



Total Project Cost	\$ 26,250,000
Approval Level:	Full BoR

PROJECT CHANGE REQUEST

TO: Pat Gamble
President

THROUGH: Kit Duke
AVP Facilities and Land Management

THROUGH: Brian Rogers *BR*
Chancellor

THROUGH: Pat Pitney *Pat Pitney*
Vice Chancellor, Administrative Services

THROUGH: Scott Bell *SB*
Associate Vice Chancellor, Facilities Services

THROUGH: Jenny Campbell *JC*
Interim Director

FROM: Michael Ruckhaus, P.E. *Mike Ruckhaus*
Sr. Project Manager

DATE: March 7, 2014

SUBJECT: Project Type: Renewal and Replacement
Project Name: Utilities Critical Electrical Distribution Renewal Phase 2
Project No.: 2012108 UTER2

cc: UTER2 (101)



Non- Academic Project Program Resource Planning Status Report

UAF Critical Electrical Distribution Phase 2 – Project Change Request

This project is a major Deferred Maintenance and Renewal of existing facilities and was initiated prior to acceptance of the Program Resource Planning process by the Regents; therefore milestones 0 and 1 were not required.

This project change request is the required to allow UAF to add the FY14 DM&R funds that were identified for use on this project but not available at the time that SDA was granted.

Milestone #0

Mission Area Analysis: (not required at time of project development) Date: N/A
Statement of Need: (not required at time of project development) Date: N/A

Milestone #1

SAC Review: (not required) Date: N/A

Milestone #2

Preliminary Administrative Approval: Date: 08/11

Milestone #3

Statement of Requirements: Date: 02/16/12

Milestone#4

Business and Financing Plan: Date: 02/16/12
Operating Budget Request Date: N/A
Capital Budget Request: Date: FY12
Legislative Funding: FY12 DM&R Bonds Series “Q” and “S”
FY14 DM&R Funds
Board Approval of FY13 Capital Budget Distribution: Date: 06/07/12
Board Approval of FY14 Capital Budget Distribution: Date: 06/06/13
Redistribution of FY13 DM&R Funds: Date: 04/03/14

Milestone #5

Formal Project Approval (For all Phases): Date: 02/16/12
Schematic Design Approval (Phase 2): Date: 06/08/12

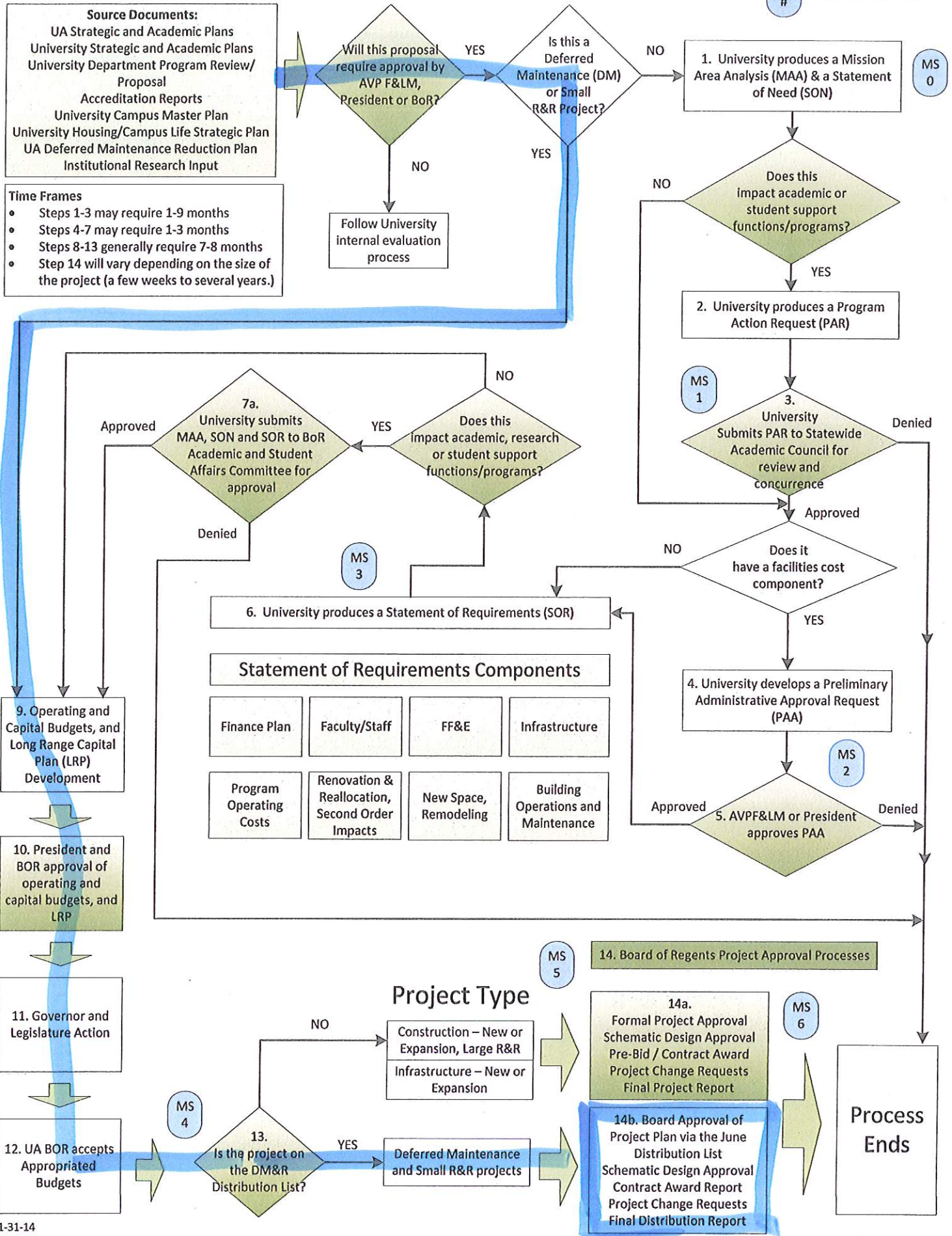
Milestone #6

Construction Started: Date: 07/16/12
Project Change Request #1 Date: 09/26/13
Project Change Request #2 (Current action requested) Date: 04/03/14
Construction Completed: Date: _____
Beneficial Occupancy: Date: _____
Final Project Report: Date: _____

University of Alaska Program Resource Planning

Academic, Budget and Project Planning Process

MS # Process Mile Stones





PROJECT CHANGE REQUEST

Name of Project: Utilities Critical Electrical Distribution Renewal Phase 2
Project Type: Renewal and Replacement
Location of Project: UAF, Fairbanks Campus
Project Number: 2012108 UTER2
Date of Request: March 7, 2014

Total Project Cost:	\$26,250,000	Funding Allocation Increase: \$2,000,000
Approval Required:	Full BoR	
Prior Approvals:	Preliminary Administrative Approval	August 2011
	Formal Project Approval	February 16, 2012
	Schematic Design Approval	June 8, 2012
	Project Change Approval	September 27, 2013

A Project Change Request (PCR) is required for all Capital Projects with a Total Project Cost in excess of \$250,000.

For projects that have changes in the source of funds, increases or decreases in budget, savings to the construction budget, and/or material changes in program or project scope identified subsequent to schematic design approval shall be determined by the chief facilities officer based on the extent of the change and other relevant circumstances. This determination requires judgment, but will generally be based on the nature of the funding source, the amount, and the budgetary or equivalent scope impact relative to the approved budget at the schematic design approval stage. Any changes with an estimated impact in excess of \$400,000 will require approval by the Facilities and Land Management Committee (F&LMC) or the full Board of Regents depending on the amount of the impact.

Action Requested

The Facilities and Land Management Committee recommends that the Board of Regents approve the Project Change Request in the amount of \$2,000,000 for the University of Alaska Fairbanks Utilities Critical Electrical Distribution Renewal Phase 2 as presented in compliance with the campus master plan, and authorizes the university administration to complete construction bid documents to bid and award a contract within the approved Total Project Cost budget of \$26.25 million, and to proceed with project construction not to exceed \$19,880,000. This motion is effective April 3, 2014.

Project Change Request Abstract

This project is being funded over several fiscal years. As funding becomes available for the project additional items are funded and completed. This Project Change Request will provide authority to use the additional deferred maintenance funding allocated to this project in FY14. The original Schematic Design Approval authorized construction up to \$14,325,000 (FY13 funding). A Project Change Approval in September 2013 authorized construction up to \$17,880,000. This Project Change Request will increase the authorized construction amount by \$2,000,000 for construction spending of \$19,880,000. The Total Project cost in the original Schematic Design Approval (June 2012) is \$26,250,000 and has not changed.

RATIONALE AND REASONING

Previous Approvals

“The Facilities and Land Management Committee recommends that the Board of Regents approve the Project Change Request in the amount of \$3,555,000 for the University of Alaska Fairbanks Utilities Critical Electrical Distribution Renewal Phase 2 as presented in compliance with the campus master plan, and authorizes the university administration to complete construction bid documents to bid and award a contract within the approved Total Project Cost budget of \$26.25 million, and to proceed with project construction not to exceed a Total Project Cost of \$17,880,000. This motion is effective September 27, 2013.”

“The Board of Regents approves the Schematic Design Approval for the University of Alaska Fairbanks Critical Electrical Distribution Renewal Phase 2 as presented in compliance with the campus master plan, and authorizes the university administration to complete construction bid documents to bid and award a contract within the approved Total Project Cost budget of \$26.25 million, and to proceed with project construction not to exceed a Total Project Cost of \$14,325,000. This motion is effective June 8, 2012.”

Project Scope

Phase 2 will continue the work started in the previous phases to provide a functional medium voltage distribution system for UAF. This phase of the project will consist of the following elements that will be performed throughout the UAF campus:

- Replace old building transformers (approximately 50% of the existing transformers will need replacement).
- Replace old high voltage cable (approximately 35% of the existing cables will need to be replaced). The cables are in the existing underground utilidor system.
- Install five new underground vaults to house new high voltage switches.
- Modify new building transformers for new distribution voltage of 12,470v.
- Correct Code deficiencies in the building electrical service for 8 buildings. This is required to complete the conversion to the new distribution voltage.
- Install an alternate connection to GVEA to the new switchgear building. This connection could be used to supply most of the power needs of campus if there were an emergency and the UAF/GVEA substation was not operational.
- Install an alternate feed from the Atkinson Combined Heat and Power Plant to the Campus Switchgear building to provide increased reliability.

The scope of the project will include any temporary power provisions that may be needed if conversions of the buildings cannot be done in a short outage. Although there will be some inconvenience to building occupants, a work plan will be developed to minimize these impacts.

The new distribution system will be installed in a looped configuration which will provide a level of reliability that is significantly better than the current radial configuration. If a problem is encountered on a feeder, it can be isolated while keeping the majority of the buildings on that feeder in service. The current system limits the ability to isolate problems in feeders.

Replacement of the Atkinson Switchgear is also in the scope. It was determined that it was not feasible, nor safe, to connect the new alternate feed from the Atkinson Combined Heat and Power Plant to the Campus Switchgear building from the existing switchgear, which is nearly 50 years old. No increase to the Total Project Cost budget is anticipated for this addition.

Project Impacts

The total duration of the project is increasing due to phased funding. It is possible that inflation could affect future Project Change Requests as funding is added up to the Total Cost Budget of \$26.25 million.

Approximately \$400,000 in savings from the CMAR has been realized in Phase 2 of construction. The savings have been used to increase the amount of work that can be done in this phase.

Variances

At the time of the original Schematic Design Approval the overall completion date was fall of 2014. Since funding is being allocated over multiple years the anticipated completion date is now summer of 2015.

Total Project Cost and Funding Sources

<u>Funding Title</u>	<u>Fund/Org Account#</u>	<u>Original Amount</u>	<u>New Amount</u>
FY12 DM&R Bonds Series "Q"	514499-50216	\$5,895,863	\$6,952,000
FY12 DM&R Bonds Series "S"	514551-50216	\$8,684,137	\$8,684,000
FY14 DM&R Funds	571368-50216	\$3,300,000	\$3,300,000
FY14 DM&R Funds	571385-50216	\$0	\$ 944,000
Total Budget available for Construction		\$17,880,000	\$19,880,000
 FY15 DM&R Funds	 TBD	 \$0	 \$6,370,000
Total Project Cost		\$0	\$26,250,000
 <u>Annual Renewal and Replacement</u>			<u>\$416,000</u>
Total Annual Cost Projections			\$416,000

Project Schedule

DESIGN

Conceptual Design	January, 2012
Formal Project Approval	February 16, 2012
Schematic Design	March, 2012
Schematic Design Approval	June 8, 2012
Construction Documents	July, 2012

BID & AWARD

Advertise and Bid	July, 2012
Construction Contract Award	July, 2012

CONSTRUCTION

Start of Construction	July, 2012
Construction Complete	November, 2015
Date of Beneficial Occupancy	September, 2015
Warranty Period	1 year

Project Delivery Method

This project (all phases) use the CM@R project delivery method. The CM@R (Kiewit Building Group) was selected in Phase 1 and the selection criteria included all phases of the project.

Affirmation

This project complies with Regents Policy and the campus master plan.

Supporting Documents

One-page Project Budget

Approvals

The level of approval required for PCR shall be based upon the estimated TPC as follows:

- **Changes with an estimated impact in excess of \$1.0 million will require approval by the Board based on recommendations from the Facilities and Land Management Committee (F&LMC).**
- Changes with an estimated impact in excess of \$0.4 million but not more than \$1.0 million will require approval by the F&LMC.

UNIVERSITY OF ALASKA		
Project Name: Critical Electrical Distribution Renewal Phase 2		
MAU: UAF		
Building: N/A	Date: March 7, 2014	
Campus: UAF	Prepared By: M. Ruckhaus	
Project #: 2012108 UTER2	Account No.: 514449-50216	
Total GSF Affected by Project: N/A		
PROJECT BUDGET	PCA Budget (Sept-2013)	PCA Budget (March 2014)
A. Professional Services		
Advance Planning, Program Development	0.0%	\$0
Consultant: Design Services	\$2,055,000	\$2,055,000
Consultant: Construction Phase Services	\$500,000	\$500,000
Consul: Extra Services (List: _____)	\$0	\$0
Site Survey	\$100,000	\$100,000
Soils Testing & Engineering	\$15,000	\$15,000
Special Inspections	\$0	\$0
Plan Review Fees / Permits	\$5,000	\$5,000
Other	\$0	\$0
<i>Professional Services Subtotal</i>	\$2,675,000	\$2,675,000
B. Construction		
General Construction Contract (s)	\$18,100,000	\$17,500,000
Other Contractors (List: GVEA)	\$600,000	\$600,000
Construction Contingency	\$1,200,000	\$1,200,000
<i>Construction Subtotal</i>	\$19,900,000	\$19,300,000
<i>Construction Cost per GSF</i>	<i>N/A</i>	<i>N/A</i>
C. Building Completion Activity		
Equipment	\$700,000	\$1,500,000
Fixtures	\$0	\$0
Furnishings	\$0	\$0
Signage not in construction contract	\$0	\$0
Move-Out Cost/Temp. Reloc. Costs	\$0	\$0
Move-In Costs	\$0	\$0
Art	\$0	\$0
Other (List: _____)	\$0	\$0
OIT Support	\$0	\$0
Maintenance/Operation Support	\$150,000	\$150,000
<i>Building Completion Activity Subtotal</i>	\$850,000	\$1,650,000
D. Owner Activities & Administrative Cost		
Project Planning and Staff Support	\$1,054,125	\$1,063,125
Project Management	\$1,171,250	\$1,181,250
Misc Expenses: Advertising, Printing, Supplies	\$30,000	\$30,000
<i>Owner Activities & Administrative Cost Subtotal</i>	\$2,255,375	\$2,274,375
E. Total Project Cost	\$25,680,375	\$25,899,375
<i>Total Project Cost per GSF</i>	<i>N/A</i>	<i>N/A</i>
F. Total Appropriation(s)	\$26,250,000	\$26,250,000