SWAN LAKE-LAKE TYEE INTERTIE
DENALI COMMISSION GRANT

CLOSE-OUT REPORT OF WORK THROUGH DECEMBER 2003

Physical Project Description. The Swan Lake – Lake Tyee Intertie (Intertie Project) is a fifty-seven (57) mile 138 kv (69 kv initially) hydroelectric transmission line connecting the Four Dam Pool Power Agency owned hydroelectric projects at Swan Lake on the Upper Carroll Inlet and Lake Tyee on the Bradfield Canal. The route crosses primarily federal land with a small portion crossing State land and State tidelands.

Project History. The initial study that proposed construction of a transmission line interconnecting the Swan Lake Hydroelectric Project and the Lake Tyee Hydroelectric Project dates from 1982 (Teshmont Consultants, Inc. 1892). The report concluded an Intertie is a key element in any interconnected electric transmission system designed to serve Southeast Alaska.

In 1997, the Alaska Power Authority contracted with Harza Engineering Company to evaluate options and recommend a specific transmission system for Southeast Alaska. The recommended transmission system included an Intertie between the Swan Lake and Lake Tyee hydroelectric projects. The study concluded that the ratio of project benefits to costs for the Swan Lake-Lake Tyee Intertie was the best of any segment of the proposed transmission system. The study further recommended preparation of more detailed feasibility studies for the Intertie Project.

A preliminary market and financial assessment for the Intertie Project was published in 1991 (R.W. Beck and Associates 1991). The purpose of this study was to evaluate KPU's financial ability to construct the transmission line. The report concluded KPU would receive cost savings from reduced diesel generation and sales revenue from the Intertie Project without increasing customer rates.

In 1992, the Alaska Energy Authority contracted with R.W. Beck and Associates to prepare a feasibility study of the proposed Intertie Project. The potential environmental impacts, technical feasibility, and costs of alternative routes were evaluated. The report concluded that the low-cost, low-impact route would start at the Swan Lake switchyard, proceed up the Carroll Creek drainage to Neets Creek, cross Shrimp Bay, continue along Klam Creek and Beaver Creek basins, cross Behm Narrows and Bell Island, follow the west side of Eagle River, and cross Eagle Bay to tie in at the Lake Tyee switchyard.

In 1994, KPU received an Alaska state grant to hire consultants to design the transmission line and prepare the EIS for the Forest Service. In the fall of that year, Raytheon Infrastructure Services, Inc., now known as Washington Group International was hired to complete the engineering for the Intertie Project and Foster Wheeler Environmental Corporation, now known as Tetra Tech FW, was hired to prepare the EIS.

In August of 1997 the final EIS was approved by the Forest Service and a Record of Decision released, granting KPU the authority to construct the Intertie Project. In September of 2001, the Forest Service issued to KPU a Special Use Permit allowing construction to begin.

Design/Construction Work To Date

Design: Design of the Intertie Project has been provided by Washington Group Infrastructure, formerly Raytheon Infrastructure, and is approximately 90% complete. Final design will be completed by Dryden & LaRue under contract to the Four Dam Pool Power Agency (the Four Dam Pool Power Agency is in the process of taking over the project from KPU).

Key design elements completed to date include the selection and surveying of the centerline and clearing limits and the location of tower sites. The Intertie design consists of above ground transmission line conductors strung over 282 steel towers mounted on micropile foundations and caps. All water crossings are above the water.

Construction: Construction of the Intertie Project has been phased as follows:

- Phase I – Right-of Way Clearing, Swan Lake to Neets Bay – Work consisted of clearing the Intertie right-way-way between Swan Lake Hydroelectric facility and Neets Bay. Work was completed in 2002 by Columbia Helicopters and Silver Bay Logging. Construction cost - $1,276,508.

- Phase II – Right-of-Way Clearing, Neets Bay to Lake Tyee – Work consisted of clearing the Intertie right-way-way between Neets Bay and the Lake Tyee Hydroelectric facility. Work was completed in 2003 by Columbia Helicopters. Construction cost - $13,274,541.

- Phase III – Installation of the tower foundations; and, final clearing, tower clearing and danger tree clearing – Begin April 2004 with completion in the fall of 2004. Tower foundations to be done by Wilson Construction and final clearing and danger tree clearing to be done by S.O. F. Logging. Estimated construction cost - $45,000,000

- Phase IV – Tower Erection and Stringing of Conductor – Begin March 2005 with completion in the fall of 2005.

- Phase V – Construction of substations – Begin in the spring of 2005 with completion in fall of 2005.

Financial Information

Included as Attachment A are financial reports for the time period ending December 31, 2003.

City of Ketchikan d/b/a Ketchikan Public Utilities
Swan Lake - Lake Tyee Intertie
Funding To Date
As of 12/31/03

Grants Received to Date:			
Fiscal Year 1994:		4,664,262.29	DOA #9/94-036
Fiscal Year 1995:		4,000,000.00	DOE #2155224
Fiscal Year 1996:		2,560,000.00	DOA #9/96-001
Fiscal Year 1998:		9,900,000.00	DOE # DE-FG07-98ID13607
Fiscal Year 1999:		4,443,587.00	AEA #2195028
Fiscal Year 2001:	Additional Funding	1,996,000.00	DOE # DE-FG07-98ID13607
Fiscal Year 2001:		2,000,000.00	USFS - Woods Program PL 106-291-2607
Fiscal Year 2002:		5,000,000.00	KGB - Economic Development
Fiscal Year 2002:		2,500,000.00	USFS - Woods Program PL 107-063
Fiscal Year 2002:	Additional Funding	2,908,000.00	DOE # DE-FG07-98ID13607
Fiscal Year 2003:		5,000,000.00	Denali Commission
Fiscal Year 2003:	Additional Funding	7,621,839.00	DOE # DE-FG07-98ID13607
Total Grant Fund Agreements		52,593,688.29 *	

* This does not include $1,297.50 paid by the City of Ketchikan/KPU.

ATTACHMENT A

City of Ketchikan d/b/a Ketchikan Public Utilities
Swan Lake - Lake Tyee Intertie Cost History
12/31/2003

Per Books		**Reported Per Grant Reports**	
Actual Expenses: (Fund 422)			
1992	328.52		
1993	968.28	2155224	4,000,000.00
1994	223,397.01	2195028	-
1995	2,562,550.66	9/94-036	4,626,991.09
1996	2,290,104.73	9/96-001	716,472.17
1997	1,899,596.77	DE-FG07-98ID13607	2,281,244.75
1998	258,741.70	PL 106-291-2607	2,062,730.97
1999	46,966.41	PL 107-63	2,559,848.71
2000	51,427.28	Denali Commision	5,000,000.00
2001	766,002.18	KGB SE Econ Disaster	5,000,000.00
2002	2,588,177.66		
2003 (As of 12/31/03 month end)	15,560,323.99		
Total	26,248,585.19	Total	26,247,287.69
		Difference	1,297.50
		Amount not reported on a grant report	-
			1,297.50 *

* In 1992 and 1993 the City of Ketchikan funded the costs associated with the Intertie Project. The other ($0.70) difference is unknown.

1992	328.52
1993	968.28
	1,296.80
*	1,297.50
Unknown Difference	(0.70)

Swan Lake - Lake Tyee Intertie
As of 12/31/2003

Project Number		Budget	Actual Outlays	Percentage of Budgeted Funds Used	Committed Funds	Budget Variance* under/(over)
14-201	Owner Costs	1,885,000	803,389	1.04%	105,461	976,150
14-202	EIS/Permiting	2,800,000	2,799,955	3.62%	128,316	(128,270)
14-203	Eng and Design	6,500,000	7,375,583	9.54%	18,733	(894,316)
14-204	Constr. Management	2,276,000	295,903	0.38%	83,072	1,897,025
14-205	Construction	63,738,454	14,883,158	19.26%	4,821,945	44,033,351
14-206	Stumpage	90,000	90,598	0.12%	-	(598)
	Total	77,289,454	26,248,585	33.96%	5,157,527	45,883,342

* Budget less Actual Outlays and Committed Funds.