Project Implementation Plan

8.2. *The Grantee shall submit a proposed project implementation plan including a proposed project schedule, proposed performance measures, key personnel, and a proposed project budget including any changes since the submission of the project application for RUS review and approval.*

Changes to the Proposed Project

The CSP HECG Airport Feeder project is substantially the same as proposed in our HECG application, with the following modifications to accommodate supply chain interruptions and City of Saint Paul COVID-19 travel restrictions.

- CSP may direct bury the airport feeder distribution cable, rather than install in HDPE duct, due to limited duct availability and associated high material cost. If duct is not used, conductors will be bedded with locally available sand to protect from damage.
- CSP may solicit competitive bids for the work to ensure availability of a contractor that can comply with CSP's COVID-19 travel restrictions and requirements.
- To help reduce contractor cost, CSP intends to use city employees to perform the trench excavation, sand-bedding, and backfill.

Project Schedule

The following schedule supports spring/summer 2026 construction.

- Fall 2023: Project design and Owner Furnished Materials procurement
- Fall 2023: Contractor negotiation/solicitation
- Fall 2024 – Spring 2026: Ship materials to St. Paul Island
- Fall 2026: Complete construction/Record drawings
- September 20, 2026: Close-out & ongoing performance reporting

Performance Measures

Our HECG application consisted of four components: a) electrical distribution upgrades, b) power plant upgrades, c) heat recovery improvements, and d) LED lighting retrofits. The Airport Feeder portion of the electrical distribution upgrade portion was funded by RUS. The following revised performance measures are provided to coordinate with the funded work:

- Provide reliable power to the Airport and Critical Infrastructure.
  This goal will be measured by successfully completing the fiber cable by September 2026.
- Improve controls integration and communications with TDX wind farm.
  This goal will be measured by successfully completing the fiber cable by September 2026.

Key Personnel

The contact information for key personnel is the same as our HECG application. Additional qualifications and information is available upon request.

Grant Manager:
Phillip A. Zavadil, City Manager
City of Saint Paul
PO Box 901
St. Paul Island, Alaska 99660
Phone: 907-341-3994
Email: pazavadil@stpaulak.com

Project Implementation Plan

Project Finances:

Stephanie Mandregan, Finance Director
City of Saint Paul
PO Box 901
St. Paul Island, Alaska 99660 Phone:
907-600-4354
Email: stephanie@stpaulak.com

Project Engineer:

Christopher T. Davis, P.E.
Electric Power Systems, Inc
3305 Arctic Blvd, Suite #201
Anchorage, AK 99503
Phone: 907-646-5108
Email: cdavis@epsinc.com

Construction Contractor:

Ben Miebs
Electric Power Constructors, Inc
3305 Arctic Blvd, Suite #201
Anchorage, AK 99503
Phone: 907-631-4702
Email: bmiebs@epconstructors.com

CSP will perform all project bookkeeping. Stephanie Mandregan, Finance Director, will manage the grant funds, including payroll and accounts payable, and will be responsible for overseeing project bookkeeping and accounting. All procurements will follow written procurement procedures. A procurement budget will be established to control and monitor project spending. Each expenditure will be properly authorized. Grant funds will not be comingled with ongoing utility operations but will be separated within the City's accounting system. Expenditures over $3000 require City Manager approval. All checks require two signatures. CSP's authorized check signers are separate from the bookkeeping staff. CSP will retain project records for 7 years.

Electric Power Systems, Inc. (EPS) will provide design, permitting and construction administration services for the project, as well as support CSP with its RUS HECG advance/draws and quarterly reports. EPS has over 50-years of rural Alaska energy project design and construction administration experience and has successfully implemented RUS HECG projects. CSP contracted with EPS to prepare the concept design for the power plant and Airport Feeder upgrade projects, and EPS is also supporting CSP's transition out of its Title V operating permit.

EPS's responsibilities under this grant include:

- Regulatory and permitting compliance
- Engineering & construction administration
- Grant Support
- Owner Furnished Materials Procurement and mobilization
- Answering construction crew questions and systems commissioning
- Record Drawings and Operations & Maintenance Manuals

Project Implementation Plan

CSP proposes to contract with Electric Power Constructors (EPC) to install the Airport Feeder conductor and fiber optic cable. Should CSP be unsuccessful negotiating fair and reasonable profit under this noncompetitive procurement, or should EPC be unable to fulfill CSPs COVID-19 travel requirements, CSP may use a limited solicitation invitation to bid (ITB) procurement to select a competent, responsible, and responsive contractor to perform the work.

Project Budget and Match

In our HECG Application, Grant Audit, Project Insurance and Match were allocated to the power plant upgrade project. Since only the Airport Feeder upgrade was funded by RUS, our Airport Feeder budget has been revised to include these expenditures. Please see attached Form SF-424C, Grant Tracking spreadsheet, and project cost estimate.

8.4. *This Grant Award requires match funding in the amount of $3,015,415. Match funding must be contributed pro rata with amounts disbursed under this grant agreement. The Grantee reporting shall ensure that a full description of the nature and cost of the match contribution is included as part of the overall project implementation plant and cost tracking.*

CSP will provide the matching funds required through a USDA Rural Electric Program loan.

8.11. Section 106 Review Amendment

Pursuant to Amendment No. 1 dated March 3, 2021, CSP designates Phillip A. Zavadil, City Manager, as the point of contact for any inadvertent discoveries and ongoing monitoring during project activity and will comply with the amended provisions regarding previously unidentified archaeological resources and previously unknown historic properties.

Notices to RUS shall be directed to:

Rural Utilities Service
United States Department of
Agriculture Room No. 4121 South
1400 Independence Avenue, SW
Washington, DC 20250-1500
Attention: Administrator

And via email to: RUSElectric@usda.gov

NOTE an acknowledgment of receipt is required for compliance with a notice provision under this Grant Agreement.

HECG PROJECT SUMMARY

The existing CSP power plant generates at 480-volt. Power is stepped-up via a 480V/12470Y7200V step-up transformer, which feed three (3) separate primary distribution feeders (Airport, Harbor and Town feeder) via a 15kV multi-feeder vacuum switch. The Airport and Town feeders were constructed in 1988 and consist of direct bury, 15kV, #2/0 stranded aluminum, cross linked polyethylene (XLP) "non-jacketed" (exposed) concentric neutral conductors. The Town feeder has been upgraded, but the Airport feeder is at the end of its useful life and at risk of failure.

This HECG project will replace the antiquated multi-feeder vacuum switch with new state of the art switchgear and replace the existing 2.6-mile Airport feeder and install fiber optic cable to the water treatment plant and the wind power site at the Airport. The TDX village corporation wind farm is connected to the CSP grid but is poorly utilized due to lack of control coordination. The new fiber optic cable will enhance future improvement of wind power integration and provide the added benefit of upgraded communication for the Airport, City facilities, US Coast Guard, and the National Weather Service. A new solid dielectric switch at the airport will provide a distinct motor operated switch for the TDX for better wind-power integration.

The airport feeder will be designed and constructed consistent with the standards and requirements for projects under the RE Act, and in accordance with RUS Bulletin 1728F-806: Specifications and Drawings for Underground Electrical Distribution, and 2023 National Electrical Safety Code. All new equipment will be dead front and utilize fiberglass ground sleeves. Sectionalizing cabinets will be fiberglass construction with stainless steel hardware. All new primary cable will be either sand-bedded or installed in HDPE conduit to protect the conductors from damage. All new primary cable will be Polyethylene jacketed concentric neutral with ethylene propylene (EPR) insulation, 133% MV105, and all primary terminations will be through load break elbows. All connections will be above grade in sectionalizing cabinets. No buried or below grade connections or in-line splices will be made.

The electrical distribution work will be performed along the existing Airport Feeder alignment and within existing utility rights-of-ways. See attached Map.


St P A k
2020 RUS HECG P t M p
L g d
CSP A p t F d
St P
CSP
WATER
SYSTEM
USCG
LORAN
STATION
NWS
CSP POWER
AIRPORT DISTRIBUTION FEEDER AND FIBEROPTIC, FROM POWER PLANT TO TDX POS - APPROX. 2.6-MILES
St Paul
Google Earth
NGA G BCO
mage © 2020 MaxarTeChnologies

OMB Number: 4040-0008
Expiration Date: 02/28/2025

BUDGET INFORMATION - Construction Programs

NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case, you will be notified.

COST CLASSIFICATION	a. Total Cost	b. Costs Not Allowable for Participation	c. Total Allowable Costs (Columns a-b)
1. Administrative and legal expenses	$ 17,000.00	$	$ 17,000.00
2. Land, structures, rights-of-way, appraisals, etc.	$	$	$
3. Relocation expenses and payments	$	$	$
4. Architectural and engineering fees	$ 35,000.00	$	$ 35,000.00
5. Other architectural and engineering fees	$ 35,000.00	$	$ 35,000.00
6. Project inspection fees	$	$	$
7. Site work	$	$	$
8. Demolition and removal	$	$	$
9. Construction	$ 2,256,611.00	$	$ 2,256,611.00
10. Equipment	$ 500,000.00	$	$ 500,000.00
11. Miscellaneous	$	$	$
12. SUBTOTAL *(sum of lines 1-11)*	$ 2,843,611.00	$	$ 2,843,611.00
13. Contingencies	$	$	$
14. SUBTOTAL	$ 2,843,611.00	$	$ 2,843,611.00
15. Project (program) income	$	$	$
16. TOTAL PROJECT COSTS *(subtract #15 from #14)*	$ 2,843,611.00	$	$ 2,843,611.00

FEDERAL FUNDING

17. Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share.) Enter the resulting Federal share.	Enter eligible costs from line 16c Multiply X 100 %	$ 2,843,611.00

	A	B	C	D	E	F	G	H	I	J	K	L
1	**A**											
2	**City of Saint Paul**	**8/31/2023**				RUS High Energy Cost Grant # AK0080-A84						
3						Amended Grant Period:	September 21,2023 to September 21, 2026					
4	**Grant Amount:**	**807,969.00**				Expenditures - Advance/Reimbursements Grant To Date						
5	**Required Match**	**3,015,415.00**										
6	**Total Project Budget as of 8/31/2023**	**3,823,384.00**										
7				**Project Reimbursement/Advances**								
8	Budget Categories	Budget	Budget								Cumulative	Balance
9		**Approved**	**DRAFT**	1	2	3	4	5	6	7		
10		**Feb 8 2022**	**Aug 31 2023**	**Date**							Draw Downs	Remaining
11												
12												
13	SF 271 Line 11a: Administrative Expense	$17,000	$17,000								$0.00	$17,000.00
14												
15	SF 271 Line 11d: Architectural engineering basic fees	$35,000	$35,000								$0.00	$35,000.00
16												
17												
18	SF 271 Line 11e: Architecture engineering - other											
19	[project management]	$35,000	$35,000								$0.00	$35,000.00
20												
21												
22	SF 271 Line 11k: Construction and Project Improvement costs	$720,969	$720,969								$0.00	$720,969.00
23	Materials and Labor											
24												
25												
26	SF 271 Line 11l: Equipment (**see MATCH, below**)	$0									$0.00	$0.00
27												
28												
29												
30	SF 271 Line 11m: Miscellaneous											
31												
32												
33	Total **Grant Funds** Project Budget *	**$807,969**	**$807,969**	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$807,969.00
34	*Eligible expenditures incurred after [date=1 year prior to date of obligation]										**0%**	**% EXPENDED**
35												
36												
37	Budget Categories	Match									Cumulative	Matching
38		Budget		1	2	3	4	5	6	7	Match	Remaining
39	Source: RUS Loan:											
40												
41	SF 271 Line 11k: Construction	$337,320.00	$1,530,107.00								$0.00	$1,530,107.00
42												
43	SF 271 Line 11l: Equipment	$327,444.00	$1,485,308.00								$0.00	$1,485,308.00
44												
45												
46												
47	Total **Match Funds** Project Budget	$664,764.00	$3,015,415.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$3,015,415.00
48											**0%**	**of Req'd Match**
49	**Grand Total Budget**	$1,472,733.00	$3,823,384.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$3,823,384.00
50												
51	Certification:											
52	I certify that all expenditures and information reported herein are true and correct, appropriate for purposes in accordance with the terms and conditions and other applicable rules and regulations											
53	of the Dept. of Agriculture, Rural Utilities Service and that payment for services reported herein has not been received. Furthermore, contributed match expenditures are for this project and no other,											
54	nor are they accounted for as match for any other project funded with federal dollars.											
55												
56												
57	Original Signature of Authorized Official				Title				Date			

SAINT PAUL AIRPORT FEEDER

August 28, 2023
CONSTRUCTION BID SHEET - IFR
Project(s):
EPS 22-0130
SAINT PAUL #:AK0080-A84

Status	Assembly Unit	Description	Bid Quantity	Unit of Meas.	Labor (P.U.)	Total Labor	Material (P.U.)	Total Material	Total Labor & Material
	INSTALL								
I	#1/0 CONC 15	1/0 CONC 15kV AL, FULL NEUTRAL, 133% INSULATION (FEET)	55992	FT	$ 6.69	$ 374,474.50	$ 7.05	$ 394,799.59	$ 769,274.09
I	FIBER	OPTICAL FIBER - 48 COUNT, UNDERGROUND, Altos #048EU4-T4701D20	14484	FT	$ 6.69	$ 96,868.99	$ 1.05	$ 15,135.78	$ 112,004.77
I	UM1-1G	See Note #1. PAD, THREE PHASE 600A SWITCH CABINET, 15KV PME	1	EA	$ 3,645.75	$ 3,645.75	$ 6,519.62	$ 6,519.62	$ 10,165.38
I	UM31F-B-3	1PH FIBERGLASS DIRECT BURY CABLE JUNCTION PEDESTAL, 3-WAY, 200A, PDI #CJP-10	1	EA	$ 3,038.13	$ 3,038.13	$ 1,809.92	$ 1,809.92	$ 4,848.05
I	UM33F-B-3	3PH FIBERGLASS DIRECT BURY CABLE JUNCTION PEDESTAL, 3-WAY, 200A, PDI #CJP-31-41	3	EA	$ 3,038.13	$ 9,114.40	$ 3,706.58	$ 11,119.75	$ 20,234.15
I	UM3E-3X-9SD	See Note #2 3PH SS SWITCH CAB, SOL DIELECTRIC, TWO MO SWITCHES, TWO FUSES, 600A, 15KV, S&C	1	EA	$ 4,557.19	$ 4,557.19	$253,846.15	$ 253,846.15	$ 258,403.34
I	UG17-3-150-B	3PH PAD MOUNTED TRANSFORMER LOOP FEED W/ RADIAL (480Y/277V, 150 kVA)	1	EA	$ 3,645.75	$ 3,645.75	$ 31,267.37	$ 31,267.37	$ 34,913.12
I	UG17-3-150SS-D	STAINLESS 3PH PAD-MOUNT TRANS, LOOP FEED W/ RADIAL (480V DELTA, 150 kVA)	1	EA	$ 3,645.75	$ 3,645.75	$ 44,489.23	$ 44,489.23	$ 48,134.98
I	UG17-3-300-B	3PH PAD-MOUNT TRANS, LOOP FEED W/ RADIAL (480Y/277V, 300 kVA)	1	EA	$ 4,253.38	$ 4,253.38	$ 38,615.97	$ 38,615.97	$ 42,869.35
I	UM50-H-1.25	CONDUIT, 1.25" HDPE - SCHEDULE 40 (FEET)	13934	FT	$ 3.64	$ 50,733.69	$ 1.57	$ 21,918.18	$ 72,651.88
I	UM50-H-4	CONDUIT, 4" HDPE - SCHEDULE 40 (FEET)	18304	FT	$ 5.47	$ 100,067.97	$ 6.73	$ 123,222.53	$ 223,290.50
I	SURE-LOCK	4" SURE-LOCK COUPLING	460	EA	$ 10.87	$ 5,000.00			$ 5,000.00
I	FBR445SS	ELBOW, CONDUIT 4" FIBERGLASS SHORT SWEEP 45°	24	EA	$ 303.81	$ 7,291.42	$ 149.79	$ 3,594.89	$ 10,886.30
I	RSC1.2590SS	ELBOW, CONDUIT 1.25" RIGID STEEL SHORT SWEEP 90°	22	EA	$ 303.81	$ 6,683.80	$ 21.04	$ 462.95	$ 7,146.74
I	RSC245SS	ELBOW, CONDUIT 2" RIGID STEEL SHORT SWEEP 45°	2	EA	$ 303.81	$ 607.62	$ 40.10	$ 80.19	$ 687.81
I	UM6-1-A	LOAD BREAK ELBOW (200A) - FOR #1/0 CONC 15kV AL, FULL NEUTRAL, 133% INSULATION	75	EA	$ 759.53	$ 56,964.60	$ 79.20	$ 5,940.00	$ 62,904.60
I	UR2	TRENCH, PRIMARY OR SECONDARY (24"W X 48"D) (FEET)	17496	FT	$ 22.78	$ 398,576.38		$ -	$ 398,576.38
I	FIBER-HH	See Note #1. FIBEROPTIC HAND HOLE	10	EA	$ 3,645.75	$ 36,457.52	$ 2,706.00	$ 27,060.00	$ 63,517.52
	REMOVE & REINSTALL								
RR	***UG17-3-500-B***	***3PH PAD MOUNTED TRANSFORMER LOOP FEED W/ RADIAL (480Y/277V, 500 kVA)***	1	EA	$ 6,904.84	$ 6,904.84		$ -	$ 6,904.84
					TOTAL INSTALL	$ 1,172,531.68		$ 979,882.11	$ 2,152,413.79
	RETIRE								
R	*#1/0 CONC 15*	*1/0 CONC 15kV AL, FULL NEUTRAL, 133% INSULATION (FEET)*	2154	FT	$ 1.52	$ 3,269.77		$ -	$ 3,269.77
R	*#2 CONC 5*	*#2 CONC 5kV AL, FULL NEUTRAL, 133% INSULATION (FEET)*	585	FT	$ 1.52	$ 888.03		$ -	$ 888.03
R	*#2/0 CONC 15 NJ*	*#2/0 CONC 15kV AL NON-JACKETED*	46514	FT	$ 0.61	$ 28,140.97		$ -	$ 28,140.97
R	*#4/0 CONC 15*	*4/0 CONC 15kV AL, 1/3 NEUTRAL, 133% INSULATION (FEET)*	180	FT	$ 1.52	$ 273.24		$ -	$ 273.24
R	*UM1-1B*	*PAD, THREE PHASE TRANSFORMER/SECTIONALIZER 75-750 kVA (78"x72"x24")*	1	EA	$ 1,822.88	$ 1,822.88		$ -	$ 1,822.88
R	*UM1-1D*	*PAD, THREE PHASE 600A SWITCH CABINET*	1	EA	$ 1,822.88	$ 1,822.88		$ -	$ 1,822.88
R	*UM3E-3X-312*	*3PH PAD MOUNTED SWITCH CABINET, ONE SWITCH, TWO FUSE, 600A, 15KV*	1	EA	$ 1,822.88	$ 1,822.88		$ -	$ 1,822.88
R	*UG17-3-150-B*	*3PH PAD MOUNTED TRANSFORMER LOOP FEED W/ RADIAL (480Y/277V, 150 kVA)*	1	EA	$ 1,822.88	$ 1,822.88		$ -	$ 1,822.88
R	*UG17-3-300-B*	*3PH PAD-MOUNT TRANS, LOOP FEED W/ RADIAL (480Y/277V, 300 kVA)*	1	EA	$ 1,822.88	$ 1,822.88		$ -	$ 1,822.88
R	*UG17-3-500-B*	*3PH PAD MOUNTED TRANSFORMER LOOP FEED W/ RADIAL (480Y/277V, 500 kVA)*	1	EA	$ 2,430.51	$ 2,430.51		$ -	$ 2,430.51
R	*UM6-1-A*	*LOAD BREAK ELBOW (200A) - FOR #1/0 CONC 15kV AL, FULL NEUTRAL, 133% INSULATION*	15	EA	$ 303.81	$ 4,557.14		$ -	$ 4,557.14
R	*UM6-1-H*	*LOAD BREAK ELBOW (200A) - FOR #2/0 CON 15kV AL, NON-JACKETED*	36	EA	$ 303.81	$ 10,937.12		$ -	$ 10,937.12
					TOTAL RETIRE	$ 59,611.16		$ -	$ 59,611.16
					EPC MOB	$ 22,095.48		$ -	$ 22,095.48
					EPC DEMOB	$ 22,095.48			$ 22,095.48
					POTELCOM MATERIAL FREIGHT, SEATTLE TO SAINT PAUL	$ -		$ 74,990.09	$ 74,990.09
					CONTINGENCY (20%)	$ 246,428.57		$ 195,976.42	$ 442,404.99
					ENGINEERING	$ 70,000.00			$ 70,000.00
					TOTAL	$ 1,592,762.36		$ 1,250,848.62	$ 2,843,610.99

RUS-USDA Airport Feeder Grant Amount	$ 807,969.00
CSP Required Match - USDA Rural Electric Program Loan	$ 3,015,415.00
TOTAL AVAILABLE FUNDS	$ 3,823,384.00

NOTES:

1. PAD MATERIAL PRICES ARE FOR FIBERGLASS SINCE THE PLANNED CONCRETE PADS WILLL NOT BE AVAILABLE AS THE FREIGHT WILL SKIP ANCHORAGE. PRICE FOR S&C VISTA SWITCH PAD SHOWN.
2. FULL AUTOMATIC S&C 6/6/2022 QUOTE OF $230,769.23 SHOWN. G&W FULL AUTOMATIC QUOTE OF $220,538.67 DOES NOT INCLUDE SHIPPING. ASSUMED G&W SAVINGS OF $10,230.56 EQUALS SHIPPING.
   MAUAL S&C SWTICH QUOTE OF $200,000 SAVES $30,769.23 OVER FULL AUTOMATIC. MANUAL G&W SWITCH QUOTE IS $197,406.67, SAVES $23,132.00 OVER FULL G&W AUTOMATIC, BUT DOES NOT INCLUDE SHIPPING.

	ADDITIVE ALTERNATE FOR DPW-WATER FIBER								
I	AA-FIBER	ADDITIVE ALTERNATE, OPTICAL FIBER - 48 COUNT, UNDERGROUND, Altos #048EU4-T4701D20	2924	FT	$ 6.69	$ 19,555.71	$ 1.05	$ 3,055.58	$ 22,611.29
I	AA-UM50-H-1.25	ADDITIVE ALTERNATE, CONDUIT, 1.25" HDPE - SCHEDULE 40 (FEET)	2774	FT	$ 3.64	$ 10,100.13	$ 1.57	$ 4,363.50	$ 14,463.64
I	AA-RSC1.2590SS	ADDITIVE ALTERNATE, ELBOW, CONDUIT 1.25" RIGID STEEL SHORT SWEEP 90°	6	EA	$ 303.81	$ 1,822.85	$ 21.04	$ 126.26	$ 1,949.11
I	AA-UR2	ADDITIVE ALTERNATE, TRENCH, PRIMARY OR SECONDARY (24"W X 48"D) (FEET)	150	FT	$ 22.78	$ 3,417.15		$ -	$ 3,417.15
					ALTERNATE TOTAL	$ 34,895.85		$ 7,545.34	$ 42,441.19
					AIRPORT FEEDER PROJECT TOTAL	$ 1,627,658.21		$ 1,258,393.96	$ 2,886,052.18

	ADDITIONAL CRITICAL EQUIPMENT REPLACEMENTS								
RR	UG7-3-25SS-A	STAINLESS 1PH PAD MOUNT TRANS, LOOP FEED W/ RADIAL (7200-120/240V, 25 kVA)	7	EA	$ 4,000.00	$ 28,000.00	$ 17,811.41	$ 124,679.86	$ 152,679.86
RR	UG7-3-50SS-A	STAINLESS 1PH PAD MOUNT TRANS, LOOP FEED W/ RADIAL (7200-120/240V, 50 kVA)	2	EA	$ 4,500.00	$ 9,000.00	$ 20,377.01	$ 40,754.01	$ 49,754.01
RR	UG17-3-45SS-A	STAINLESS 3PH PAD-MOUNT TRANS, LOOP FEED W/ RADIAL (12470Y7200-208Y120V, 45 kVA)	1	EA	$ 4,800.00	$ 4,800.00	$ 38,157.81	$ 38,157.81	$ 42,957.81
RR	UG17-3-45SS-B	STAINLESS 3PH PAD-MOUNT TRANS, LOOP FEED W/ RADIAL (12470Y7200-480Y277V, 45 kVA)	1	EA	$ 4,800.00	$ 4,800.00	$ 38,157.81	$ 38,157.81	$ 42,957.81
RR	UG17-3-75SS-B	STAINLESS 3PH PAD-MOUNT TRANS, LOOP FEED W/ RADIAL (12470Y7200-480Y277V, 75 kVA)	1	EA	$ 5,300.00	$ 5,300.00	$ 39,379.60	$ 39,379.60	$ 44,679.60
RR	UG17-3-112.5SS-A	STAINLESS 3PH PAD-MOUNT TRANS, LOOP FEED W/ RADIAL (12470Y7200-208Y120V, 112.5 kVA)	1	EA	$ 5,600.00	$ 5,600.00	$ 40,788.04	$ 40,788.04	$ 46,388.04
RR	UG17-3-500SS-B	STAINLESS 3PH PAD-MOUNT TRANS, LOOP FEED W/ RADIAL (12470Y7200-480Y/277V, 500 kVA)	1	EA	$ 6,700.00	$ 6,700.00	$ 57,954.50	$ 57,954.50	$ 64,654.50
RR	UM33F-B-4	3PH FG DIRECT BURY CABLE JUNCTION PEDESTAL, 4-WAY, 200A, PDI, #CJP-31-50-L2-MG-2415	7	EA	$ 4,500.00	$ 31,500.00	$ 4,947.39	$ 34,631.75	$ 66,131.75
					ADDITIONAL CRITIACAL EQUIPMENT REPLACMENT TOTAL	$ 95,700.00		$ 414,503.40	$ 510,203.40

STATUS ABBREVIATIONS: E=EXISTING, I=INSTALL, R=RETIRE, HI=HOT INSTALL, HR=HOT RETIRE, R&R=REMOVE & REINSTALL

The table below shows the cost differences between the approved budget and funds required to complete the project based on updated material pricing and actual cost for contractor to construct:

Saint Paul Airport Distribution Feeder Replacement
Cost Summary

Engineering	$70,000
Materials and Labor	$2,212,025
Freight and Mobilization	$119,181
Construction Total	**$2,401,206**
Airport Feeder Sub-Total	**$2,401,206**
Project Contingency	$442,405
Total Airport Feeder Replacement Cost	**$2,843,611**

USDA HECG Grant Amount	$807,969
USDA Rural Electric Program Loan	$3,015,415
Total Funds Available	**$3,823,384**