

CHUGACH ELECTRIC ASSOCIATION, INC.
Anchorage, Alaska

BOARD MEETING
AGENDA ITEM SUMMARY

May 11, 2005

ACTION REQUIRED

AGENDA ITEM NO. IX.H.

Information Only
 Motion
 Resolution
 Executive Session
 Other

TOPIC

Beluga Unit 5 Major – SRU Project

DISCUSSION

Beluga Unit 5 is a GE Frame 7 gas turbine. Hot Gas Path parts within the turbine have limited lives due to operating environments involving high speeds, vibration, and temperatures. The row 2 blades maintenance interval is approximately 48,000 operating hours. Continued operation would risk part failure and consequential damage. Therefore this part will be replaced during the inspection.

Additionally, in April of 2005 the unit was inspected because of high variations in exhaust temperatures and damage was discovered. High temperature seals failed damaging downstream turbine buckets and nozzles. The planned outage for hot gas path repairs has been extended to accommodate the additional repair work. Additional costs of approximately \$800,000 are anticipated. The cash flow impact is approximately \$350,000 because of the inventory value of the parts to be used.

Beluga Unit 5 receives a Hot Gas Path or Major inspection every 24,000 operating hours. This major inspection will replace two rows of turbine blades, rows 1 & 2.

CEO's RECOMMENDATION

Move that the Chugach Board of Directors authorizes project expenditures for the Beluga Unit 5 Major – SRU Project with an estimated cost of \$1,504,479 and an estimated completion date of July 2005.

CHUGACH

RESOLUTION

WHEREAS, Chugach Electric Association, Inc., has a need to perform regular maintenance on the hot gas path components of various gas turbines and needs to repair damaged components,

WHEREAS, Chugach Electric Association, Inc., has included the Beluga Unit 5 Major – SRU Project in the 2005-2009 Capital Improvement Plan ,

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Chugach Electric Association, Inc., authorizes project expenditures for the Beluga Unit 5 Major – SRU Project with an estimated cost of \$1,504,479 and an estimated completion date of July, 2005.

CERTIFICATION

I, David Cottrell, do hereby certify that I am Secretary of Chugach Electric Association, Inc , an electric non-profit cooperative membership corporation organized and existing under the laws of the State of Alaska: that the foregoing is a complete and correct copy of a resolution adopted at a meeting of the Board of Directors of this corporation, duly and properly called and held on the ___ day of _____, 20___, that a quorum was present at the meeting; that the resolution is set forth in the minutes of the meeting and has not been rescinded or modified

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the seal of this corporation the ___ day of _____, 2005

(Seal)

Secretary

Chugach Project Authorization – Budget Year 2005

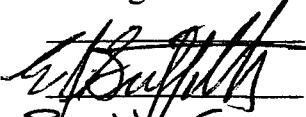

Project Name: BELUGA UNIT 5 Major – SRU PROJECT

Project Category:

Safety	Incremental Load Growth	New Service	R&R T&D	
Agency Mandated	Reliability	Operating Efficiency	R&R Generation	X

Accountabilities & Approvals

Board of Directors: Dave Cottrell, Secretary
 CEO: Evan J. Griffith, CEO
 Executive Sponsor: Brad Evans, GM G&T Division
 Project Manager: Paul Risse, Director GTS

Signatures	Date
	5/19/05
	5/16/05
_____	_/_/

Purpose and Need:

Beluga Unit 5 is a GE Frame 7 gas turbine. Hot Gas Path parts within the turbine have limited lives due to operating environments involving high speeds, vibration, and temperatures. The row 2 blades maintenance interval is approximately 48,000 operating hours. Continued operation would risk part failure and consequential damage. Therefore this part will be replaced during the inspection.

Additionally, in April of 2005 the unit was inspected because of high variations in exhaust temperatures and damage was discovered. High temperature seals failed damaging downstream turbine buckets and nozzles. The planned outage for hot gas path repairs has been extended to accommodate the additional repair work. Additional costs of approximately \$800,000 are anticipated. The cash flow impact is approximately \$350,000 because of the inventory value of the parts to be used.

Project Description:

Beluga Unit 5 receives a Hot Gas Path or Major inspection every 24,000 operating hours. This major inspection will replace two rows of turbine blades, rows 1 & 2.

Approval Amount: \$ 1,504,479

Project included in 2005/2009 CIP and 2005 Budget @ \$ 679,650

Chugach Project Authorization – Budget Year 2005

Category	Budget	Actual	Projected	Variance \$	Variance %	Notes
Labor	226,200		451,184	224,984	99%	1
Transportation	0		11,304	11,304		
Materials	400,000		877,281	477,281	119%	1
Professional Services	0		0	0		
OH	53,450		81,181	27,731	52%	1
Total	679,650		1,504,479	824,829	121%	1

Variance Discussion (Note #):

1. Reflects additional work due to damage caused by seal failures.

Cash Flows

2nd QTR 2005: \$ 100,000
 3rd QTR 2005: \$ 1,404,479

Economic Analysis

Capitalized maintenance project.

Economic Analysis Summary

Required routine maintenance of hot gas path parts and repair of damaged parts.

Current Project Status: Percent Complete 0 %

Project Schedule: (see attached timeline)

May - July of 2005

FINANCE COMMITTEE MEETING

ADDITIONAL AGENDA ITEM

XIV. D. Management Response to Approval of New Depreciation Rates