... :
City, State, Zip ..... :
Alaska Business License Number ..... :
Federal Tax Identification No. ..... :
DOT&PF DBE Certification No. (if any) ..... :
Individual(s) to sign contract ..... :
Title(s) ..... :
Type of business enterprise (check one) .... : [ ] Corporation in the state of . :
[ ] Individual [ ] Partnership [ ] Other(specify) ..... :

ALASKA STATUTORY PREFERENCES (IF NO FEDERAL FUNDING)

Check the applicable preferences that you claim for the proposed contract (reference Criteria 11, 12 & 13 in Part C):
[ ] Alaska Bidder (Offeror) **AND>>** [ ] Veterans **AND>>** [ ]Employment Program or [ ] Disabled Persons

PROPOSED SUBCONTRACTOR(S)

Service, Equipment, etc.	Subcontractor & Office Location	AK Business License No.	DOT&PF DBE Certification No.

CERTIFICATIONS

I certify: that I am a duly authorized representative of the Contractor; that this Submittal accurately represents capabilities of the Contractor and Subcontractors identified herein for providing the services indicated; and that the requirements of the Certifications on page 2 and 3 of this Part D for 1) Alaska Licenses/Registrations, 2) Insurance, 3) Federal-Aid Contracts exceeding $100,000, 4) Cost and Pricing Data, 5) Trade Restrictions/Suspension/Debarment, 6) Foreign Contracting, 7) DBE Commitment, and 8) Former Public Officer – will be complied with in full. These Certifications are material representations of fact upon which reliance will be placed if the proposed contract is awarded. Failure to comply with these Certifications is a fraudulent act. The Contracting Agency is hereby authorized to request any entity identified in this proposal to furnish information deemed necessary to verify the reputation and capabilities of the Contractor and Subcontractors. This proposal is valid for at least ninety days.

Signature ..... : _____
Name ..... : _____ Date: _____
Title ..... : _____ Telephone (voice): _____
(fax): _____
Email Address: _____

PART

D

CERTIFICATION FOR ALASKA BUSINESS LICENSES AND REGISTRATIONS

Contractor and all Subcontractors shall comply with the following applicable requirements of Alaska Statutes:

1. **Alaska Business License** (Form 08-070 issued under AS 43.70) at the time contract is awarded as required by AS 36.30.210(e) for Contractor and all Subcontractors. In accordance with Administrative Manual, Section 81.120, proof of application for an Alaska Business license will satisfy this requirement. Per AAM 81.120, acceptable evidence that the offeror possesses a valid Alaska business license consists of any one of the following:
   a. Copy of the Alaska business license.
   b. A canceled check that demonstrates payment for the Alaska business license fee.
   c. A copy of the Alaska business license application with a receipt stamp from the State's business license office.
   d. A sworn notarized affidavit that the bidder/offeror applied and paid for the Alaska business license.
   e. Other forms of evidence acceptable to the Department of Law.

2. **Certificate of Registration** for each individual to be in "responsible charge" (AS 08.48.341(11-14)) for Architecture, Engineering, Land Surveying, or Landscape Architecture (Form 08-2407 issued under AS 08.48.211) issued prior to submittal of proposal. Associates, consultants, or specialists under the supervision of a registered individual in "responsible charge" are exempt from registration requirements (AS 08.48.331).

3. **Certificate of Authorization for Corporations, Limited Liability Companies, and Limited Liability Partnerships** for Contractors and Subcontractors for Architecture, Engineering, Land Surveying, or Landscape Architecture (Form 08-2407 issued under AS 08.48.241). Entities offering to provide Architectural, Engineering or Land Surveying services do not need to be registered for such disciplines at the time proposal is submitted provided they obtain registration prior to contract award (AS 08.48.241).

4. **Certificate of Incorporation** (Alaska firms) or **Certificate of Authorization for Foreign Firm** ("Out-of-State" firms). All corporations, regardless of type of services provided, must have one of the certificates (AS 10.06.218 and other sections of Title 10.06 - Alaska Corporations Code).

5. **Current Board of Director's Resolution** for incorporated Contractors and incorporated Subcontractors for Architecture, Engineering, Land Surveying or Landscape Architecture (reference AS 08.48.241) that names the person(s) designated in "responsible charge" for each discipline. Such persons shall be licensed in Alaska and shall participate as project staff in the Contract/Subcontracts.

6. **All partners** in a Partnership to provide Architectural, Engineering, Land Surveying, or Landscape Architecture **must be legally registered in Alaska** prior to submittal of proposal for at least one of those disciplines (AS 08.48.251) which the Partnership offers.

7. **Joint Ventures**, regardless of type of services provided, must be licensed/registered in the legal name of the Joint Venture as used in this proposal (AS 43.70.020 and 43.70.110(4)).

8. **Contracts for Architecture, Engineering, Land Surveying, or Landscape Architecture** may not be awarded to individuals, corporations or partnerships not in compliance, respectively, with the provisions of paragraph 2, 3, and 6, above (AS 36.90.100).

For information about licensing, Offerors may contact the Alaska Department of Commerce, Community, and Economic Development, Division of Corporations, Business and Professional Licensing at P.O. Box 110806, Juneau, AK 99811-0806, or at Telephone (907) 465-2550, or at Internet address: https://www.commerce.alaska.gov/web/cbpl

CERTIFICATION FOR INSURANCE

Contractor will ensure that it and all Subcontractors have insurance coverage to effectuate the requirements of DOT&PF Form 25A269, Indemnification and Insurance.

CERTIFICATION FOR FEDERAL-AID CONTRACTS EXCEEDING $100,000

The individual signing this proposal certifies to the best of his or her knowledge and belief, that:

(1) No federal appropriated funds have been paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard Form-LLL, Disclosure of Lobbying Activities, in accordance with its instructions. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

This certification is a material representation of fact upon which reliance will be placed if the proposed contract is awarded. Submission of this certification is a prerequisite for making or entering into the proposed contract imposed by Section 1352, Title 31, U.S. Code. The Contractor also agrees by submitting this proposal that Contractor shall require that the language of this certification be included in all lower tier subcontracts which exceed $100,000 and that all such Subcontractors shall certify and disclose accordingly.

PART

D

CERTIFICATION – COST AND PRICING DATA

In accordance with AS 36.30.400, any cost and pricing data submitted herewith, or in any future price proposals for the proposed contract, will be accurate, complete and current as of the date submitted and will continue to be accurate and complete during the performance of the contract, if awarded.

The Contractor certifies that all costs submitted in a current or future price proposal are allowable In accordance with the cost principles of the Federal Acquisition Regulations of Title 48, Code of Federal Regulations (CFR), Part 31 and that the price proposal does not include any costs which are expressly unallowable under the cost principles of the FAR of 48 CFR 31. In addition, all known material transactions or events that have occurred affecting the firm's ownership, organization and indirect costs rates have been disclosed.

CERTIFICATION – TRADE RESTRICTIONS AND SUSPENSION AND DEBARMENT

The individual signing this proposal certifies to the best of his or her knowledge that the Contractor and any subcontractors are in compliance with DOT&PF 25A262 Appendix A, General Conditions, Article A25 and Article A26.

CERTIFICATION - FOREIGN CONTRACTING

By signature on this solicitation, the offeror certifies that all services provided under this contract by the contractor and all subcontractors shall be performed in the United States. If the offeror cannot certify that all work is being performed in the United States, the offeror must contact the Contracts Officer to request a waiver at least 10 days prior to proposal deadline. The offeror must provide with their submission a detailed description of the portion of work being performed outside the United States, where, by whom, and the reason the waiver is necessary. Failure to comply with this requirement may cause the state to reject the bid or proposal as non-responsive, or cancel the contract.

CERTIFICATION – DBE COMMITMENT

For federal-aid projects with DBE goals: if the Contractor submits a utilization report that proposes to use certified DBE's in the performance of work, the Contractor certifies that every effort will be made to meet or exceed the proposed percentage.

In addition, the Contractor certifies that a Consultant Registration form shall be submitted to the DBE/Civil Rights Office for their firm and each subconsultant prior to award.

CERTIFICATION – FORMER PUBLIC OFFICER

Any proposer listing as a member of the proposer's team a current public officer or a former public officer who has left state service within the past two years must submit a sworn statement from that individual that the Alaska Executive Branch Ethics Act does not prohibit his or her participation in this project. If a proposer fails to submit a required statement, the proposal may be deemed nonresponsive or nonresponsible, and rejected, depending upon the materiality of the individual's proposed position.

The Ethics Act bars a public officer who leaves State service from representing, advising or assisting a person for compensation regarding a matter that was under consideration by the administrative unit in which the officer served, and in which the officer participated personally and substantially through the exercise of official action, for two years after leaving state service. See AS 39.52.180(a). "Public officer" includes a state employee, a member of a state board and commission, and a trustee of the Exxon Valdez Oil Spill Trust. "Official action" means a recommendation, decision, approval, disapproval, vote, or other similar action or inaction. Possible remedies for violating the bar include penalties against the former public officer and voiding the state grant, contract or lease in which the former public officer is involved.

Additionally, former public officers may not disclose or use information acquired in the course of their official duties that could in any way result in a benefit to the former public officers or their families, if the information has not been disseminated to the public or is confidential by law, without appropriate authorization. *See* AS 39.52.140.

Each current or former public officer is responsible for determining whether he or she may serve in the listed capacity on this project without violating the Ethics Act. A form that a former public officer may use to certify their eligibility is attached. Current public officers may seek advice from their designated ethics supervisors concerning the scope and application of the Ethics Act. Former public officers may, in writing, request advice from the Office of the Attorney General, Ethics Attorney concerning the application of the Ethics Act to their participation in this project. It is the responsibility of the individual and the proposer to seek resolution in a timely manner of any question concerning the individual's eligibility.

Former Employee's Certification of Eligibility
Under the Alaska Executive Branch Ethics Act
(AS 39.52.140, AS 39.52.180)

I am a former employee of the State of Alaska and left state service within the last two years. My last position with the state was [*job title*] with the [*name of state agency and administrative unit*]. I propose to work on [*describe state contract or other matter*] on behalf of [*name of current employer*]. This work will not involve any matter (a) that was under consideration by the state administrative unit that I served, and (b) in which I participated personally and substantially during my state service through the exercise of official action ("official action" means a recommendation, decision, approval, disapproval, vote, or other similar action or inaction). I am therefore eligible to participate in this [*contract or matter*] under the Alaska Executive Branch Ethics Act. I also understand that as a former public officer I may not disclose or use information acquired in the course of my official duties that could in any way result in a benefit to me or my family, if the information has not been disseminated to the public, or that is confidential by law, without appropriate authorization.

I certify under penalty of perjury that the foregoing is true.

Dated: _____, 20__, at _____, Alaska.

_____
[*name of former state employee*]

STATE OF ALASKA)
) ss.
_____ JUDICIAL DISTRICT)

On this _____ day of _____, 20__, [*name of former state employee*], whom I know to be the individual described in and who executed this certification, personally appeared before me and acknowledged that [s]he signed the certification as [her or his] free and voluntary act.

IN WITNESS WHEREOF, I have placed my signature and affixed my official seal.

_____
Notary Public in and for Alaska
My commission expires: _____

If no notary or other official (judge, magistrate, U.S. postmaster or municipal clerk) is available, omit the notary certificate and include the following statement in the text: A notary or other official empowered to administer oaths is unavailable.

PRE-AUDIT STATEMENT

(Confidential when completed)

Submit this form, completed and with required attachments, ***only*** if specifically requested, and ***only*** to the following address: Department of Corrections, ATTN: Administrative Services, 802 3rd Street, Suite 221, Douglas, Alaska 99824.

Confidentiality may not be ensured if delivered otherwise.

Evaluation of this statement may preclude the necessity for a comprehensive on-site audit of Contractor's records. Entries may be handwritten, if legible.

1. Identify your financial year including beginning and ending dates .....:

2. List your actual costs, by the following categories, for your most recently ended fiscal year. Cost Terminology is defined on the reverse.

   2a. Direct Labor ..... $

   2b. Attach a Trial Balance with grouping of accounts used to arrive at the following Indirect Cost amounts:
   Fringe Benefits ..... $
   General & Administrative Expenses ..... $

   Sum ..... $

   2c. Indirect Cost Rate (Sum of 2b / 2a) .....Percent (%):

3. If your records have been audited within the last two years by a government agency, attach a copy of the Audit Report.

4. Attach copies of your most recent Internal and Audited (if performed by other than the Contracting Agency) Financial Statements.

5. Are your accounting methods for recording contract costs based on a job or project identified cost system?
   [ ] Yes [ ] No If your response is “No”, attach an explanation of your project cost accounting system.

6. If you charge projects based on unit rates (e.g.: for computer time, laboratory tests, copies or equipment use, etc.) attach a list of such items and unit rates.

7. Do you offset revenue received from unit rate payments against the applicable Indirect Cost Accounts?
   [ ] Yes [ ] No

If you have questions concerning this document, please telephone our Auditors at (907) 269-0715.

CERTIFICATION

I certify that I am a duly authorized representative of the Contractor and that information and materials enclosed within this statement accurately represent financial records of the office listed below.

Signature: _____ Date: _____
Name: Telephone:
Title: Fax:
Contractor: Email:

Office Address for which this Submittal is made:

Street:
P.O. Box:
City, State, Zip:

Address where Accounting Records are maintained, if not at Office Address:
:
:
:

COST TERMINOLOGY

DIRECT LABOR - Base salary or wages paid to employees charged directly to contracts or projects.

OTHER DIRECT COSTS - Actual costs of other than Direct Labor. Some examples of Other Direct Costs are subcontracts, equipment (company owned or rented), unit rate items and reimbursable expenses (travel, computer charges, reproduction, etc.).

INDIRECT COST RATE – A computed rate developed by adding all of a firm's general and administrative costs, and all other indirect costs, then dividing by a base value, usually direct labor dollars to get a percentage. This rate is normally compiled based on the consultant's applicable fiscal year.

INDIRECT COSTS - Indirect costs consist of allowable expenses which, because of their incurrence for common or joint cost objectives, must be prorated (allocated) to jobs or contracts using a specified Indirect Cost Rate. A cost objective is a function, organizational subdivision, contract, project or work unit for which cost data is accumulated under the Contractor's accounting system. Generally, Indirect Costs are segregated into the following categories: Fringe Benefits and General & Administrative Expenses .

Fringe Benefits - Costs for items such as:

Workers' Compensation Insurance
Deferred Compensation/Retirement Plans
Vacation Time and Authorized Leave
Social Security and Unemployment Taxes
Group Medical Plan and Life Insurance Premiums

Overhead costs for items such as the following, if they are not included in Direct Costs:

Indirect Labor (Supervisory, Administrative, etc.)
Travel, Food and Lodging
Maintenance and Depreciation of Equipment/Computers
Business Insurance Premiums Not Billed to Clients
Rent, Heat, Power, Light and Janitorial Services
Office Supplies
Communications
Reproduction Costs
Recruiting Expense
Rentals of Equipment/Computers

UN-ALLOWABLE COSTS - Costs for the following items and certain other costs defined in 48 CFR Part 31 and related regulations are not allowable. Such costs shall not be included as Indirect Costs or in the calculation of the Indirect Cost Rate.

Alcoholic Beverages
Advertising
Interest and Other Financial Costs
Contributions and Donations
Federal Income Taxes
Goodwill
Organization Costs
Lobbying Costs
Bad Debts
Fines and Penalties
Entertainment
Keyman Insurance

NOTE: IF YOUR ACCOUNTING SYSTEM WHOLLY OR PARTIALLY ALLOCATES INDIRECT COSTS ON OTHER THAN A DIRECT LABOR BASIS, ATTACH A DESCRIPTION OF THE COST POOLS OR SERVICE CENTERS YOU USE AND IDENTIFY THE INDIRECT COSTS RATE(S) AND BASE(S).

INDEMNIFICATION AND INSURANCE
Appendix D in Professional Services Agreements

IRIS Program No:	230000534-3
Federal Project No:	N/A
Date Prepared:	7/26/24

CONTRACTOR shall include the provisions of this form in all subcontracts that exceed $25,000 and shall ensure Subcontractor's compliance with such provisions.

ARTICLE D1
INDEMNIFICATION

D1.1 The CONTRACTOR shall indemnify, hold harmless, and defend the CONTRACTING AGENCY from and against any claim of, or liability for negligent acts, errors or omissions of the CONTRACTOR under this Agreement. The CONTRACTOR shall not be required to indemnify the CONTRACTING AGENCY for a claim of, or liability for, the independent negligence of the CONTRACTING AGENCY. If there is a claim of, or liability for, the joint negligent error or omission of the CONTRACTOR and the independent negligence of the CONTRACTING AGENCY, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "CONTRACTOR" and "CONTRACTING AGENCY", as used within this article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "Independent Negligence" is negligence other than in the CONTRACTING AGENCY's selection, administration, monitoring, or controlling of the CONTRACTOR and in approving or accepting the CONTRACTOR's Work.

D1.2 The CONTRACTOR shall exercise that degree of skill, care and judgment commensurate with the professional standards for the services of a similar nature. When such standards are in dispute, they shall be established by a panel of three qualified, impartial professionals objectively selected and appointed by the Appeals Officer.

D1.3 The CONTRACTOR shall correct, through re-performance at its expense, any services which are deficient or defective because of the CONTRACTOR's failure to perform said services in accordance with professional standards, provided the CONTRACTING AGENCY has notified the CONTRACTOR in writing within a reasonable time, not to exceed 60 days, of the discovery of any such deficiency during the performance of the services and within 12 months of the date of final payment under this Agreement.

ARTICLE D2
INSURANCE

D2.1 Without limiting the CONTRACTOR's indemnification, it is agreed that CONTRACTOR shall purchase at its own expense and maintain in force at all times for the duration of this Agreement, plus one year following the date of final payment, the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the CONTRACTOR's policy contains higher limits, the CONTRACTING AGENCY shall be entitled to coverage to the extent of such higher limits. Certificates of insurance must be furnished to the CONTRACTING AGENCY and incorporated into this Agreement with copies attached to this document. Certificates must provide for the CONTRACTING AGENCY to receive notice of any policy cancellation or reduction per AS 21.36 Sections 210-310. Failure to furnish certificates of insurance or lapse of the policy is a material breach and grounds for termination of the CONTRACTOR's services and may preclude other Agreements between the CONTRACTOR and the CONTRACTING AGENCY.

D2.1.1 Worker's Compensation Insurance: The CONTRACTOR shall provide and maintain, for all employees engaged in work under this Agreement, coverage as required by AS 23.30.045, and; where applicable, any other statutory obligations including but not limited to Federal USL&H and Jones Act requirements. The policy(s) must waive subrogation against the State of Alaska.

D2.1.2 Commercial General Liability Insurance: Such policy shall have ***minimum*** coverage limits of $300,000 combined single limit per occurrence, covering all business premises and operations used by the Contractor in the performance of services under this agreement. The policy shall be written on an "occurrence" form and shall not be written as a "claims-made" form unless specifically reviewed and agreed to by the CONTRACTING AGENCY.

D2.1.3 Comprehensive Automobile Liability Insurance: Such policy shall have ***minimum*** coverage of $300,000 combined single limit per occurrence covering all vehicles used by the Contractor in the performance of services under this agreement.

D2.1.4 Professional Liability (E&O) Insurance: Covering all negligent errors or omissions, and negligent acts, which the CONTRACTOR, Subcontractor or anyone directly or indirectly employed by them, make in the performance of this Agreement which result in financial loss to the State of Alaska. Limits required are per the following schedule:

MINIMUM LIMITS OF E&O INSURANCE

Contract Amount	Combined Single Limit, Per Occurrence & Annual Aggregate
Under $25,000	As Available
$25,000 to $100,000	$300,000
$100,000 to $499,999	$500,000
$500,000 to $999,000	$1,000,000
$1,000,000 and over	Negotiable

D2.1.5 Professional Liability Insurance required for this Agreement is $ 500,000.00

ARTICLE D3
MODIFICATION OF INSURANCE REQUIREMENTS

(Article D3 is completed only when some of the standard insurance coverages are not applicable.)

CONTRACTOR RELATED MODIFICATIONS

D3.1 ☐ **Workers Compensation Insurance** is not required because the CONTRACTOR is an Independent Contractor, Sole Proprietor or Self-Employed Person having no employees in any sense of AS 23.30.045.

D3.2 ☐ **Comprehensive or Commercial General Liability Insurance** is not required because the general public and clients do not have any business access to a place of business or home office maintained by the CONTRACTOR.

D3.3 ☐ **Comprehensive Automobile Liability Insurance** is not required because only public transportation, or a rented passenger vehicle with business use insurance, will be used to accomplish requirements of this Agreement.

PROJECT RELATED MODIFICATIONS FOR E&O COVERAGE

When services may apply to fire, life safety or structural aspects and/or wherever the services should safeguard life, limb, health or property, Professional Liability Insurance shall be required.

(E&O Coverage may be waived only if it was specifically not required within the solicitation for proposals.)

D3.4 ☐ **Professional Liability (E&O) Insurance** is not required because: 1) the CONTRACTING AGENCY's use of the services or Work products obtained from the CONTRACTOR will not result in significant exposure to any third party claims for loss or damage; and 2), the CONTRACTOR services will not apply to any construction, alteration, demolition, repair or direct use of any highway, airport, harbor, building or other structure.

D3.5 ☐ **Professional Liability (E&O) Insurance** is not required because this Agreement is for one of the following applicable (*checked*) services for which E&O coverage is not needed:

- ☐ Right-of-Way Fee Appraisals
- ☐ Photogrammetric Mapping Services
- ☐ Architectural/Engineering review of Construction Bid Documents wherein design responsibility clearly remains with the designer of record.

OTHER BASIS FOR MODIFICATIONS

(Requires written concurrence from Division of Risk Management)

D3.6 ☐ Attached Exhibit D-1 identifies and provides justification for insurance modifications.

Above *checked* modifications of the insurance requirements specified in Article D2 are hereby approved:

CONTRACTING OFFICER Signature: _____ Date: _____

Name: Michael Lim

Title: Procurement Specialist

STATEMENT OF SERVICES
APPENDIX B

RFP No: 230000534-3
IRIS Project No:
Date Prepared: 7/26/2024

DOC Statewide Backup Power System – Design Services

ARTICLE B1
ADMINISTRATIVE REQUIREMENTS

1.1 General
The contractor shall provide services as identified and authorized by one sequentially numbered Notice to Proceed (NTP). The contractor shall not perform services or incur billable expense except as authorized by an NTP.

1.2 Project Staff
All services must be performed by or under the direct supervision of the following individuals. Replacement of, or addition to, the Project Staff named below shall be accomplished only by prior written approval from the department:

Name	Project Responsibilities
	Contract Management
	Project Management
	Lead Engineer

1.3 Definitions and Project Responsibility
The department's project manager or designee shall be the contractor's main point of contact. The contractor shall not deal directly with other department personnel or the subsequent construction contractor without the project manager's approval.

Department or Contracting Agency:	Department of Corrections
Contractor:	
Project Manager:	William Merchant, DOC Facilities Manager
Construction Contractor:	Subsequent Construction Contractor

1.4 Project Location and Travel
Project locations will be in active correctional facilities and contract personnel are required to complete a request for clearance form if requested to be onsite. The contractor shall follow all security requirements issued by the department. The department reserves the right to remove any contract personnel that are deemed detrimental to the facilities security. The contractor is responsible for all travel to any of the below listed locations.

1. Anchorage Correctional Complex
   1400 East 4th Avenue
   Anchorage, Alaska 99501

2. Fairbanks Correctional Center
   1931 Eagan Avenue
   Fairbanks, Alaska 99701

3. Hiland Mountain Correctional Center
   9101 Hesterberg Road
   Eagle River, Alaska 99577

4. Ketchikan Correctional Center
   1201 Schoenbar Road
   Ketchikan, Alaska 99901

5. Mat-Su Pretrial Facility
   339 E. Dogwood Avenue
   Palmer, Alaska 99645

6. Spring Creek Correctional Center
   3600 Bette Cato Avenue
   Seward, Alaska 99664

7. Yukon Kuskokwim Correctional Center
   1000 Chief Eddie Hoffman Highway
   Bethel, Alaska 99559

1.5 General Standards

The contractor shall perform all services in accordance with applicable codes, regulations and standards, professional practice procedures, and commonly recognized construction methods. The contractor shall consider the geographical location, intent of the project (security) and any site-specific constraints when performing work.

1.6 Schedule

The RFP schedule set out herein represents the State of Alaska best estimate of the schedule that will be followed. If a component of this schedule, such as contract execution, is delayed, the rest of the schedule may be shifted accordingly.

Calendar days are used unless otherwise noted:

Event / Deliverable	Event or Deliverable Deadline:
35% Plans and Specifications	TBD
95% Plans and Specifications and Cost Estimate	TBD
Final Sealed Plans	October 31, 2025

1.7 Unit of Measure

The contractor shall use U.S. Customary units of measure throughout the project.

1.8 Professional Registration

All reports, plans, specification, estimates and similar work products provided by the contractor shall be prepared by or under the supervision of the Registered Alaskan Engineer or Architect in responsible charge for the services. These Engineers or Architects shall be currently registered in the State of Alaska and they shall sign, seal and certify as to the accuracy of each final work product for which they are responsible.

1.9 Billing Reports

The contractor shall provide a separate billing for each facility. The contractor shall provide a two-page (typical) report with each monthly billing for months in which services are performed. The report shall specifically describe the services and other items for which the billing is submitted and shall estimate the percent the services are complete. Any delayed costs from previous billing periods that are included in the current billing must be clearly explained in the report.

1.10 Correspondence

All correspondence prepared by the contractor shall bear the department's assigned project name and numbers (State & Federal).

1.11 Documents and Reports

Documents and Reports shall be printed with solid black letters that are double spaced on white, 8.5 inch x 11 inch bond or "Xerox Copy" paper. Other size paper may be used for illustrations if they are folded to 8.5 inch x

11-inch size. Original documents and reports shall be printed on one side of the paper only and shall be ready for copying. Documents and reports shall have no black and white photographs, color photographs, or multicolored graphics except as specifically approved by the Contracting Agency. Original, camera ready, copies of final documents and reports shall be submitted to the Contracting Agency for a check before printing.

1.12 Copies

When the Contract calls for multiple copies of documents or reports, the copies shall be printed on both sides of the paper. However, the cover and pages with approved illustrations, multicolored graphics, or photographs shall be printed on one side of the page only. All copies - except for originals - shall be bound.

1.13 Page Numbers

All documents shall be page numbered to allow every major Section, Chapter, Appendix, etc., to begin on a "right hand," odd numbered page.

1.14 Covers

The cover of all documents and reports shall include the following information:

a. Name of document or report.
b. Date.
c. Indicate whether draft or final.
d. Project Name.
e. State and Federal Project Number(s).
f. Prepared for: Alaska Department of Corrections.
g. Prepared by:
h. Map and/or picture of project area.

1.15 Contractor Name on Plan Sheets and Documents

No contractor logos shall be allowed on any electronic or hard copy document produced for the department. The contractor company name shall be included in the box above or below the engineer's seal on each plan sheet. Documents produced for the department shall include the contractor's company name at the bottom right of the first page, cover sheet or title sheet only. Contractor letterhead shall be allowed only as exhibits in document appendices. The contractor name shall be in the same font as other lettering on the plan sheet or document, shall be 1/16" or less in height on 11"X17" plan sheets, and shall be in the following format:

PLANS DEVELOPED BY:
COMPANY NAME
ADDRESS
TELEPHONE NO.
CERTIFICATION OF AUTHORIZATION NO.

1.16 Plans, Maps, and Plats

Plans, Maps, and Plats shall be submitted with solid black ink on 11 x 17 -inch bond paper. Submit final drawings on 11" x 17" -inch bond paper and in pdf format.

1.17 Digital Copies

The department uses Microsoft Windows (Word, Excel) and AutoCAD Civil 3D 2016 software. The contractor shall submit all digital files in formats fully compatible with the department's software. Formal submittals shall be on CD-R(W) or as approved by the department. Provide informal digital submittals as approved by the department.

1.18 Drafting

All drawings shall be submitted in either AutoCAD, current format, or DXF format. All submissions shall include the AutoCAD drawing files, or DXF drawing files, on CD ROM discs. A standard layering scheme provided by the department shall be used. Failure to adhere to this scheme will be cause for rejection.

1.19 Specifications and Estimates

Specifications and Estimates shall be submitted with solid black letters that are double spaced on white, 8.5 - inch x 11-inch bond or "Xerox Copy" paper. They shall be printed on one side of the paper only and shall be ready for copying. Specifications and estimates shall contain no graphics and no photographs except as specifically approved by the Contracting Agency. All Specifications shall also be submitted on CD ROM discs or

thumb drive as document files for Microsoft Word current edition or compatible software written for IBM compatible personal computers. It is the contractor's responsibility to ensure all document files are virus free.

1.20 Revisions

The Contractor shall modify work products in response to direction from the Contracting Agency. Corrections, adjustments, or modifications necessitated by the review/approval process, but which do not substantially affect the scope, complexity, or character of the services, shall be considered a normal part of the Contractor's services.

1.21 Errors and Omissions

Except as described in this Statement of Services, work products shall be essentially complete when submitted to the Contracting Agency. Work products having significant errors or omissions will not be accepted until such problems are corrected.

1.22 Review Meetings

Following each review, the Contracting Agency will provide written comments and may hold a meeting to discuss the issues. The Contractor's personnel who are in-responsible-charge for the work products under review shall attend the meeting and they may be asked to interpret and provide explanations of the content.

1.23 Comment Resolution

The Contractor shall provide a written response with subsequent submittals that address all written and oral comments from the Contracting Agency. All changes from previous submittals shall be clearly explained.

1.24 Reproduction and Distribution

When the contract requires only the original or only one copy of a work product to be delivered, the Contracting Agency will reproduce and distribute any other copies required. Items delivered for reproduction shall be organized and camera ready for copying and not stapled or otherwise bound.

1.25 Engineer Estimate

The contractor shall provide their best construction estimate for each design. The department discourages the use of costly estimating services. The contractor shall not release any information pertinent to the engineer's estimate without the prior written authorization by the department's project manager.

1.26 Cost Effective Design

When developing the design, the contractor shall advise the department of any cost-effective solutions such as minimum or desirable design criteria.

1.27 Specifications

The contractor shall not specify sole source materials unless the department first obtains a sole source approval. The contractor shall not specify brand name materials unless a minimum of three (3) are named, and if "or equivalent" is used, specify the criteria for judging equivalence.

ARTICLE B2
SCOPE OF SERVICE

PHASE 1 – Design and Specification Development

2.1 Design and Specification Development

The contractor shall provide a design service for backup power upgrades at seven (7) institutional facilities. The scope of the design will be taken, but not limited to the evaluation report of the backup power system that was completed in 2023. Contractor shall provide a prioritized list of repairs or replacement conditions noted during design. Some of the facilities may include both mechanical and electrical design. See attached seven (7) facilities backup power survey. Contract requires site visits to each locations as needed. Bid ready documents for each locations. Sheet notes specifications acceptable. The contractor shall provide final 100% design plans and specifications no later than October 31, 2025.

2.2 Task 1 – Plans & Specifications Package

The contractor shall complete an individual bid-ready P&S package for the project site as outlined below.

A. Plans in Hand (PIH) Description. Prepare draft contract documents addressing the primary elements of the project.

B. Technical Specifications. Technical Specifications shall include Division 2-28 as applicable This reflects the level of completeness of the plan set and estimate. Include all appropriate pay items and include drafts of any significant project-specific specifications. Discuss these with the department before submitting the review documents.

2.3 Task 1 Deliverable Items

Document Type	Format
Draft PIH	Emailed PDF
Draft Specification	Emailed Microsoft Word
Work Description	Emailed Microsoft Word

2.4 Task 2 – Plans & Specifications Review.

The contractor shall revise the contract documents according to the comments and responses from the PIH review. Provide plans, specifications, and construction cost estimate for the P&S review that is 95% complete.

a. Adjudicated PIH Review Comments. Provide the comments and responses from the PIH review meeting and a summary memo to the project manager. Format all responses in the past tense (e.g. “have done”, “changed” etc.).

b. Significant Change Memo. Provide a memo to the project manager summarizing any significant design changes between the PIH review meeting and the P&S review submittal that were not captured in the adjudicated PIH review comments.

c. Draft Mod to Standards Memo. Provide a draft Modifications to Construction Standards Memo based on the department’s template.

2.5 Task 3 – Deliverable Items

Document Type	Format
Adjudicated PIH Review Comments	Emailed PDF
Significant Change Memo	Emailed PDF
Draft Mods to Standards Memo	Emailed PDF
95% Cost Estimate	Emailed PDF

2.6 Task 3 Review Meetings

The contractor shall attend department review meetings to discuss the P&S review comments from the PIH and P&S Review and the contractor shall note any discussions that resolve comments or develop consensus.

a. Pre-Meeting Comment Responses. The department will provide the contractor a list of compiled comments two (2) days before each review meeting if needed. The contractor shall provide preliminary responses to the comments before the review meeting to facilitate a quicker review.

b. Post-Meeting Comment Resolution. The contractor shall provide a memo to the department that lists the comments and proposed response within 2 weeks after each meeting and promptly revise any draft responses according to department requests. The contractor shall provide a finalized list of adjudicated comments and responses once comments are resolved.

2.7 Task 3 Deliverable Items

Document Type	Format
Preliminary Responses	Emailed PDF
Comment and Response Memo	Emailed PDF
Final list of adjudicated comments and Response	Emailed PDF

2.8 Task 4 – Final Plans & Specifications

The contractor shall 100% finalize the contract documents based on comments from the P&E Review. Include the indicated products that were listed for changes in a previous review. Documents will not be accepted until comments have been addressed to the department's satisfaction. Prepare documents that are ready for advertising for construction bids as identified below.

a. Final Check Set. Provide a final unsigned plan set for final comments by the department. Incorporate any comments received into the plans before signing and sealing the final plan sheets.

b. Engineering Seals. Submit final plan sheets sealed by an appropriate Professional Engineer currently registered in the State of Alaska who is in charge for the project work. Sign plan sheets in blue waterproof ink. Digital signatures will not be accepted.

2.9 Task 4 – Deliverable Items

Document Type	Format
Final Check Set	Emailed PDF
Final Sealed Plans	Emailed PDF

June 14, 2023

Alaska Department of Corrections
550 W 7th Ave., Ste. 1820
Anchorage, Alaska 99501

ATTENTION: William Merchant

Dear Bill,

REFERENCE: DOC SW Back Up Power System Evaluation – Anchorage Correctional Complex (ACC) Report

On 1/19/23 I, Patrick Collins, and AJ Schirack with RSA along with Bill Merchant, with DOC, visited the Anchorage Correctional Complex to investigate the backup power systems at the facility. The following report is a summary of our findings and recommendations for upgrades to the existing system.

Electrical - East:

Existing Conditions

The east building has a 4,000A, 480V, 3Ø, 4-wire main switchboard with a 4,000A main breaker. The switchboard distribution section has (2) 1,200A breakers which sub-feed, via 1,200A Automatic Transfer Switches (ATS), another, normal power, section of the main switchboard and another standalone 2,000A emergency switchboard. The generator is 1,100KW, 480V, 3Ø, 4-wire, Cummins model #1100DFLB – 1450. There are (2) 1,200A engine mounted breakers feed to the ATS. The ATS are installed within the respective normal and emergency power switchboards. Both ATS are rated 1,200A, 480V, 3Ø, 4-pole, with switched neutral and open transition type, Cummins type #OTPCE-1746735. The generator was manufactured in October in 2000. The ATS were installed as part of an upgrade during 2014 and expect they were manufactured around that time. All the standby equipment is in excellent condition. The entire building load is on the standby system. Emergency loads have battery backup.

The East facility is entirely backed up by standby power and all standby equipment is in excellent condition it does not require any upgrades currently as long as routine maintenance is performed per the manufacturer's recommendations.

Electrical - West:

Existing Conditions

The West building electrical service directly connects to a 1,600A, 480V, 3Ø, 4-wire switchboard (panel MDP) with a CT section and a distribution section. The distribution section has (5) service entrance rated breakers. A 175A breaker feeds a 225A Automatic Transfer Switch (ATS), ETS, which originally fed emergency panel loads. An 800A breaker in the MDP feeds an 800A ATS, STS, which services an 800A distribution panel. Although this generator was originally used as emergency source it is no longer maintained per the NEC requirements and non-emergency loads have been installed on the emergency system. Currently all emergency loads have a battery system in order to comply with emergency power requirements. The 225A ATS is a Westinghouse Style #1T4537, 3-pole, solid neutral, open transition. The 800A AST is a Westinghouse Style #1T4536, 3-pole solid neutral, open transition. Both ATS are original to the building, past their useful life, no longer manufactured, and replacement parts or additional control cannot be installed. The ATS are fed from a 520KW, 480V, 3Ø, 4-wire standby generator with a 175A and 800A generator mounted breakers. The generator is a CAT #SR4 which is original to the building and is maintained by NC Machinery.

There have not been any reports of issues at this time and the generator appears to be in good condition.

Mechanical - East:

The generator/boiler plant is served by a 10,000-gallon Aboveground Storage Tank (AST) located east of the facility. The boilers are dual fuel units, which operate primarily on natural gas, but would change to fuel oil in the event of emergency.

Piping between the tank and building/generator is routed underground with an appropriate product that utilizes secondary containment. Aboveground piping is schedule 40 steel piping with threaded joints.

The Generator draws fuel from a 275-gallon day tank situated in the room. It was noted that the day tank lacks a fuel return pump, which was likely due to the change from below ground to above ground fuel storage tank during construction. It is recommended that the day tank be replaced with an appropriate model that meets NFPA 30 requirements. The boiler system day also has a similar configuration and requires replacement.

The generator is cooled by an engine-mounted radiator, which appeared to be in good condition and working properly.

Exhaust piping from the generator is equipped with a muffler and is insulated. Size was not possible to determine with the insulation in place.

Based on the assumption that boilers and generator operate at 75% capacity, the current anticipated runtime for the system is 2.9 days. During a power outage where the natural gas service is not interrupted, it is expected that the generator has 5.44 days @ 75% capacity.

Mechanical - West:

Fuel piping is routed above grade in schedule 40 black iron, threaded piping. No day tank is present, the generator pulls fuel directly from the 7,500-gallon fuel tank situated just outside the building. No other equipment is connected to the storage tank.

The generator is cooled by an engine-mounted radiator, which appeared to be in good condition and working properly.

Exhaust piping from the generator is equipped with a muffler and is insulated. Size was not possible to determine with the insulation in place.

Based on the assumption that generators operate at 50% capacity (based on utility use data), the current anticipated runtime for the system is 14.4 days.

Concerns and Recommendations

1. The West facility ATS need to be replaced as they may no longer be upgraded or maintained. As the local utility does not allow for closed transition ATS we would recommend replacing them with similarly rated open transition ATS in the same locations. This would not change any current operations for testing but could be upgraded to allow more information of transfer states by the building management systems and other operation considerations. Under this recommendation the current generator may remain until such time as NC Machinery, or other licensed CAT workshop, can no longer maintain the unit.

2. To have the entire building backed up by standby power would require a service upgrade to comply with the utility and latest NEC requirements. When the Switchgear was installed with the (5) service disconnects this was a code compliant installation the latest NEC 230.71(B) now requires each service disconnect be installed in a dedicated vertical section. The current installation does not comply with Chugach Electric Association (CEA) standards which require the service disconnect be mounted on the exterior of the building. The new service would be an exterior-mounted CT with 800A fused service disconnect adjacent to an exterior-mounted 800A ATS. The new ATS would then be connected to a new 800A MDP which would feed the existing MDP and SDP loads. The ATS would be connected to the existing generator-mounted breaker. Because we need to do a service upgrade with a new exterior disconnect, we would recommend pursuing an agreement with CEA to use a closed-transition type ATS instead of the open-transition type.

3. Based on CEA peak demand the existing 500KW generator is adequately sized to operate the entire building load, however based on this information if a generator replacement is required it may be downsized as small as 250KW. It is assumed the existing generator room is adequately sized for any replacement generator which may be installed. The size reduction would result in an increase of anticipated run time of 2 additional days, for a total of 16.5 days at 75% capacity.

FACILITY SUMMARY TABLE

ELECTRICAL DISTRIBUTION SYSTEM

Existing Generators		Rating(KW)	Voltage	Phase	Wiring	
	East	1,100	480	3	4	
	West	520	480	3	4	

Existing ATS		Rating (A)	#Poles	Transition		
	East - ATS L	1,200	3	Open		
	East - ATS N	1,200	3	Open		
	West - ATS ETS	800	3	Open		
	West - ATS STS	225	3	Open		

Utility Demand Load Information		KW	Assumed PF	KVA	Total NEC Demand (KVA)
	East	491	0.90	546	682
	West	187	0.90	208	260

Recommended ATS		Rating (A)	#Poles	Transition		
	West – ETS (Rec #1)	800	3	Open		
	West – STS (Rec #1)	200	3	Open		
	West – Building (Rec #2)	800	3	Open		

FUELING SYSTEM

Fuel Tanks		Size (gal)	Type	Est. Fuel Use W/ NG	Est. Fuel Use W/O NG
	East	7,500	Above Ground	5.44 days	2.9 days
	West	10,000	Above Ground	14.4 days	N/A
	West - reduced gen size (Rec #3)	10,000	Above Ground	16.5 days	N/A

If you have any questions concerning the above, please do not hesitate to call me.

Sincerely,

Patrick Collins

Patrick Collins, P.E.
Electrical Project Engineer

pcc/hhm
23-0245/M2231

June 14, 2023

Alaska Department of Corrections
550 W 7th Ave., Ste. 1820
Anchorage, Alaska 99501

ATTENTION: Clifton Reagle

Dear Clif,

REFERENCE: DOC SW Back Up Power System Evaluation – Fairbanks Correctional Center (FCC) Report

On 1/9/23 I, Patrick Collins, along with Bill Merchant with DOC, travelled to Fairbanks Correctional Facility to investigate the backup power systems at the facility. The following report is a summary of our findings and recommendations for upgrades to the existing system.

Electrical:

Existing Conditions

The existing service for FCC has a 120/208V, 3Ø, 4-wire service with Golden Valley Electric Association (GVEA) metered transformer which feeds (2) disconnects. One disconnect is 800A and feeds Unit 3. The other disconnect is 1,200A and feeds Unit 1. The second service is a dedicated 600A service to the ACI building which connects to a 600A service rated disconnect.

Unit 1 disconnect feeds a 2,000A Main Distribution Panel (MDP), Siemens type SB3 switchboard which then feeds to the standby systems with a 600A breaker. The feeder to the standby system feeds a 600A, close-transition Automatic Transfer Switch (ATS), ASCO 7000 Series. The ATS then feeds another 600A distribution Panel 'EDP', Siemens type P4. The distribution panel feeds various branch circuit panels. The distribution panels were replaced in 2016 and the ATS was originally installed in 2002. Per on-site conversation the ATS may have had the controls updated when they did the panel replacement. All the distribution equipment is in good to excellent condition. The generator for this system is located North of the building from the distribution system in a dedicated room. The generator is manufactured by The Instrument Laboratory (TIL), Inc 175KW/219KVA, 120/208V, 3Ø generator. There is no manufactures dates on the nameplate however the unit appears to be original construction. As this building was constructed prior to 1972, based on earliest available plans for an addition built in 1972. We would assume that this generator was manufactured sometime prior to 1970. It has a breaker mounted on the skid which feeds to the ATS. The Breaker rating was not printed on the handle of the device, so we assume it is a fully rated 600A breaker. The generator is currently in operation and the current staff is able to change filters with the use of various manufacturer who purchased the technology from TIL. Since the engine is no longer manufactured if any major repairs are required the entire unit would need to be replaced.

Unit 3 disconnect feeds an 800A MDP. Two breakers in this MDP feed the standby system, a 100A and a 300A breaker. It appears that the generator was originally intended to function as the standby and emergency power source based on the separation of loads on separate ATS but additional non-emergency loads have been added to both sections and the generator is not maintained as an emergency source. Battery backups have been installed in upgrades to operate the emergency systems. These breakers feed a 100A and 400A, respectively ATS. The ATS are open-transition ASCO 300 Series. The 100A ATS feeds a branch circuit Panel 'EM1' and the 400A ATS feeds a distribution panel EMDP which feeds various branch circuit panels. The generator which feeds the ATS is a unit installed in a walk-in enclosure outside the building and has (2) generator-mounted breakers, a 100A, and a 400A which feed the ATS. The generator is a CAT C7.1 D150GC,

150KW/187KVA, 120/208V, 3Ø. The transfer switches and generator were all installed within the last couple of years to replace a broken generator.

The ACI building distribution has no standby system. However, at least one panel within the building is fed from Panel 'EDP' on Unit 1 generator.

Mechanical:

The facility is served by a 20,000-gallon Aboveground Storage Tank (AST) located outside the secured area south of the facility which provides fuel for the generators and boilers. The boilers are dual fuel units, which operate primarily on natural, but would change to fuel oil in the event of emergency.

Piping between the tank and building/generators is routed underground with an appropriate product that utilizes secondary containment. Aboveground piping is schedule 40 steel piping with threaded joints.

The fuel system is connected to (4) mechanical rooms, which have the following equipment:

- Unit 1 – One Boiler, DT-4, Generator, DT-5.
- Unit 3 – Two Boilers, DT-1, Remote Pump to Unit 1.
- ACI – One Boiler, DT-3.
- Generator Module (serves Unit 3) – Generator, DT-6.

Each day tank is configured with integral pumps and controls, adjacent to the units which draw off the main AST fuel tank. Unit 1 Generator has a new replacement day tank which is yet to be installed; the current day tank is in poor condition, primarily due to age. Unit 3 Generator was installed in 2020 and is excellent condition. Unit 3 Generator day tank alarms are tied into the DDC system per record dwgs that we have.

Unit 3 Generator engine cooling uses an engine-mounted radiator which is in excellent condition and working properly. Unit 1 Generator is liquid cooled using domestic water line which then dumps into a floor drain located in an adjacent room to the generator room. Per on-site discussion the generator functions well for about 1 hour but after an hour the adjacent room experiences flooding because the drain system cannot keep up with the water-cooling system of the generator.

Exhaust piping from each generator is insulated.

Based on natural gas use records for the facility, and that the generators operate at 75% capacity, the current anticipated runtime for the system is 32.5 days. During a power outage where the natural gas service is not interrupted, it is expected that the generators would have 39.1 days @ 75% capacity.

Concerns and Recommendations

1. Unit 1 Generator cooling system is poorly configured currently and does not allow for extended operation of the unit. The unit is also of an age that it is past its end of life and could experience a catastrophic failure at any time. With the current room configuration and it being near the center of the building there is not room for a new unit within the same room. Replacing the generator with a module similar to the approach taken on Unit 3 would be required to provide adequate backup power. However, we are recommending that instead of adding a second enclosure and generator, we revise the distribution system as needed to allow for a single generator unit to run the entire facility. This would include removing the existing ATS, salvaging them for the owner to use at other facilities or as backups, and replacing them with junction boxes to splice the existing feeders. New ATS would need to be installed on the load side of the service disconnects.

2. The new ATS would be fully rated, 1,200A and 800A, close transition type ATS which would then be connected to the new generator in a new walk-in enclosure. The enclosure will be sighted near the existing 20,000-gallon AST and be connected to the tank as a fuel source. There will be (2) generator-mounted breakers which feed the new ATS within the building. Based on demand load reading, provided by the utility Golden Valley Electric Association (GVEA), the peak demand load is 239KW. To run the entire facility with a single generator would require a minimum of 300KW generator which includes 25% spare capacity per NEC. Assuming 75% load capacity of the generator during normal operation we would assume 32.8 days of fuel use with a single generator.

FACILITY SUMMARY TABLE

ELECTRICAL DISTRIBUTION SYSTEM

Existing Generators		Rating(KW)	Voltage	Phase	Wiring	
	Unit 1	175	208	3	4	
	Unit 3	150	208	3	4	

Existing ATS		Rating (A)	#Poles	Transition		
	ATS - EDP	600	3	Closed		
	ATS - EM	100	3	Open		
	ATS - EMDP	400	3	Open		

Utility Demand Load Information		KW	Assumed PF	KVA	Total NEC Demand (KVA)
	Complete Facility	239	0.80	298	373

Recommended Generators		Rating(KW)	Voltage	Phase	Wiring	
	Complete Facility	300	208	3	4	

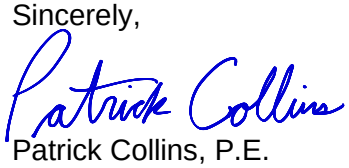
Recommended ATS		Rating (A)	#Poles	Transition		
	Service Unit 1	1,200	3	Closed		
	Service Unit 3	800	3	Closed		

FUELING SYSTEM

		Size (gal)	Type			
	Existing Tank	20,000	Above Ground			
	Current Fuel Use Estimated	32 days				
	Estimate Fuel Use Based on Recommended Generator	32 days				

If you have any questions concerning the above, please do not hesitate to call me.

Sincerely,



Patrick Collins, P.E.
Electrical Senior Engineer

pcc/hhm
23-0247/M2231

June 14, 2023

Alaska Department of Corrections
550 W 7th Ave., Ste. 1820
Anchorage, Alaska 99501

ATTENTION: Bill Merchant

Dear Clif,

REFERENCE: DOC SW Back Up Power System Evaluation – Hiland Mountain Correctional Center (HMCC) Report

On 1/24/23, Steven Bassler, and Dustin McCleskey with RSA along with Bill Merchant, with DOC, visited the Hiland Mountain Correctional Complex to investigate the backup power systems at the facility. The following report is a summary of our findings and recommendations for upgrades to the existing system.

Electrical:

Existing Conditions

The existing electrical service for HMCC is a 480/277V, 3Φ, 4-wire service with Matanuska Electric Association. The service enters the building and feeds a 2000A, 480V, 3Ø, 4-wire, floor mounted main switchboard containing a utility CT and meter. The switchboard feeds a 600A Automatic Transfer Switch (ATS) via a 600A breaker that feeds the sites 600A generator distribution panel. There is a 225A breaker in the generator distribution panel that feeds to a Manual Transfer Switch (MTS) located in building N.

There is one generator for this site, and it is located in a dedicated generator room in building H. The generator was manufactured by Caterpillar and is a prime rated, 275KW, 480V, 3Φ, 4-wire diesel generator model # 3406 with 857 hours of run time. The generator was manufactured in, or before 1998. The generator has one 600A engine mounted breaker that feeds an ATS. The ATS is an ASCO 7000 series and is a 600A, 480V, 3Φ, 3-pole, solid neutral, closed transition, model # H7ACTSA30600N5XC. The generator distribution panel “EMCC” is a Westinghouse switchboard rated 600A, 480/277V, 3Φ, 4-wire panel manufactured in 1972. Generator distribution panel “EMCC" feeds all generator loads for the campus via additional distribution panels, all of similar make and age. ‘EMCC’ feeds a motor control center labeled ‘MCC-EM’ and it is a Westinghouse, 400A, 480,277V, 3Φ, 4-wire motor control center manufactured in 1972. MCC-EM had notes that breakers and relays were not operating correctly, and a buzzing noise could be heard when energized. Additionally, EMCC feeds the backup power side of an MTS in building N. The MTS is a Square D double throw enclosed, switch rated, 100A, 600V, 3Φ, 4-wire MTS. The MTS acts to move panel ‘MM’ between being solely on utility power or being on the back-up power system and is currently set to be on back-up power. Panel MM is a Square D, NH1B panelboard rated 100A, 480/277V, 3Φ, 4-wire. The ATS, MTS, panel ‘EMCC’ and panel ‘MM’ all appear to be in excellent condition. The Generator is in relatively good condition for being at least 30 years old. With parts still being available for this model it is believed that it will continue to operate as designed. The voltage, frequency and amperage monitors on the control panel are not operational at this time.

Mechanical:

The generator/boiler plant is served by a 7,500-gallon Aboveground Storage Tank (AST) located near the generator room and boiler room. The boilers are dual fuel units, which operate primarily on

natural gas, but would change to fuel oil in the event of emergency. The boiler plant consists of 3 Weil McLain 88s which use 23.5 GPH when burning oil.

Piping between the tank and building/generator is routed above ground into the building. Once inside the building the piping is routed in a shallow trench protected by diamond steel grating. Piping is schedule 40 steel piping with threaded joints.

The Generator draws fuel from a 50-gallon day tank located in the boiler room. It was noted that the day tank has recently been replaced and is in new condition. The day tank is filled via a fuel pump located in the boiler room. The day tank has a tank mounted return pump back to the main tank.

The generator is cooled by an engine-mounted radiator, which was replaced in 2018 and is in new condition.

Exhaust piping from the generator is an insulated exhaust pipe that is routed outside of the generator room. A silencer is installed on the exhaust pipe outside of the generator room.

Based on the assumption that boilers and generator operate at 75% capacity, the current anticipated runtime for the system is 4.4 days. During a power outage where the natural gas service is not interrupted, it is expected that the generator has 19 days @ 75% capacity.

Concerns and Recommendations

1. The switchgear in the facility, specifically MCC-EM and EMCC is 51 years old and indication of failing components were visible during the site visit. A handful of breaker or starters had notes, handwritten, indicating that there is buzzing from certain motor starters or there are nonoperational motor starters. The main distribution equipment was all manufactured by Westinghouse, which no longer makes this equipment and parts would have to be special ordered. It would be recommended that updating the facilities switchgear be the first priority when looking at the electrical distribution system.

2. There is a wire way located overhead in the generator room that has a cover plate that is not secured. Recommend securing the cover plate to keep conductors enclosed in the wireway.

3. The Voltage, Amperage and Frequency gauges on the Generator are non-operational. Recommend repairing or replacing these monitoring systems.

FACILITY SUMMARY TABLE

ELECTRICAL DISTRIBUTION SYSTEM

Existing Generators		Rating(KW)	Voltage	Phase	Wiring	
	MAIN	275	480	3	4	

Existing ATS, MTS		Rating (A)	#Poles	Transition		
	MAIN ATS	600	3	Closed		

Utility Demand Load Information		KW	Assumed PF	KVA	Total NEC Demand (KVA)
	Complete Facility	301	0.80	377	471

FUELING SYSTEM

Fuel Tanks		Size (gal)	Type	Estimated run time	Est. Run Time W/O NG
	Complete Facility	7,500	Above Ground	455 hr	104.5 hr

If you have any questions concerning the above, please do not hesitate to call me.

Sincerely,

Jeremy Maxie, P.E. LC, RCDD
Associate Principal Electrical Engineer

jam/hhm
23-0249/M2231

June 14, 2023

Alaska Department of Corrections
550 W 7th Ave., Ste. 1820
Anchorage, Alaska 99501

ATTENTION: William Merchant

Dear Bill,

REFERENCE: DOC Back Up Power System Evaluation – Ketchikan Correctional Center (KCC) Report

On 2/6/23 we visited the Ketchikan Correctional Center to investigate the backup power systems at the facility. Jeremy Maxie from our office met with Clif Reagle on-site. The following report is a summary of our findings and recommendations for upgrades to the existing system.

Electrical:

Existing Conditions

The facility has a single meter and utility transformer. The service feeds a 1200A, 480V, 3Ø main distribution panel (MDP). The MDP contains a 400A/3P circuit breaker that provides utility power to a 350A automatic transfer switch (ATS). There are also two circuit breakers in the MDP, rated 600A/3P and 125A/3P which were originally designated for a future electric boiler and a future chiller. These circuit breakers would not be backed up by the generator, and no load was ever connected to them.

There is a single 210kW, 263kVA, 480V, 3Ø generator, Caterpillar #3406DI, which was manufactured in the early 1980's as it was installed during original construction. The generator is in very good condition, has been maintained, and parts are available. Per our conversation with the facility, they have been informed by the servicing technicians that the generator should have a life expectancy well into the future given the availability of parts and the condition of the equipment.

The facility is backed up completely by the generator (with the exception of the two large breakers noted above that are not in use). At the time of the site visit, the meter reading was 125kW. Assuming a .9 power factor and using the 125% NEC requirement for existing loads, the peak demand equals 207A of load on the 350A ATS and 1200A service. There is ample capacity for current loads and the ability to add load in the future.

The MDP, ATS, and branch panel boards were manufactured by Federal Pacific. The MDP has a manufacture date of 11-20-81, and the rest of the equipment will be similar as it is from the original construction.

Mechanical:

The facility is served by a 3000 gallon above ground storage tank located outside the boiler room that provides fuel for the generator and boilers. The boilers are fuel oil units and are connected to the same piping system as the backup generator.

The fuel system is connected to the boiler room, which has the following equipment:

- Two boilers B-1 and B-2, and a 231-gallon day tank

Exhaust piping from the generator is equipped with a muffler and is insulated. Size was not possible to determine with the insulation in place.

Based on burn rates of the boilers, and assuming that the generator operates at 75% capacity, the current anticipated runtime for the system is 120 hours, or 5 days of full heat and power.

Concerns and Recommendations

1. The generator is in good condition and does not need to be replaced in the near future. The MDP, ATS, and distribution panels are approaching end of life and should be replaced as funding allows. Parts are not readily available for them. When this equipment is replaced, working clearance needs to be addressed in the room. The current configuration has less than 40" between the MDP and the generator. NEC working clearance should be 48" as both have exposed live parts. We would recommend downsizing the MDP as the "future" chiller and electric boiler loads were never installed. This would allow the gear to be reconfigured to better utilize the space and move live parts down the lineup so that they are not across from the generator breaker. The new ATS should be rated 400A, to match the output of the MDP breaker.

FACILITY SUMMARY TABLE

ELECTRICAL DISTRIBUTION SYSTEM

Existing Generators		Rating(KW)	Voltage	Phase	Wiring	
	Generator	210	480	3	4	

Existing ATS		Rating (A)	#Poles	Voltage	Transition	
	ATS	350	4	600	Open	

Utility Demand Load Information		KW	Assumed PF	KVA	Total NEC Demand (KVA)	
	Facility	125	0.90	138	173	

Recommended ATS		Rating (A)	#Poles	Transition		
	ATS	400	3	Close		

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FUELING SYSTEM

Tanks		Size (gal)	Type	Est. Fuel Use under normal heat/load	# of days
	Main Facility Tank	3,000	Above Ground	14.2 (heat), 11 (power), 25.2 gph total	5

If you have any questions concerning the above, please do not hesitate to call me.

Sincerely,

Jeremy Maxie, P.E. LC, RCDD
Associate Principal Electrical Engineer

jam/hhm
23-0250/M2231

June 14, 2023

Alaska Department of Corrections
550 W 7th Ave., Ste. 1820
Anchorage, Alaska 99501

ATTENTION: Clifton Reagle

Dear Clif,

REFERENCE: DOC SW Back Up Power System Evaluation – Mat-Su Pre Trial (MSPT) Report

On 1/24/23, Steven Bassler, and Milaud Baumgartner with RSA along with James Rheault, with DOC, visited the Mat-Su Pre-Trial facility to investigate the backup power system. The following report is a summary of our findings and recommendations for upgrades to the existing system.

Electrical:

Existing Conditions

The existing service for MSPT is a 208/120V, 3Φ, 4-wire service with Matanuska Electric Association. The service enters the building and feeds an 800A bussed gutter that taps off to feed a 600A Manual Transfer Switch (MTS) and an 280A Automatic Transfer Switch (ATS). The ATS feeds two panels. The first panel is a 300A panel designated Emergency Distribution Panel 'EDP' and the second panel is a 150A panel designated Standby Emergency Panel "S". The MTS feeds a 600A distribution panel designated Distribution Panel 'DP'. The entire building is able to be picked up by the generator if the manual transfer switch is switched to backup power when utility power is lost. Utility meter data shows that the generator is adequately sized to pick up the entire building.

There is one generator for this site, and it is located in a dedicated generator building to the southeast of the building. The generator was manufactured by Onan and is a 150KW, 208/120V, 3Φ, 4-wire, diesel generator model #1500DUE with 275 hours of run time. The generator was manufactured on 7/27/1986. The generator has one 600A engine mounted breaker that feeds into the building. The ATS is an Onan OT Switch and is a 280A, 208/120V, 3Φ, 3-pole, solid neutral, open transition, model #OTNCK280-4/1102C and was manufactured on 7/21/1986. The MTS is a Square D double throw, non-fusible safety switch and is a 600A, 208/120V, 3Φ, 3-pole, solid neutral, model #92456-E01. Emergency Distribution Panel 'EDP' is a 300A, 208/120V, 3Φ, 4-wire wall mounted, Square D NQOB with a 300A, 3-pole main breaker. Standby Emergency Panel "S" is a 150A, 208/120V, 3Φ, 4-wire wall mounted, Square D NQOB with a 150A, 3-pole main breaker. Distribution Panel 'DP' is a 600A, 208/120V, 3Φ, 4-wire wall mounted, Square D I-line model #3691-6M-E1.

The Generator is in good condition and has low hours. Onan has since been bought by Cummins who can provide replacement parts. The battery charger for the generator is functioning but has detached from its original mounting and is sitting on the bottom of the generator frame. The ATS and MTS appear to be in good condition. Panels 'EDP', 'S' and 'DP' all appear to be in excellent condition.

Mechanical:

The generator is served by a 3,000-gallon Aboveground Storage Tank (AST) located east of the generator building. Piping between the tank and building/generator is routed above ground with schedule 40 steel piping with threaded joints and is electrically heat traced. The Generator draws

fuel directly from the AST with a tiger loop located at the connection to the generator. No day tank or fuel oil return piping is present.

Exhaust piping, approximately 3”ø from the generator, is not equipped with a muffler and is not insulated. It goes straight up, through the roof, and terminates with a 45° mitered angle outlet.

Based on the assumption that the generator operates at 75% capacity, the current anticipated runtime for the system is 12.6 days.

Concerns and Recommendations

1. The conductors between the bussed gutter and the transfer switches are taps from the building service but do not provide the proper over current protection per NEC 240.21(B)(1). Recommend providing proper overcurrent protection per NEC.

2. The ATS is only rated for 280A but the upstream over current protective device is rated for 800amps. Recommend adding over current protection ahead of the ATS to limit the current to below 280amps.

3. Battery charger is resting on the bottom of the generator frame. Recommend remounting battery charger.

FACILITY SUMMARY TABLE

ELECTRICAL DISTRIBUTION SYSTEM

Existing Generators		Rating(KW)	Voltage	Phase	Wiring
	MAIN	150	208	3	4

Existing ATS, MTS		Rating (A)	#Poles	Transition	
	ATS	280	3	Open	
	MTS	600	3	Open	

Utility Demand Load Information		KW	Assumed PF	KVA	Total NEC Demand (KVA)
	Complete Facility	77	0.80	96	120

FUELING SYSTEM

Fuel Tanks		Size (gal)	Type	Estimated run time
	Main Tank	3,000	Above Groun	12.6 days

If you have any questions concerning the above, please do not hesitate to call me.

Sincerely,

Jeremy Maxie, P.E. LC, RCDD
Associate Principal Electrical Engineer

jam/hhm
23-0252/M2231

June 14, 2023

Alaska Department of Corrections
550 W 7th Ave., Ste. 1820
Anchorage, Alaska 99501

ATTENTION: John Gard

Dear John,

REFERENCE: DOC SW Back Up Power System Evaluation – Spring Creek Correctional Complex (SCCC) Report

On 2/15/23 I, Patrick Collins, and Matt Malecha with RSA along with John Gard, with DOC, visited the Spring Creek Correctional Complex to investigate the backup power systems at the facility. The following report is a summary of our findings and recommendations for upgrades to the existing system.

Electrical:

Existing Conditions

The facility is primary metered at a utility switch cabinet near the entrance to the property and feeds several pad-mount transformers. Transformer 'T1' serves the main facility, 'T4' serves House 1, 'T3' service House 2, 'T2' serves House 3, 'T5' serves the Warehouse. The primary feed also connects to a medium voltage pad-mount switching cabinet outside the warehouse. The main facility transformer, 'T1', feeds to a main disconnect which then feeds to a 2,000A, 277/480V, 3Ø, 4-wire distribution panel, Panel 'A'. Panel 'A' is tapped directly to a fused disconnect which feeds the Programs 002 (Craft Shop). This facility is the only portion of the distribution system which is not backed up by a generator. The other breakers in Panel 'A' feed to the following transfer switches; ATS 'C', ATS 'E', ATS 'K', MTS 'D', and MTS 'F'. These transfer switches serve all distribution equipment in the main facility. ATS 'C' is a 260A, 480V, 3Ø, 4-pole, open transition, Square D #8901 frame with ASCO #9403 controls automatic transfer switch. ATS 'C' was manufactured in 1987. ATS 'E' is a 400A, 480V, 3Ø, 4-pole, open transition, Square D series #8901 automatic transfer switch. ATS 'E' was manufactured in 1987. ATS 'K' is a 600A, 480V, 3Ø, 4-pole, open transition, Square D series #8901 automatic transfer switch. ATS 'K' was manufactured in 1987. MTS 'D' is a 400A, 600V, 3Ø, 4-pole, Square D #92445 double-throw switch. We assume this switch was manufactured around 1987, similar to all the other equipment. MTS 'F' is a 600A, 600V, 3Ø, 4-pole, Square D #92446 double-throw switch. We assume this switch was manufactured around 1987, similar to all the other equipment.

House 1 transformer, 'T4' feeds to a building disconnect then to ATS '4M' the load side of which feeds a 600A, 120/208V, 3Ø, 4-wire distribution panel, Panel '4M'. Panel '4M' feeds all distribution panels in House 1. ATS '4M' is a 400A, 120/208V, 3Ø, 4-pole, open transition, Square D series #8901 automatic transfer switch, which was manufactured in 1987. House 2 transformer, 'T3' feeds to a building disconnect then to ATS '3A' the load side of which feeds a 600A, 277/480V, 3Ø, 4-wire distribution panel, Panel '3A'. Panel '3A' feeds all distribution panels in House 2. ATS '3A' is a 600A, 277/480V, 3Ø, 4-pole, open transition, Square D series #8901 automatic transfer switch, which was manufactured in 1987. House 3 transformer, 'T2' feeds to a building disconnect then to ATS '2A' the load side of which feeds a 600A, 277/480V, 3Ø, 4-wire distribution panel, Panel '2A'. Panel '2A' feeds all distribution panels in House 3. ATS '2A' is a 600A, 277/480V, 3Ø, 4-pole, open transition, Square D series #8901 automatic transfer switch, which was manufactured in 1987. Warehouse transformer, 'T5' feeds to a building disconnect then to MTS '5A' the load side of which feeds a 400A, 277/480V, 3Ø, 4-wire distribution panel, Panel '5A'. MTS '5A' is a 400A, 600V, 3Ø, 4-pole, Square

D type #92445 double throw switch we assume was manufactured in 1987. Panel ‘5A’ feeds all distribution panels in Warehouse.

There are (2) 750KW, 4,160V, 3Ø generators, Caterpillar #SR4, we assume was manufactured in 1987. The generators are in maintained by NPC Energy Services are still functioning. There is an issue with a battery charger and while on site personnel described an intermittent issue with #1. The generators are connected to paralleling medium voltage switchgear. Within the warehouse the switchgear feeds via 480V transformer ‘T24’ to a distribution panel, Panel ‘5E’. Panel ‘5E’ sub-feeds to the standby side of MTS ‘5A’, the fire pump ATS, and ATS ‘5E’. The fire pump and ATS ‘5E’ normal power sides are powered via Panel ‘5A’. ATS ‘5E’ feeds branch circuit panels ‘5EA’, ‘5X’ and Fuel Pump Panel. ATS ‘5E’ is a 400A, 480V, 3Ø, 4-pole, open transition, Square D series #8901 automatic transfer switch. From the generator switchgear there is a feed to a step-up transformer ‘T23’ which then connects to the medium voltage switching cabinet from which feeds to each building with a dedicated pad-mount transformers. Transformer ‘T10’ feeds House 1 via a building disconnect and feeds to the standby side of ATS ‘4M’ and ‘4X’. AST ‘4X’ normal power is fed from Panel ‘4M’ and the load side serves Panels ‘4X’ and ‘4XA’. ATS ‘4X’ is the same type and rating as ATS ‘4M’. Transformer ‘T9’ feeds House 2 via a building disconnect and feeds to the standby side of ATS ‘3A’ and ‘3E’. AST ‘3E’ normal power is fed from Panel ‘3A’ and the load side serves Panels ‘3E’ and ‘3X’. ATS ‘3E’ is the same type and rating as ATS ‘3A’. Transformer ‘T8’ feeds House 3 via a building disconnect and feeds to the standby side of ATS ‘2A’ and ‘2E’. AST ‘2E’ normal power is fed from Panel ‘2A’ and the load side serves Panels ‘2E’ and ‘2X’. ATS ‘2E’ is the same type and rating as ATS ‘2A’. Transformer ‘T7’ feeds the main facility via a building disconnect to distribution panel, Panel ‘E’. Panel ‘E’ feeds the standby sides of the transfer switches which derive normal power from Panel ‘A’ as noted above.

The current set up of (2) transfer switches at each building or area within the facility appears to have been set up to provide emergency and standby power. The current system is not maintained as an emergency system. The Fire Alarm and their security systems currently have standalone battery backup so that these systems have instantaneous or required emergency systems. However, the facility is currently deficient in emergency lighting as all lighting systems were to be on the emergency generator which no longer is maintained or acceptable as an emergency system.

The peak demand from Seward Electric Department for the past 12 months, assuming a .8 Power Factor and calculating 125% for NEC demand the current peak use is 1254A. This is also 834KW of peak demand on the generator. This means the facility has 746A of spare capacity and 666KW of spare capacity on the generators.

Mechanical:

The facility is served by a 30,000-gallon underground storage tank located outside the secured area south of the facility which provides fuel for the generators and boilers. The boilers are fuel oil units and are connected to the same piping system as the backup generators.

Piping between the tank and building/generators is routed underground with an appropriate product that utilizes secondary containment. Above ground piping is schedule 40 steel piping with threaded joints.

The fuel system is connected to (5) mechanical rooms, which have the following equipment:

- Unit 1 – Three boilers B-11/B-12/B-13, day tank DT-11.
- Unit 2 – Two boilers B-21/B-22, day tank DT-21.
- Unit 3 – Two boilers B-31/B-32, day tank DT-31.
- Unit 4 – Two boilers B-41/B-42, day tank DT-41.
- Unit 5 - Generator Module: Two generators, DT-51, DT-52, DT-53, facility fuel pump system.

Each day tank is configured with integral pumps and controls, drawings from the below grade supply and return fuel oil piping routed from the generator module throughout the secure area.

The generators each pull from their own dedicated 275-gallon day tank located behind the generators, and the day tanks are in good condition and work properly. The generators are cooled with remote radiators, discharging to the generator module exterior. The remote radiators are in good condition and are working as intended.

Exhaust piping from the generator is equipped with a muffler and is insulated. Size was not possible to determine with the insulation in place.

Based on fuel oil delivery records for the facility, and that the generators operate at 75% capacity, the current anticipated runtime for the system is 19.5 days.

Concerns and Recommendations

1. We recommend a lighting upgrade for the facility to address the deficiency in required emergency lighting. There are two options for an upgrade.
    a. Provide standalone emergency lighting units to properly illuminate the path of egress per latest adopted code.
    b. The existing lighting is using outdated fluorescent and some HID sources with some LED lamp replacements in areas. A full facility lighting upgrade would improve lighting quality, reduce energy consumption of the facility, provide better lighting controls, and could use integral battery backups to address the emergency lighting deficiency.

2. Recommend revising the distribution system to eliminate emergency transfer switches which are no longer required. For the main facility provide a new 2,000A, 277/480V, 3Ø, 4P, close transition automatic transfer switch. Interrupt the main feed to Panel ‘A’ and extend it to connect the new 2,000A ATS load and normal power side to this feed. Extend the feeder from transformer ‘T7’ building disconnect to the standby side of the ATS. This will eliminate Panel ‘E’ and transfer switches, ‘C’, ‘E’, ‘D’, ‘K’, ‘F’, as well as provide back up for the Craft Shop. For House 1,2, and 3 the replace the ‘A’ transfer switch with a similar rated closed transition transfer switch eliminate the second transfer switch. In the warehouse if MTS ‘5A’ is replaced with a similar rated close transition ATS the fire pump ATS and ATS ‘5E’ may be eliminated, with the normal power fire pump feed going directly to the controller.

FACILITY SUMMARY TABLE

ELECTRICAL DISTRIBUTION SYSTEM

Existing Generators		Rating(KW)	Voltage	Phase	Wiring	
	Generator 1 & 2	750	4,160	3	4	

Existing ATS		Rating (A)	#Poles	Voltage	Transition	
	MTS 'F', '5A'	400	4	600	Open	
	MTS 'D'	600	4	600	Open	
	ATS '4M', '4X', '5E', 'E'	400	4	480	Open	
	ATS '3A', '3E', '2A', '2E', 'K'	600	4	480	Open	
	ATS 'C'	260	4	480	Open	

Utility Demand Load Information		KW	Assumed PF	KVA	Total NEC Demand (KVA)
	Facility	171	0.90	190	238

Recommended ATS		Rating (A)	#Poles	Transition		
	ATS 'A' (rec #2)	2,000	3	Close		
	ATS '1', '2', '3' (rec #2)	600	3	Close		
	ATS 'W' (rec #2)	400	3	Close		

FUELING SYSTEM

Tanks		Size (gal)	Type	Est. Fuel Use W/ NG	Est. Fuel Use W/O NG
	Main Facility Tank	30,000	Below Ground	N/A	19.5

If you have any questions concerning the above, please do not hesitate to call me.

Sincerely,

Patrick Collins

Patrick Collins, P.E.
Electrical Senior Engineer

pcc/hhm
23-0255/M2231

June 14, 2023

Alaska Department of Corrections
550 W 7th Ave., Ste. 1820
Anchorage, Alaska 99501

ATTENTION: John Gard

Dear John,

**REFERENCE: DOC Back Up Power System Evaluation –
Yukon Kuskokwim Correctional Center (YKCC) Report**

On 3/8/23, we visited the Yukon Kuskokwim Correctional Center to investigate the backup power systems at the facility. Jeremy Maxie from our office met with you on-site. The following report is a summary of our findings and recommendations for upgrades to the existing system.

Electrical:

Existing Conditions

The facility has three services and multiple utility transformers. There is a 3-phase service for the fire pump that has been abandoned as well as a single-phase service to the storage Conex/Caribou Huts. The main service supplies power to the building other than those loads and is discussed here. The entire facility is supported by the generator, through a project finished recently. Original construction had partial generator support.

The 208V, 3Ø service to the building enters via overhead transformers to a meter and CT assembly mounted outside of the electrical room. There is an 800A service disconnect that supplies utility power to an 800A automatic transfer switch (ATS) which then provides power to an 800A main distribution panel (MDP).

There is a single 175kW, 218kVA, 208V, 3Ø generator, Power Systems Model No 240D343, which was manufactured in the early 1980's as it was installed during original construction. The generator has been a source of maintenance and repair concerns for a number of years. A recent project replaced the generator controls which helped with some of the issues, but the general consensus is that the generator is due for replacement.

The facility is backed up completely by the generator except for the standalone service to the storage Conex/Caribou Hut. At the time of the most recent project, the demand load on the facility was approximately 125kW, which equals 482A on the 800A service after power factor and NEC required adjustments. There is capacity for additional loads if needed.

The MDP, distribution panels, and branch panels are mostly from the original construction. The ATS is new in the most recent project.

Mechanical:

The facility is served by a 5000 gallon above ground storage tank located in the service area outside of the electrical/boiler rooms that provides fuel for the generator and boilers. The boilers are fuel oil units and are connected to the same piping system as the backup generator.

The fuel system is connected to the boiler room, which has the following equipment:

- Two boilers and day tank being replaced under a current project.

Based on burn rates of the boilers, and assuming that the generator operates at 75% capacity, the current anticipated runtime for the system is 195 hours, or 8 days of full heat and power. Note that this facility uses waste heat from the power plant, so the boilers are backup only. There are different scenarios in which power could be out but waste heat still in use, waste heat lost while utility power is available, or both power and waste heat lost if the power plant is down completely. That is the worst-case scenario used in the calculation above.

Concerns and Recommendations

1. The generator should be replaced as funding allows. A similar size generator can be installed which would meet the current needs of the facility.
2. The MDP and distribution panels are approaching 40 years old and should be considered for replacement in the next 5 years.

FACILITY SUMMARY TABLE

ELECTRICAL DISTRIBUTION SYSTEM

Existing Generators	Rating(KW)	Voltage	Phase	Wiring	
Generator	175	208	3	4	

Existing ATS	Rating (A)	#Poles	Voltage	Transition	
ATS	800	4	600	Open	

Utility Demand Load Information	KW	Assumed PF	KVA	Total NEC Demand (KVA)
Facility	125	0.90	138	173

Recommended ATS	Rating (A)	#Poles	Transition		
ATS	N/A	N/A	N/A		

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FUELING SYSTEM

Tanks	Size (gal)	Type	Est. Fuel Use under normal heat/load	# of days
Main Facility Tank	5,000	Above Ground	16 (heat), 9.7 (power), 25.7 gph total	8

If you have any questions concerning the above, please do not hesitate to call me.

Sincerely,

Jeremy Maxie, P.E. LC, RCDD
Associate Principal Electrical Engineer

jam/hhm
23-0257/M2231