

**Chugach Electric Association,  
Inc  
2005 – 2009 Capital Improvement  
Program**

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October 27, 2004

## Financial Targets for 2005 – 2009 Capital Improvement Program (CIP)

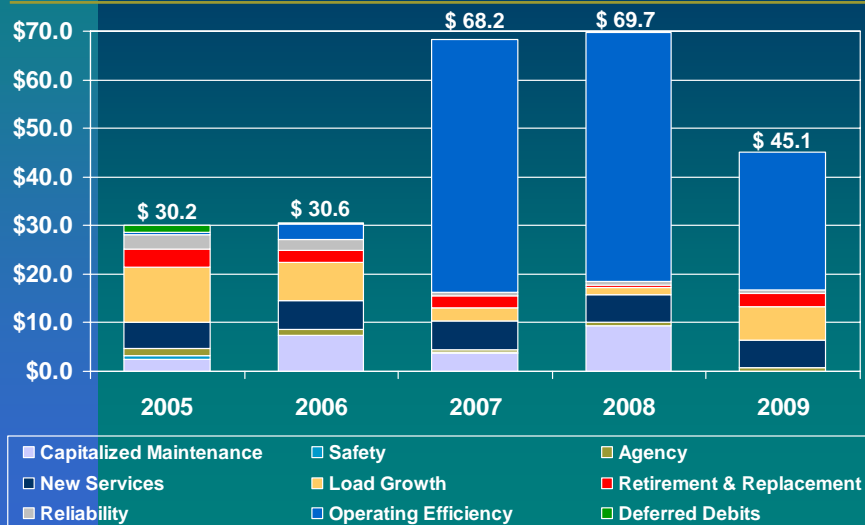
### ❖ Match depreciation & amortization expense

- Capital
  - Approximately \$152 million over 5 year period
    - Capitalized Maintenance
    - Capital Improvement Projects
- Amortized Projects
  - Approximately \$7.5 million over 5 year period
    - Deferred Studies
    - IT Projects
- Total targeted approximately \$159.5 million over 5 years

### ❖ Current Plan is \$243.8 million over 5 years

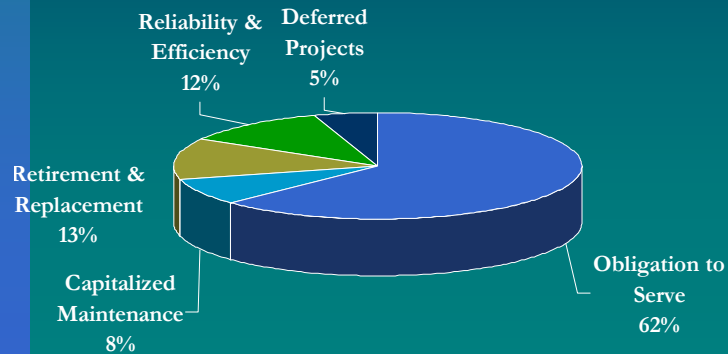
- Includes \$128.5 million associated with new generation

## Net Capital Expenditures 2005 – 2009 (In Millions)



## 2005 Net CIP Expenditures

❖ Capitalized Maintenance	\$2.4 million
❖ Obligation to Serve	\$19.0 million
❖ Retirement & Replacement	\$3.8 million
❖ Reliability & Operating Efficiency	\$3.5 million
❖ Deferred Debit Projects	\$1.5 million



## Further Discussion

- ❖ Major Projects 2005
  - Obligation to Serve
    - Line Extensions
    - Service Connects
    - Meters/Transformers
  - Beluga Unit 7 Annual
  - Beluga Unit 3 Turbine Controls
  - Alternate 35kV Supply to Baxter Substation
  - South Anchorage Bulk Substation
  - Cooper Lake Relicensing

## Further Discussion continued

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### ❖ Future Major Projects Currently in Design Phase

- Abbott Loop Substation
- Postmark 138/12.5kV Substation
- New 138kV Huffman to South Anchorage
- 138kV Yard at IGT
- New Generation

Capital Improvement Plan  
2005 to 2009 By Function

Budget Item	Budget Item Title	Function	Category	2005	2006	2007	2008	2009
<b>DISTRIBUTION PROJECTS</b>								
01.0367	OH Line Extensions - Distribution (66% non-reim only)	Distribution	New Services	\$157,000	\$161,000	\$161,000	\$161,000	\$161,000
01.0368	UG Line Extensions - Distribution (66% non-reim only)	Distribution	New Services	\$2,479,000	\$2,513,000	\$2,513,000	\$2,513,000	\$2,513,000
01.0581	Operations Service Connects (incl Coreflo)	Distribution	New Services	\$1,665,000	\$1,726,000	\$1,726,000	\$1,726,000	\$1,726,000
01.0667	Distr. Primary Loop Closures	Distribution	Reliability	\$85,100	\$52,500	\$52,500	\$52,500	\$52,500
02.0384	Abbott Loop Distr. Subst. Feeders	Distribution	Load Growth	\$0	\$0	\$0	\$94,500	\$1,064,300
02.0745	Posmark Distribution Substation Feeders	Distribution	Load Growth	\$212,000	\$956,000	\$0	\$0	\$0
02.0787	Dowling 612 Underground Feeder Circuit	Distribution	Load Growth	\$772,600	\$0	\$0	\$0	\$0
02.0817	Airport 412 Feeder Getaway	Distribution	Reliability	\$110,000	\$0	\$0	\$0	\$0
03.0182	Code Violation Corrections	Distribution	Safety	\$48,000	\$50,000	\$50,000	\$50,000	\$50,000
03.0225	12.5 & 25kV Distribution Reconductoring	Distribution	Load Growth	\$0	\$0	\$200,000	\$200,000	\$200,000
03.0509	UG Cable Rehabilitation Project	Distribution	Reliability	\$0	\$400,000	\$400,000	\$400,000	\$400,000
03.0538	UG Cable Replacement	Distribution	Reliability	\$0	\$250,000	\$250,000	\$250,000	\$250,000
03.0541	Bombrook Subd. Addn #3 - 3ph Cable Replacement	Distribution	Reliability	\$240,000	\$0	\$0	\$0	\$0
03.0543	Dave's Creek 352 Re-Energize "B" Phase	Distribution	Load Growth	\$58,300	\$59,800	\$60,000	\$60,000	\$60,000
03.0810	Municipal Undergrounding	Distribution	Agency	\$600,000	\$600,000	\$0	\$0	\$0
03.0811	State Undergrounding Requirement	Distribution	Agency	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
03.0866	Hope Line Reliability (100% Grant Reimb)	Distribution	Reliability	\$0	\$0	\$0	\$0	\$0
07.0849	Street Light Conductor Replacement	Distribution	Reliability	\$72,800	\$75,500	\$75,500	\$75,500	\$75,500
CapMeter	Capitalized Meters/Transformers	Distribution	New Services	\$1,340,100	\$1,422,000	\$1,422,000	\$1,422,000	\$1,422,000
<b>DISTRIBUTION PROJECTS SUBTOTAL</b>				<b>\$8,239,900</b>	<b>\$8,665,800</b>	<b>\$7,310,000</b>	<b>\$7,404,500</b>	<b>\$8,314,300</b>

<b>DISTRIBUTION SUBSTATION PROJECTS</b>								
04.0428	Abbott Loop Substation	Distribution Substation	Load Growth	\$0	\$0	\$29,000	\$187,000	\$3,307,000
05.0380	Portage Subst Switchgear Roof	Distribution Substation	R&R Distribution	\$79,000	\$0	\$0	\$0	\$0
05.0488	Alternate Station Service	Distribution Substation	R&R Distribution	\$34,400	\$35,800	\$35,800	\$35,800	\$35,800
05.0746	Postmark 138/12.5kV Substation	Distribution Substation	Load Growth	\$431,000	\$3,646,000	\$0	\$0	\$0
05.0825	Dowling Substation 612 Breaker	Distribution Substation	Load Growth	\$384,000	\$0	\$0	\$0	\$0
05.0847	Airport Substation 412 Breaker	Distribution Substation	Load Growth	\$284,000	\$0	\$0	\$0	\$0
05.0957	Tumagain Relay and Control Upgrade	Distribution Substation	R&R Distribution	\$0	\$0	\$0	\$0	\$263,000
05.0959	Woodland Park Relay and Control Upgrade	Distribution Substation	R&R Distribution	\$0	\$0	\$0	\$0	\$263,000
<b>DISTRIBUTION SUBSTATION PROJECTS SUBTOTAL</b>				<b>\$1,212,400</b>	<b>\$3,681,800</b>	<b>\$64,800</b>	<b>\$222,800</b>	<b>\$3,868,800</b>

<b>MUNICIPAL AND STATE RELOCATION PROJECTS</b>								
03.0485	Misc. State and Muni. Relocation Projects (10% non-reim only)	Reimb Relocates	Agency	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000
03.0485M	West No Lights Relocation - Dist (10% non-reim only)	Reimb Relocates	Agency	\$262,800	\$0	\$0	\$0	\$0
<b>MUNICIPAL AND STATE RELOCATION PROJECTS SUBTOTAL</b>				<b>\$418,800</b>	<b>\$156,000</b>	<b>\$156,000</b>	<b>\$156,000</b>	<b>\$156,000</b>

<b>SUBTRANSMISSION PROJECTS</b>								
11.0487	South Anch Sub 34.5kV Feeders	Subtransmission	Load Growth	\$556,000	\$0	\$0	\$0	\$0
02.0145	Alternate 35kV Supply to Baxter Substation	Subtransmission	Reliability	\$1,880,000	\$896,000	\$0	\$0	\$0
03.0820	JGT 34.5kV Getaway Replacements	Subtransmission	R&R Distribution	\$0	\$0	\$0	\$160,300	\$1,185,600
11.0491	34kV Reconductor-Sand Lake Sub to 94th Ave	Subtransmission	Load Growth	\$0	\$0	\$0	\$803,300	\$0
11.0386	34.5kV Subtrans OH Reconductoring	Subtransmission	Load Growth	\$0	\$0	\$0	\$0	\$2,184,000
<b>SUBTRANSMISSION PROJECTS SUBTOTAL</b>				<b>\$2,436,000</b>	<b>\$896,000</b>	<b>\$0</b>	<b>\$963,600</b>	<b>\$3,369,600</b>

Budget Item	Budget Item Title	Function	Category	2005	2006	2007	2008	2009
<b>TRANSMISSION PROJECTS</b>								
05.0726	Six Mile East Bus Improvements	Transmission	Reliability	\$0	\$184,012	\$0	\$0	\$0
08.0475	138 kV International Subst.to So. Anch. Subst.	Transmission	Load Growth	\$632,000	\$0	\$0	\$0	\$0
09.0452	South Anchorage Bulk Station	Transmission	Load Growth	\$6,602,000	\$203,000	\$0	\$0	\$0
10.0239	138kV Yard @ IGT	Transmission	Operating Efficiency	\$0	\$0	\$100,000	\$6,320,000	\$0
10.0593	Beluga Line #3, Str 8-2	Transmission	Reliability	\$216,000	\$0	\$0	\$0	\$0
10.0594	115kV Glacier Creek - Str. 32-6	Transmission	Reliability	\$330,100	\$0	\$0	\$0	\$0
10.0601	Aircraft Warning Marker Replacement	Transmission	Safety	\$52,500	\$54,000	\$54,000	\$54,000	\$54,000
10.0702	South Anch. Loop - Univ SS & HQ Modifications	Transmission	Load Growth	\$134,000	\$0	\$0	\$0	\$0
10.0727	New 138kV Huffman to South Anchorage	Transmission	Load Growth	\$575,000	\$0	\$0	\$0	\$0
10.0848	Raptor Protection	Transmission	Load Growth	\$551,000	\$3,042,000	\$2,480,000	\$0	\$0
10.0858	Beluga 138kV Relay & Control Upgrade Phase II	Transmission	Agency	\$50,500	\$51,000	\$51,000	\$51,000	\$51,000
10.0909	Beluga 230kV Relay & Control Upgrade Phase II	Transmission	R&R Transmission	\$120,400	\$0	\$0	\$0	\$0
10.0945	Teeland Relay & Control Upgrades	Transmission	R&R Transmission	\$120,400	\$0	\$0	\$0	\$0
10.0960	Quartz Creek Relay & Control Upgrades	Transmission	R&R Transmission	\$0	\$0	\$467,400	\$0	\$771,000
10.0970	230kV BZO Breaker Replacements	Transmission	R&R Transmission	\$906,800	\$883,800	\$883,800	\$0	\$0
10.0971	Bernice Lake Alternate Station Service	Transmission	R&R Transmission	\$0	\$42,970	\$0	\$0	\$0
<b>TRANSMISSION PROJECTS SUBTOTAL</b>				<b>\$10,290,700</b>	<b>\$4,460,762</b>	<b>\$4,036,200</b>	<b>\$6,425,000</b>	<b>\$876,000</b>

**GENERATION PROJECTS**

12.0317	Plant Security Phase II	Generation	Safety	\$120,000	\$0	\$0	\$0	\$0
12.0318	Beluga Air System Dryer Addition	Generation	R&R Generation	\$36,000	\$0	\$0	\$0	\$0
12.0320	Beluga Enstar Gas Controls	Generation	R&R Generation	\$22,200	\$0	\$0	\$0	\$0
12.0321	Beluga Unit 3 Relay & Control Upgrade	Generation	R&R Generation	\$201,000	\$0	\$0	\$0	\$0
12.0552	Beluga U6&U7 Fire Suppression	Generation	R&R Generation	\$154,000	\$0	\$0	\$0	\$0
12.0620	Beluga Unit 7 Annual - SRU (LCI & Hex Rings Net of Refurbished)	Generation	Capitalized Maint Generation	\$1,191,000	\$0	\$0	\$0	\$0
12.0626	Beluga Unit 5 HGP Inspection	Generation	Capitalized Maint Generation	\$680,000	\$0	\$0	\$0	\$0
12.0650	Beluga Unit 3 Turbine Controls	Generation	R&R Generation	\$1,395,000	\$0	\$0	\$0	\$0
12.0651	Beluga Unit 5 Controls Upgrade	Generation	R&R Generation	\$113,000	\$0	\$0	\$0	\$0
12.0671	Beluga Mezzanine Fire Suppression	Generation	R&R Generation	\$12,000	\$0	\$0	\$0	\$0
12.0783	Beluga Unit 3 Hot Gas Path Inspection - SRU Project (Net of refurbished parts)	Generation	Capitalized Maint Generation	\$527,000	\$0	\$0	\$0	\$0
12.0851	Beluga Unit 1 Hot Gas Path Inspection - SRU Project	Generation	Capitalized Maint Generation	\$0	\$0	\$0	\$323,000	\$0
12.0852	Beluga Unit 2 Hot Gas Path Inspection - SRU Project	Generation	Capitalized Maint Generation	\$0	\$0	\$323,000	\$0	\$0
12.0853	Beluga Unit 6 Major Overhaul - SRU Project (Net of refurbished parts)	Generation	Capitalized Maint Generation	\$0	\$7,300,000	\$0	\$0	\$0
12.0854	Beluga Unit 7 Rotor Overhaul - SRU Project (Net of refurbished parts)	Generation	Capitalized Maint Generation	\$0	\$0	\$0	\$6,500,000	\$0
12.0856	Beluga Unit 5 Major Overhaul - SRU Project (Net of refurbished parts)	Generation	Capitalized Maint Generation	\$0	\$0	\$3,500,000	\$0	\$0
12.0857	Beluga Unit 8 Major Life Extension - SRU Project	Generation	Capitalized Maint Generation	\$0	\$0	\$0	\$2,500,000	\$0
12.0911	IGT Unit 1 Relay Upgrade	Generation	R&R Generation	\$0	\$125,000	\$0	\$0	\$0
12.0912	IGT Unit 2 Relay Upgrade	Generation	R&R Generation	\$0	\$125,000	\$0	\$0	\$0
New1	New Generation	Generation	Operating Efficiency	\$470,000	\$3,090,000	\$51,800,000	\$44,760,000	\$28,420,000
<b>GENERATION PROJECTS SUBTOTAL</b>				<b>\$4,921,200</b>	<b>\$10,640,000</b>	<b>\$55,623,000</b>	<b>\$54,083,000</b>	<b>\$28,420,000</b>

**SCADA PROJECTS**

16.0919	SCADA Communications Upgrades	SCADA	R&R Transmission	\$125,000	\$163,000	\$187,000	\$0	\$0
16.0942	SCADA/EMS Master Migration	SCADA	R&R Transmission	\$187,700	\$778,000	\$752,000	\$366,000	\$0
<b>SCADA PROJECTS SUBTOTAL</b>				<b>\$312,700</b>	<b>\$941,000</b>	<b>\$939,000</b>	<b>\$366,000</b>	<b>\$0</b>

Budget Item	Budget Item Title	Function	Category	2005	2006	2007	2008	2009
<b>TELECOMMUNICATIONS PROJECTS</b>								
16.0914	Communications Power Improvements	Telecom	R&R Transmission	\$114,700	\$105,000	\$62,000	\$50,300	\$50,300
16.0916	Beluga Plant PA Replacement	Telecom	Safety	\$94,900	\$0	\$0	\$0	\$0
16.0918	Station Operations LAN Infrastructure	Telecom	Reliability	\$0	\$121,287	\$37,000	\$37,100	\$0
16.0920	Building "A" SCADA UPS	Telecom	R&R Transmission	\$96,000	\$0	\$0	\$0	\$0
16.0931	Radio Coverage Improvements	Telecom	R&R Transmission	\$29,600	\$0	\$0	\$0	\$0
16.0934	Communications Site Fire Improvements	Telecom	Safety	\$119,500	\$0	\$0	\$0	\$0
16.0937	Paging System Upgrade	Telecom	R&R Transmission	\$0	\$48,008	\$0	\$0	\$0
16.0939	ML&P Microwave	Telecom	R&R Transmission	\$0	\$145,000	\$0	\$0	\$0
16.0941	Moose Pass & Tyonek UHF Radio Site Additions	Telecom	Safety	\$51,100	\$79,000	\$0	\$0	\$0
16.0943	Turnagain Arm Comm Improvements	Telecom	Operating Efficiency	\$70,700	\$80,000	\$0	\$0	\$0
16.0965	Beluga Communications Tower Replacement	Telecom	Safety	\$215,600	\$0	\$0	\$0	\$0
16.0966	Berneck Power Plant Telephony Upgrade	Telecom	R&R General Plant	\$0	\$26,728	\$0	\$0	\$0
16.0967	Centralized Directory Database	Telecom	R&R General Plant	\$0	\$39,270	\$0	\$0	\$0
16.0968	Cooper Lake Dam Failure Monitoring System	Telecom	R&R General Plant	\$77,000	\$0	\$0	\$0	\$0
16.0969	Headquarters PBX Communications Server Revision	Telecom	R&R General Plant	\$0	\$29,092	\$0	\$0	\$0
16.0972	Headquarters Voicemail System Upgrade	Telecom	R&R General Plant	\$0	\$35,980	\$0	\$0	\$0
<b>TELECOMMUNICATIONS PROJECTS SUBTOTAL</b>				<b>\$869,100</b>	<b>\$709,365</b>	<b>\$99,000</b>	<b>\$87,400</b>	<b>\$50,300</b>
<b>DEFERRED DEBIT PROJECTS</b>								
20.0108	Cooper Lake Relicensing	Energy Supply	Agency	\$1,098,000	\$254,000	\$0	\$0	\$0
20.0104	GIS Integration	Info. Services	Software Implementation/Upgrade	\$153,500	\$0	\$0	\$0	\$0
20.0142	RCM/MMW Software Implementation	Info. Services	Software Implementation/Upgrade	\$162,000	\$154,000	\$0	\$0	\$0
20.0106	Cascade Implementation - ES	Info. Services	Software Implementation/Upgrade	\$113,000	\$0	\$0	\$0	\$0
<b>DEFERRED DEBIT PROJECTS SUBTOTAL</b>				<b>\$1,526,500</b>	<b>\$408,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>2005 - 2009 CAPITAL IMPROVEMENT PROGRAM GRAND TOTAL</b>				<b>\$30,227,300</b>	<b>\$30,558,747</b>	<b>\$68,228,000</b>	<b>\$69,708,300</b>	<b>\$45,055,000</b>

Capital Improvement Plan  
2005 to 2009 By Business Objective

Budget Item	Budget Item Title	Function	Category	2005	2006	2007	2008	2009
<b>CAPITALIZED MAINTENANCE PROJECTS</b>								
12.0620	Beluga Unit 7 Annual - SRU (LCI & Hex Rings Net of Refurbished)	Generation	Capitalized Maint Generation	\$1,191,000	\$0	\$0	\$0	\$0
12.0626	Beluga Unit 5 HGP Inspection	Generation	Capitalized Maint Generation	\$680,000	\$0	\$0	\$0	\$0
12.0783	Beluga Unit 3 Hot Gas Path Inspection (Net of refurbished parts)	Generation	Capitalized Maint Generation	\$527,000	\$0	\$0	\$0	\$0
12.0851	Beluga Unit 1 Hot Gas Path Inspection - SRU Project	Generation	Capitalized Maint Generation	\$0	\$0	\$0	\$323,000	\$0
12.0852	Beluga Unit 2 Hot Gas Path Inspection - SRU Project	Generation	Capitalized Maint Generation	\$0	\$0	\$323,000	\$0	\$0
12.0853	Beluga Unit 6 Major Overhaul - SRU Project (Net of refurbished parts)	Generation	Capitalized Maint Generation	\$0	\$7,300,000	\$0	\$0	\$0
12.0854	Beluga Unit 7 Rotor Overhaul - SRU Project (Net of refurbished parts)	Generation	Capitalized Maint Generation	\$0	\$0	\$0	\$6,500,000	\$0
12.0856	Beluga Unit 5 Major Overhaul - SRU Project (Net of refurbished parts)	Generation	Capitalized Maint Generation	\$0	\$0	\$3,500,000	\$0	\$0
12.0857	Beluga Unit 8 Major Life Extension - SRU Project	Generation	Capitalized Maint Generation	\$0	\$0	\$0	\$2,500,000	\$0
<b>CAPITALIZED MAINTENANCE PROJECTS SUBTOTAL</b>				<b>\$2,498,000</b>	<b>\$7,300,000</b>	<b>\$3,823,000</b>	<b>\$9,323,000</b>	<b>\$0</b>

**SAFETY PROJECTS**

03.0182	Code Violation Corrections	Distribution	Safety	\$48,000	\$50,000	\$50,000	\$50,000	\$50,000
10.0601	Aircraft Warning Marker Replacement	Transmission	Safety	\$52,500	\$54,000	\$54,000	\$54,000	\$54,000
12.0317	Plant Security Phase II	Generation	Safety	\$120,000	\$0	\$0	\$0	\$0
16.0916	Beluga Plant PA Replacement	Telecom	Safety	\$94,900	\$0	\$0	\$0	\$0
16.0934	Communications Site Fire Improvements	Telecom	Safety	\$119,500	\$0	\$0	\$0	\$0
16.0941	Moose Pass & Tyonek UHF Radio Site Additions	Telecom	Safety	\$51,100	\$79,000	\$0	\$0	\$0
16.0965	Beluga Communications Tower Replacement	Telecom	Safety	\$215,600	\$0	\$0	\$0	\$0
<b>SAFETY PROJECTS SUBTOTAL</b>				<b>\$701,600</b>	<b>\$183,000</b>	<b>\$104,000</b>	<b>\$104,000</b>	<b>\$104,000</b>

**AGENCY PROJECTS**

03.0485	Misc. State and Muni. Relocation Projects (0% non-reim only)	Reimb Relocates	Agency	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000
03.0485M	West No Lights Relocation - Dist (0% non-reim only)	Reimb Relocates	Agency	\$262,800	\$0	\$0	\$0	\$0
03.0810	Municipal Undergrounding	Distribution	Agency	\$600,000	\$600,000	\$0	\$0	\$0
03.0811	State Undergrounding Requirement	Distribution	Agency	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
10.0848	Raptor Protection	Transmission	Agency	\$50,500	\$51,000	\$51,000	\$51,000	\$51,000
<b>AGENCY PROJECTS SUBTOTAL</b>				<b>\$1,469,300</b>	<b>\$1,207,000</b>	<b>\$607,000</b>	<b>\$607,000</b>	<b>\$607,000</b>

**NEW SERVICES PROJECTS**

01.0367	OH Line Extensions - Distribution (66% non-reim only)	Distribution	New Services	\$157,000	\$161,000	\$161,000	\$161,000	\$161,000
01.0368	UG Line Extensions - Distribution (66% non-reim only)	Distribution	New Services	\$2,479,000	\$2,513,000	\$2,513,000	\$2,513,000	\$2,513,000
01.0581	Operations Service Connects (incl Corefio)	Distribution	New Services	\$1,665,000	\$1,726,000	\$1,726,000	\$1,726,000	\$1,726,000
CapMeter	Capitalized Meters/Transformers	Distribution	New Services	\$1,340,100	\$1,422,000	\$1,422,000	\$1,422,000	\$1,422,000
<b>NEW SERVICES PROJECTS SUBTOTAL</b>				<b>\$5,641,100</b>	<b>\$5,822,000</b>	<b>\$5,822,000</b>	<b>\$5,822,000</b>	<b>\$5,822,000</b>

Capital Improvement Plan  
2005 to 2009 By Business Objective

Budget Item	Budget Item Title	Function	Category	2005	2006	2007	2008	2009
<b>LOAD GROWTH PROJECTS</b>								
02.0384	Abbott Loop Distr. Subst. Feeders	Distribution	Load Growth	\$0	\$0	\$0	\$94,500	\$1,064,300
02.0745	Postmark Distribution Substation Feeders	Distribution	Load Growth	\$212,000	\$956,000	\$0	\$0	\$0
02.0787	Dowling 612 Underground Feeder Circuit	Distribution	Load Growth	\$772,600	\$0	\$0	\$0	\$0
03.0225	12.5 & 25kV Distribution Reconductoring	Distribution	Load Growth	\$0	\$0	\$200,000	\$200,000	\$200,000
03.0543	Dave's Creek 352 Re-Energize "B" Phase	Distribution	Load Growth	\$58,300	\$59,800	\$60,000	\$60,000	\$0
04.0428	Abbott Loop Substation	Distribution Substation	Load Growth	\$0	\$0	\$29,000	\$187,000	\$3,307,000
05.0746	Postmark 138/12.5kV Substation	Distribution Substation	Load Growth	\$431,000	\$3,646,000	\$0	\$0	\$0
05.0825	Dowling Substation 612 Breaker	Distribution Substation	Load Growth	\$384,000	\$0	\$0	\$0	\$0
05.0847	Airport Substation 412 Breaker	Distribution Substation	Load Growth	\$284,000	\$0	\$0	\$0	\$0
08.0475	138 kV International Subst. to So. Anch. Subst.	Transmission	Load Growth	\$632,000	\$0	\$0	\$0	\$0
09.0452	South Anchorage Bulk Station	Transmission	Load Growth	\$6,602,000	\$203,000	\$0	\$0	\$0
10.0702	South Anch. Loop - Univ SS & HQ Modifications	Transmission	Load Growth	\$134,000	\$0	\$0	\$0	\$0
10.0703	South Anch. Loop - Pt. MacKenzie Modifications	Transmission	Load Growth	\$575,000	\$0	\$0	\$0	\$0
10.0727	New 138kV Huffman to South Anchorage	Transmission	Load Growth	\$551,000	\$3,042,000	\$2,480,000	\$0	\$0
11.0386	34.5kV Subtrans OH Reconductoring	Subtransmission	Load Growth	\$0	\$0	\$0	\$0	\$2,184,000
11.0487	South Anch Sub 34.5kV Feeders	Subtransmission	Load Growth	\$556,000	\$0	\$0	\$0	\$0
11.0491	34kV Reconductor-Sand Lake Sub to 94th Ave	Subtransmission	Load Growth	\$0	\$0	\$0	\$803,300	\$0
<b>LOAD GROWTH PROJECTS SUBTOTAL</b>				<b>\$11,191,900</b>	<b>\$7,906,800</b>	<b>\$2,769,000</b>	<b>\$1,344,800</b>	<b>\$6,755,300</b>

**R&R GENERAL PLANT PROJECTS**

16.0966	Bernice Power Plant Telephony Upgrade	Telecom	R&R General Plant	\$0	\$26,728	\$0	\$0	\$0
16.0967	Centralized Directory Database	Telecom	R&R General Plant	\$0	\$39,270	\$0	\$0	\$0
16.0968	Cooper Lake Data Failure Monitoring System	Telecom	R&R General Plant	\$77,000	\$0	\$0	\$0	\$0
16.0969	Headquarters PBX Communications Server Revision	Telecom	R&R General Plant	\$0	\$29,092	\$0	\$0	\$0
16.0972	Headquarters Voicemail System Upgrade	Telecom	R&R General Plant	\$0	\$35,980	\$0	\$0	\$0
<b>R&amp;R GENERAL PLANT PROJECTS SUBTOTAL</b>				<b>\$77,000</b>	<b>\$131,070</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**R&R DISTRIBUTION PROJECTS**

03.0820	IGT 34.5kV Gelayway Replacements	Subtransmission	R&R Distribution	\$0	\$0	\$0	\$160,300	\$1,185,600
05.0380	Portage Subst Switchgear Roof	Distribution Substation	R&R Distribution	\$79,000	\$0	\$0	\$0	\$0
05.0488	Alternate Station Service	Distribution Substation	R&R Distribution	\$34,400	\$35,800	\$35,800	\$35,800	\$35,800
05.0957	Turnagain Relay and Control Upgrade	Distribution Substation	R&R Distribution	\$0	\$0	\$0	\$0	\$263,000
05.0959	Woodland Park Relay and Control Upgrade	Distribution Substation	R&R Distribution	\$0	\$0	\$0	\$0	\$263,000
<b>R&amp;R DISTRIBUTION PROJECTS SUBTOTAL</b>				<b>\$113,400</b>	<b>\$35,800</b>	<b>\$35,800</b>	<b>\$196,100</b>	<b>\$1,747,400</b>

**R&R GENERATION PROJECTS**

12.0318	Beluga Air System Dryer Addition	Generation	R&R Generation	\$36,000	\$0	\$0	\$0	\$0
12.0320	Beluga Enstar Gas Controls	Generation	R&R Generation	\$22,200	\$0	\$0	\$0	\$0
12.0321	Beluga Unit 3 Relay & Control Upgrade	Generation	R&R Generation	\$201,000	\$0	\$0	\$0	\$0
12.0552	Beluga U6&U7 Fire Suppression	Generation	R&R Generation	\$154,000	\$0	\$0	\$0	\$0
12.0650	Beluga Unit 3 Turbine Controls	Generation	R&R Generation	\$1,395,000	\$0	\$0	\$0	\$0
12.0651	Beluga Unit 5 Controls Upgrade	Generation	R&R Generation	\$113,000	\$0	\$0	\$0	\$0
12.0671	Beluga Mezzanine Fire Suppression	Generation	R&R Generation	\$12,000	\$0	\$0	\$0	\$0
12.0911	IGT Unit 1 Relay Upgrade	Generation	R&R Generation	\$0	\$125,000	\$0	\$0	\$0
12.0912	IGT Unit 2 Relay Upgrade	Generation	R&R Generation	\$0	\$125,000	\$0	\$0	\$0
<b>R&amp;R GENERATION PROJECTS SUBTOTAL</b>				<b>\$1,933,200</b>	<b>\$250,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

Capital Improvement Plan  
2005 to 2009 By Business Objective

Budget Item	Budget Item Title	Function	Category	2005	2006	2007	2008	2009
<b>R&amp;R TRANSMISSION PROJECTS</b>								
10.0858	Beluga 138kV Relay & Control Upgrade Phase II	Transmission	R&R Transmission	\$120,400	\$0	\$0	\$0	\$0
10.0909	Beluga 230kV Relay & Control Upgrade Phase II	Transmission	R&R Transmission	\$120,400	\$0	\$0	\$0	\$0
10.0945	Teeland Relay & Control Upgrades	Transmission	R&R Transmission	\$0	\$0	\$0	\$0	\$771,000
10.0960	Quartz Creek Relay & Control Upgrades	Transmission	R&R Transmission	\$0	\$0	\$467,400	\$0	\$0
10.0970	230kV BZO Breaker Replacements	Transmission	R&R Transmission	\$906,800	\$883,800	\$883,800	\$0	\$0
10.0971	Bernice Lake Alternate Station Service	Transmission	R&R Transmission	\$0	\$42,970	\$0	\$0	\$0
16.0914	Communications Power Improvements	Telecom	R&R Transmission	\$114,700	\$105,000	\$62,000	\$50,300	\$50,300
16.0919	SCADA Communications Upgrades	SCADA	R&R Transmission	\$125,000	\$163,000	\$187,000	\$0	\$0
16.0920	Building "A" SCADA UPS	Telecom	R&R Transmission	\$96,000	\$0	\$0	\$0	\$0
16.0931	Radio Coverage Improvements	Telecom	R&R Transmission	\$29,600	\$0	\$0	\$0	\$0
16.0937	Paging System Upgrade	Telecom	R&R Transmission	\$0	\$48,008	\$0	\$0	\$0
16.0939	ML&P Microwave	Telecom	R&R Transmission	\$0	\$145,000	\$0	\$0	\$0
16.0942	SCADA/EMS Master Migration	SCADA	R&R Transmission	\$187,700	\$778,000	\$752,000	\$366,000	\$0
<b>R&amp;R TRANSMISSION PROJECTS SUBTOTAL</b>				<b>\$1,700,600</b>	<b>\$2,165,778</b>	<b>\$2,352,200</b>	<b>\$416,300</b>	<b>\$821,300</b>

**RELIABILITY PROJECTS**

01.0667	Distr. Primary Loop Closures	Distribution	Reliability	\$85,100	\$52,500	\$52,500	\$52,500	\$52,500
02.0145	Alternate 35kV Supply to Baxter Substation	Subtransmission	Reliability	\$1,880,000	\$896,000	\$0	\$0	\$0
02.0817	Airport 412 Feeder Getaway	Distribution	Reliability	\$110,000	\$0	\$0	\$0	\$0
03.0509	UG Cable Rehabilitation Project	Distribution	Reliability	\$0	\$400,000	\$400,000	\$400,000	\$400,000
03.0538	UG Cable Replacement	Distribution	Reliability	\$0	\$250,000	\$250,000	\$250,000	\$250,000
03.0541	Bombrook Subd. Addn #3 - 3Ph Cable Replacement	Distribution	Reliability	\$240,000	\$0	\$0	\$0	\$0
03.0866	Hope Line Reliability (100% Grant Reimb)	Distribution	Reliability	\$0	\$0	\$0	\$0	\$0
05.0726	Six Mile East Bus Improvements	Transmission	Reliability	\$0	\$184,012	\$0	\$0	\$0
07.0849	Street Light Conductor Replacement	Distribution	Reliability	\$72,800	\$75,500	\$75,500	\$75,500	\$75,500
10.0593	Beluga Line #3, Str 8-2	Transmission	Reliability	\$216,000	\$0	\$0	\$0	\$0
10.0594	11.5kV Glacier Creek, Str. 32-6	Transmission	Reliability	\$330,100	\$0	\$0	\$0	\$0
16.0918	Station Operations LAN Infrastructure	Telecom	Reliability	\$0	\$121,287	\$37,000	\$37,100	\$0
<b>RELIABILITY PROJECTS SUBTOTAL</b>				<b>\$2,934,000</b>	<b>\$1,979,299</b>	<b>\$815,000</b>	<b>\$815,100</b>	<b>\$778,000</b>

**OPERATING EFFICIENCY PROJECTS**

10.0239	138kV Yard @ IGT	Transmission	Operating Efficiency	\$0	\$0	\$100,000	\$6,320,000	\$0
16.0943	Turnagain Arm Comm Improvements	Telecom	Operating Efficiency	\$70,700	\$80,000	\$0	\$0	\$0
New1	New Generation	Generation	Operating Efficiency	\$470,000	\$3,090,000	\$51,800,000	\$44,760,000	\$28,420,000
<b>OPERATING EFFICIENCY PROJECTS SUBTOTAL</b>				<b>\$540,700</b>	<b>\$3,170,000</b>	<b>\$51,900,000</b>	<b>\$51,080,000</b>	<b>\$28,420,000</b>

**DEFERRED DEBIT PROJECTS**

20.0108	Cooper Lake Relicensing	Energy Supply	Agency	\$1,098,000	\$254,000	\$0	\$0	\$0
20.0104	GIS Integration	Info. Services	Software Implementation/Upgrade	\$153,500	\$0	\$0	\$0	\$0
20.0142	RCM/MMW Software Implementation	Info. Services	Software Implementation/Upgrade	\$162,000	\$154,000	\$0	\$0	\$0
20.0106	Cascade Implementation - ES	Info. Services	Software Implementation/Upgrade	\$113,000	\$0	\$0	\$0	\$0
<b>DEFERRED DEBIT PROJECTS SUBTOTAL</b>				<b>\$1,526,500</b>	<b>\$408,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**2005 - 2009 CAPITAL IMPROVEMENT PROGRAM GRAND TOTAL**

<b>\$30,227,300</b>	<b>\$30,558,747</b>	<b>\$68,228,000</b>	<b>\$69,708,300</b>	<b>\$45,055,000</b>
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