

Investment Reason:Asset Performance - EfficiencyFERC Loc/ProfitCtr:5170021060Overhaul Related:YResponsible Person:Tom Faucheux

Asbestos Related: N Retirement: Y

	TC	TAL PROJEC	T PLAN by Ca	lendar Year			
COST ELEMENT	TOTAL	PRIOR	CY12	CY13	CY14	CY15	FUTURE
Materials	1,800,000	-	-	1,800,000	-	-	-
Labor	390,328	34,826	155,502	200,000	-	-	-
Contracts	36,303,764	15,136,093	11,383,766	9,783,905	-	-	-
Other	183,740	54,237	-	129,503	-	-	-
Salv/Reimburs. (credit)	(20,000)	-	-	(20,000)	-	-	-
Removal Labor	-	-	-	-	-	-	-
Removal Contract	250,000	-	-	250,000	-	-	-
Removal Asbestos	-	-	-	-	-	-	-
Corporate Escalation	-	-	-	-	-	-	-
Contingency	1,400,000	-	-	1,400,000	-	-	-
Surcharge	508,225	508,225	-	-	-	-	-
AFUDC	3,322,056	1,240,150	1,383,605	698,301	-	-	-
Total 100% (escalated)	44,138,113	16,973,531	12,922,873	14,241,709	-	-	-
Other Owner's Share (escalated)	(13,605,351)	(5,244,460)	(3,846,422)	(4,514,469)	-	-	-
Total PAC Share (escalated)	30,532,762	11,729,071	9,076,451	9,727,240	-	-	-
Total PAC share esc wo AFUDC	27,210,706	10,488,921	7,692,846	9,028,939	-	-	-
Total 100% (unescalated) APR Amt	44,138,113	16,973,531	12,922,873	14,241,709	-	-	-
Total PAC Share (unescalated)	30,532,762	11,729,071	9,076,451	9,727,240	-	-	-

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RIZATION		ECONOMIC DATA		
DATE	EMPLOYEE	DESCRIPTION	N	MEASURE
See APR Revie	w List and Workflow	Internal	Rate of Return:	13.30%
See APR Revie	w List and Workflow		Payback Years:	10.0
See APR Revie	w List and Workflow	Net Benefit t	o Capital Ratio:	
See APR Revie	w List and Workflow	C	Cash Flow NPV:	40,054
See APR Revie	w List and Workflow	Present Value Revenu	ue Requirement:	43,426
See APR Revie	w List and Workflow		LABOR	AMT
See APR Revie	w List and Workflow		SLC Eng	
See APR Revie	w List and Workflow		Plant Eng	
See APR Revie	w List and Workflow		Plant	
See APR Revie	w List and Workflow		TOTAL	-
	DATE See APR Revie		DATE EMPLOYEE DESCRIPTION See APR Review List and Workflow	DATE EMPLOYEE DESCRIPTION See APR Review List and Workflow Payback Years: See APR Review List and Workflow Net Benefit to Capital Ratio: See APR Review List and Workflow Cash Flow NPV: See APR Review List and Workflow Present Value Revenue Requirement: See APR Review List and Workflow SLC Eng See APR Review List and Workflow SLC Eng See APR Review List and Workflow Plant Eng See APR Review List and Workflow Plant

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PROPERTY RETIREMENT UNIT(S)		S		30,532,762	100%
SYSTEM	SUBSYSTEM	ACCT	PRU	AMT	%
Main Turbine	High Pressure (HP) Turbine	314	TBHPT07	4,579,914	15%
Main Turbine	Intermediate (IP) Turbine	314	TBIPT06	4,579,914	15%
Main Turbine	Low Pressure (LP)Turbine	314	TBLPT06	21,372,934	70%
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Escalation Rates	0.00% 1.50%	3.339	5.29%		

APR HYDRO ENVIRONMENTAL CHECKLIST APK H DEAD ENVIRONMENTAL CHECKLIS The purpose of this heckels is to beef pupils publishe environmental regulatory requirements that may affect a project's budget, scope or schedule. This checklist does not constitute a comprehensive regulatory evaluation of all potential environmental impacts of a proposed project. APR 250 Sheet Information APR 250 Sheet Information APR 250 Sheet Information APR 250 Sheet Information TITLE: B 122 Turbes Upgrade HPHPLP Reviewed by: TITLE: B 122 Turbes Upgrade HPHPLP Reviewed by: Calendar Year': Calendar Year': Date Review is needed:

						PERMITT	ING
Resource Areas	WILL THE PROPOSED ACTIVITY:	YES	NO	Project Action Description (To be filled out by Project Manager/Engineer)	REQUIREMENTS/COMMENTS (To be filled out by Regional Complaince Analyst)	Required Permits or Ervironmental Glearances/Lead	Duration to Acquire (wks)
Aquatic	1a) Require work within the bank of a stream, floodplain, reservoir, wetland, mudflat or shoreline (zone of 200 feet landward from ordinary high water mark)?						
	1b) Result in material or equipment entering the water (e.g. sediment, fill material, turbine oil, sheet erosion, etc.)?						
Aquatic	Affect stream flow or water levels (during or after activity)?						
Aquatic Invasive	Will you be working in areas with known aquatic invasive species?						
Species							
Spills	 Involve the addition or removal of oil containing equipment or bulk storage containers > or = to 55 gallons? 						1 1
Spills	5) Require use of heavy equipment, generators or machinery, or onsite fuel storage?						
Cultural/Historic	6) Require digging or soil disturbance (e.g. trenching, excavation, grading, clearing, etc.)?						
	If yes, provide total surface area of disturbance, and excavation depth and quantity.						
Cultural/Historic and	7) Require construction, demolition or renovation of project structures or buildings?						
Land Management	If yes, describe what building renovation or construction is involved (plumbing water line, septic install, electrical, flooring, acoustic tile, siding replacement, paint removal, etc.)						
Land Management	Result in cumulative ground disturbance equal to or greater than 1 acre (includes temporary use and staging areas)?						
Land Management	Involve activities on non-PacifiCorp owned lands?						
Wildlife Management	10) Require vegetation removal?						
	If yes, describe type, method and area of vegetation removal.						
Wildlife Management	Cause significant noise or activity over background levels? Provide construction time window, construction methods (e.g. drilling, blasting, etc.), maximum vertical height of structure or equipment, and construction noise levels.						
FERC	12) Change/modify project water retention or conveyance facilities in a way that may affect operations or dam safety (during or after activity)?						
FERC	13) Require construction/ground disturbance work within the FERC project boundary?						
FERC	14) Be non-routine project maintenance?						
FERC	15) Require construction of a cofferdam or dewatering of water conveyance facilities?						
FERC	16) Required blasting, excavation or drilling in the proximity of dams, water conveyance systems or project features?						
Hazardous Materials	17) Require the use or transportation of hazardous chemicals?						
Waste Management	18) Generate waste (e.g. wood waste, concrete, used oil, waste solvents, aerosol cans, paint chips, asbestos, fluorescent light tubes, batteries, mercoid switches, etc. \(\)?						
Public Safety	19) Create public health or safety risks (e.g., unposted hazards, improper waste disposal, security risks, etc)?						
Security	20) Does project require a security system (cameras, card readers, motion detectors, etc)?						
Security	21) Is project site a critical asset (HCC, Swift 1, Lemolo 2, Copco 1)?						
Security	22) Are interconnections required with existing systems?						

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Recommended Permitting Lead (Consultant, SME, Compliance Analyst, etc.):		Anticipated Total Permitting Timeline (Weeks):
	7	

Instructions:

Project Manager / Engineer

1. Project Manager Engineer. Fill out the Environmental Checklist in the IMAPR Detail spreadsheet. Fill out 1. Project Manager Engineer. Monitor project scope and construction activities to assure that work does not

Compliance Staff: Hydro East/Utah/Idaho - Jim Burris Hydro North- Briana Weatherly Hydro South - Diane Barr

Compliance Analysts

2. Compliance Analyst: complete an environmental review and list potential environmental issues
Calendar year that the project will begin in.

APR THERMAL ENVIRONMENTAL CHECKLIST

The purpose of this checklist is to identify applicable environmental regulatory requirements that may affect a project's budget, scope or schedule. This checklist does not constitute a comprehensive regulatory evaluation of all potential environmental impacts of a proposed project.

APR Face Sheet Information	
ARP: 90000565	APR Preparer:
Title: JB U2 Turbine Upgrade HP/IP/LP	Contact Name (Compliance Staff reviewer):
Plant: Jim Bridger	Review Complete Date:

Will the proposed activity:	YES	NO	Requirements/Comments
1) Will the project have the potential to increase generation or the amount of			
coal burned?			
2) Will the project result in an operational change to the plant./unit?			
3) Will the project involve a pollution control device (scrubber, EXP,			
baghouse, dust collector, etc.)?			
4) Will the project involve the boiler and/or associated equipment (fans, mills,			
feeders, RW heaters, etc.)?			
5) Will the project affect the plant site, including coal year, landfill, and ash			
pile?			
6) Does the project have the potential to increase the emission rate in lb/hour			
of any pollutant (SO2, NOx, particulate matter, VOCs, CO?)			
7) Does the project have the potential of increasing the tons/year of any			
pollutant?			
8) Will this project disturb greater than one acre during construction?			
Does this project have the potential to increase or change the			
characteristics of any water discharge from the plant? Is there potential of			
affecting any groundwater or surface waters?			
10) Does this project have the potential to increase or change the			
characteristics of any waste generated by the plant?			
11) Does this project have the potential to increase the amount of oil stored			
on site (either permanently or temporarily)? Will any additional oil storage			
containers >= to 55 gallons be brought on site?			

APR NERC CIP CHECKLIST

The purpose of this checklist is to ensure that NERC-CIP standards are appropriately addressed as they relate to this project. This checklist does not constitute a comprehensive evaluation of all potential NERC-CIP implications this proposed project.

APR: 90000565	NERC-CIP Review Completed By:
Title: JB U2 Turbine Upgrade HP/IP/LP	NERC-CIP Review Completion Date:
Plant: Jim Bridger	

		YES	NO	Requirements/Comments
1	Is the project being completed at an existing Critical Asset?			
	If you answered YES to quest	ion 1,	you mu	ıst answer questions 2, 3 & 4
2	Will any portion of the system and/or equipment planned for installation be classified as a Critical Cyber Asset?			
3	Will any portion of the system and/or equipment planned for installation be linked, connected or associated with the Electronic Security Perimeter or an existing Critical Cyber Asset?			
4	Will any portion of the system and/or equipment planned for installation be linked, connected or associated with the Physical Security Perimeter?			
	If you answered YES to questions 2, 3 or	4, the C	IP Rep	presentative must answer questions 5 & 6
5	The CIP Representative has been notified that this project may have implications relating to NERC-CIP compliance.			
6	The CIP Representative has evaluated this project against all CIP standards, including all corporate policies and procedures, to ensure full compliance.			



USER INPUT in BLUE only

	DIVISION OF PACIFICO		_		CAPSchg %:	4	1.70%
APR: 9000	00565				Start Period:		1/08/08
	3 U2 Turbine Upgra	de HP/IP/LP			End Period:		5/01/13
PLANT: J	im Bridger				AFUDC %:		7.60%
Jan-08		\$ -	\$	_	\$ -	\$	-
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Aug-08		\$ -	\$		\$ -	\$	_
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Oct-08		\$ -	\$		\$ -	\$	_
Nov-08		\$ -	\$		\$ -	\$	_
Dec-08		\$ -	\$		\$ -	\$	_
Jan-09		\$ -	\$		\$ -	\$	-
Feb-09	-	\$ -	\$		\$ -	\$	-
Mar-09		\$ -	\$		\$ -	\$	_
Apr-09		\$ -	\$		\$ -	\$	-
May-09		\$ -	\$		\$ -	\$	_
Jun-09		\$ -	\$		\$ -	\$	_
Jul-09		\$ -	\$		\$ -	\$	_
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Jan-10		\$ -	\$		\$ -	\$	_
Feb-10		\$ -	\$		\$ -	\$	_
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USER INPUT in BLUE only

	DIVISION OF PACIFICO			CAPSchg %:	4.70%
APR: 9000	00565			Start Period:	01/08/08
TITLE: JB	U2 Turbine Upgra	de HP/IP/LP		End Period:	05/01/13
	im Bridger			AFUDC %:	7.60%
Dec-11	\$ -	\$ -	\$ -	\$ -	\$ -
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May-12		\$ -	\$ -	\$ -	\$ -
Jun-12		\$ -	\$ -	\$ -	\$ -
Jul-12		\$	\$ -	\$ -	\$ -
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Mar-13		\$	\$ -	\$ -	\$ -
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May-13		\$	\$ -	\$ -	\$ -
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Jul-13		\$	\$ -	\$ -	\$ -
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Sep-13		\$ -	\$ -	\$ -	\$ -
Oct-13		\$ -	\$ -	\$ -	\$ -
Nov-13		\$ -	\$ -	\$ -	\$ -
Dec-13		\$ -	\$ -	\$ -	\$ -
TOTAL	\$ -	\$ -	\$ -	\$ -	\$ -

FERC Loc	PAC %	JO %
1	0.00%	0.00%
300	84.69%	15.31%
301	93.75%	6.25%
302	60.31%	39.69%
305	77.03%	22.97%
201003	47.50%	52.50%
517000	66.67%	33.33%
517001	66.67%	33.33%
517002	66.67%	33.33%
517003	66.67%	33.33%
517004	66.67%	33.33%
517005	66.67%	33.33%
517009	66.67%	33.33%
519000	80.00%	20.00%
519001	80.00%	20.00%
519005	85.60%	14.40%
519006	57.60%	42.40%
576500	78.79%	21.21%