

TULUKSAK TRADITIONAL POWER UTILITY

MONITORING PLAN AND RECOMMENDATIONS

Prepared for:
THE ALASKA ENERGY AUTHORITY (AEA)

AUGUST 31, 2004

Prepared by:

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TABLE OF CONTENTS

OVERVIEW AND PURPOSE	1
ELECTRIC UTILITY MANAGEMENT/OPERATIONAL SKILLS	3
Financial Management.....	3
Personnel Management	5
Operations Management.....	6
BUSINESS OPERATING PLAN COMPLIANCE.....	8
Financial Management.....	8
Personnel Management	10
Operations Management.....	11
RECOMMENDATIONS	12

OVERVIEW OF PURPOSE

This Monitoring Plan and Recommendations was completed under contract to the Alaska Energy Authority as a followup to a Rural Power System Upgrade project in Tuluksak, Alaska that constructed a new Electric Power Generation Facility with four diesel engine generators, automated switchgear, fuel handling, and a step-up transformer bank. A component of the upgrade project was the development of a Business Operating Plan, which provided a guideline for the Tuluksak Traditional Power Utility's maintenance and operation and sustainability of the Tuluksak Electric Utility Upgrade (the "Facility"). The Tuluksak Native Community, operating as the Tuluksak Traditional Power Utility, (the "Primary Operator") is responsible to operate and sustain the newly installed Facility and associated electric power generation equipment according to the criteria and guidelines outlined in the Business Operating Plan ("Plan").

The Alaska Energy Authority contracted with Aurora Consulting, of Anchorage Alaska, to conduct a site visit to the Tuluksak Traditional Power Utility (TTPU), which is owned and operated by the Tuluksak Native Community (TNC), and to develop a *"Monitoring Plan and Recommendations"*. The scope of the assignment included working with TTPU to obtain information on existing management and operational systems, comparing those systems to business operating plan requirements and other "best practices", making recommendations for changes and/or training, developing on-going monitoring tools, and/or working to cure any deficiencies or defaults experienced by TTPU.

Aurora Consulting staff member, Nancy Anderson, phoned TTPU's Anchorage financial office on July 1, 2004 and was told that staff was unable to meet with us and asked that we email our questions. After the site visit, financial questions were emailed to the Anchorage financial office on July 29 and again on August 11, 2004. On August 11, 2004, the Anchorage financial staff responded to our questions by email and faxed copies of documentation.

Aurora Consulting staff member, Nancy Anderson, traveled to Tuluksak on July 19th and 20th, 2004 to meet with TTPU and TNC management and staff, including:

Contacts	Title
Willie Phillip	Tribal Council President, Acting Tribal Administrator & Utility Manager
David Phillip	Lead Operator
Sharon Peter	Utility Clerk
Danny Allain	Operator

The following Monitoring Plan and Recommendations is organized into three sections:

- Management and Operational Skills
- Business Operating Plan Compliance
- Recommendations

Management and operational skills identify those skills and practices that are crucial to the short-term viability of a utility, while business operating plan compliance areas identify those activities that are required of the utility by the Denali Commission approved Plan. Management skills include administration, fiscal systems, collections and an understanding of federal and state reporting requirements for electric power utilities. Operational skills include the ability to perform maintenance, repair and operation of the electric power plant. Both skill sets require knowledgeable and trained managers, bookkeepers and plant operators to manage and operate the utility on a daily basis. In contrast, the business operating compliance section details the key activities and actions that are required to be completed by the utility in order to be in compliance with the terms and conditions of their business operating plan.

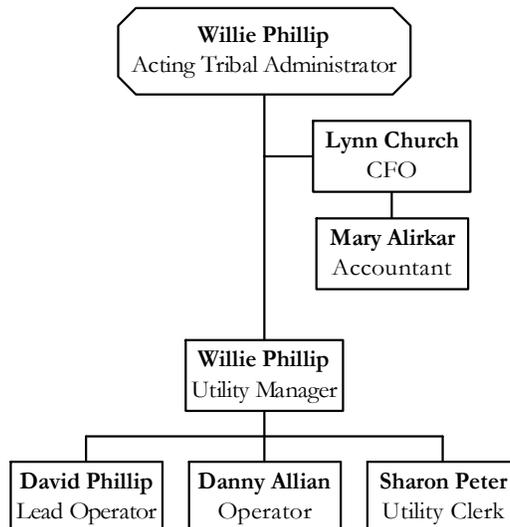
Additionally, this report includes major recommendations for continued actions and training, which are detailed in the conclusion section of this report. These recommendations are limited to those actions necessary to meet the deficient management and operational skills or business operating plan compliance areas.

Organizational Chart

Since the Plan dated June 1, 2003 was finalized, TTPU has created one new staff position titled Utility Clerk, promoted the Backup Operator to Lead Operator, hired a new operator and hired an Anchorage-based Chief Financial Officer and Accountant for accounts receivable, accounts payable and other accounting services. As a result, four new staff members were hired. Sharon Peter, Utility Clerk, who started April 1, 2004, is responsible for billing and collections, filing PCE and RCA reports. Danny Allain, Operator, who started in June 2004, will be responsible for the operation and maintenance of the power generation facility. Lynn Church, Accountant, was hired in December 2003 and promoted to Chief Financial Officer in February 2004. Mary Alirkar, Accountant, was hired in February 2004.

Below is an updated organizational chart for TTPU that includes all staff changes.

TULUKSAK TRADITIONAL POWER UTILITY PROJECT STAFFING



ELECTRIC UTILITY MANAGEMENT/OPERATIONAL SKILLS

Financial Management

(1=Lowest Skill Level, 5= Highest Skill Level)

1	2	3	4	5	<i>Financial Management Skill Areas</i>
<i>Annual Budget</i>					
			x		Develop and utilize budgeting process
		x			Staff understanding of budget
<i>Bookkeeping</i>					
				x	Develop and track utility costs using a Chart of Accounts
			x		Understands and tracks operation & management (O&M) costs
			x		Understands and tracks renewal & replacement (R&R) costs
<i>Collection Policy</i>					
				x	Policy in place
				x	Policy implemented
				x	Collections at appropriate level
<i>Business Operating Plan</i>					
	x				Policy board has general understanding of plan and requirements
	x				Management has general understanding of plan and requirements
	x				Staff has general understanding of plan and requirements
	x				Management understands financial assumptions and tables
	x				Staff understands financial assumptions and tables
	x				Management capable of annual plan update
	x				Staff capable of annual plan update
<i>Power Cost Equalization</i>					
				x	Participate fully in PCE program
				x	Understands PCE filing and reporting
				x	Staff completes PCE filings and reports

Comments:

Annual Budget

While the CFO provided a copy of the annual utility budget, the utility manager and utility clerk were uncertain as to whether or not a formal budget had been prepared and the overall budget process. We reviewed the business operating plan annual budget requirement with the utility manager and utility clerk and explained that TTPU was required to submit an annual budget to the Denali Commission by the end of their fiscal year, December 31, 2004.

Bookkeeping

TTPU's Anchorage financial office performs most bookkeeping and accounting services. TTPU purchases are recorded by the utility clerk and forwarded to the Anchorage financial office for posting. All payments for accounts payable are generated by the Anchorage financial office, and payment approvals are obtained by use of an expense summary form that is signed by the utility manager. Since the Facility began operation it has only incurred O&M expenses. A checking account at Northrim Bank is used for processing O&M payments.

The utility manager and utility clerk do not fully understand the difference between O&M and R&R costs that must be tracked by separate accounts as indicated in the Plan. A savings account at Northrim Bank is used for depositing R&R collections.

Collections Policy

In September 2003, when the new power generation facility was completed, the TTPU purchased and installed power meters and now issues power cards to all residential customers. Currently, customers are paying \$0.45 per kWh and utility collections are 100 percent. TTPU has established and now implements a billing and collection policy on past due accounts, which is posted in the tribal office. The utility clerk was able to demonstrate how she tracks customer accounts on a MSWorks spreadsheet and how TTPU collects on past due accounts each time a customer with a delinquent account purchases a new power card. At this time, 48 percent of residential customers have outstanding balances.

Because TTPU Tuluksak office does not have MSExcel, which the business operating plan uses to develop the financial tables, only a draft estimate of an updated electrical rate could be calculated using MSWorks spreadsheet software program. We worked with the TTUP staff to develop a rough estimate of their FY04 rate, which was \$0.45 per kWh.

All accounting is conducted by the Anchorage financial office except for accounts receivable, which is received locally in Tuluksak. The utility clerk receipts and deposits locally received accounts receivable and forwards records to the Anchorage financial office.

Business Operating Plan

The utility manager was not able to locate the utility's copy of the Plan. TNC and TTPU management and TTPU staff in the Tuluksak office do not have general understanding of Plan and requirements. The utility manager and utility clerk do not understand the Plan's financial assumptions and tables; therefore they are unable to update the tables annually.

Power Cost Equalization

TTPU participates fully in the PCE program. The utility manager, utility clerk and lead operator understand and know how to complete the PCE forms and reporting requirements.

Personnel Management

(1=Lowest Skill, Level 5= Highest Skill Level)

1	2	3	4	5	Personnel Management Skill Areas
<i>Job Descriptions</i>					
x					Job descriptions current for all positions
x					Staff aware of/understand job descriptions
<i>Staffing</i>					
				x	Staffing adequate to operate & maintain the facility
<i>Training</i>					
				x	Staff has adequate training for job requirements
				x	Ongoing training in place

Comments:

Job Descriptions

According to the Tuluksak office staff, no written job description exists for any of the utility staff positions. Utility staff are able to verbally describe many of their job duties.

Staffing

Since the Plan dated June 1, 2003 was finalized, TTPU has created one new staff position titled Utility Clerk, promoted the Backup Operator to Lead Operator, hired a new operator and hired an Anchorage-based Chief Financial Officer and Accountant for accounts receivable, accounts payable and accounting services. As a result, four new staff members were hired.

Training

TTPU management is striving to provide adequate training for all staff. A sample of recent training includes: Sharon Peter, Utility Clerk, who started April 1, 2004 attended an Utility Clerk Training with AEA in Anchorage, AK. Danny Allain, Operator, who started in June 2004, is currently being trained by the manager and lead operator. Additionally, he is scheduled to attend an 8-week Power Plant Operator Training with AVTEC in Seward, AK that starts in September 2004. Willie Phillip, Utility Manager, attended an Utility Clerk Training with AEA in Anchorage, AK and in May 2003, he attended an Above Ground Tank Storage Training with AVTEC in Seward, AK.

Operations Management

(1=Lowest Skill Level 5= Highest Skill Level)

1	2	3	4	5	<i>Operations Management Skill Areas</i>
<i>General Operations</i>					
				x	Management/staff have general understanding of operation needs
				x	System to schedule tasks for routine maintenance
				x	System to schedule tasks for non-routine maintenance
<i>Inventory Control</i>					
				x	Inventory control system in place
				x	Can lookup and order parts from utility reference manual
				x	Knows what parts to keep in inventory for routine maintenance
<i>Emergency/ Spill Response</i>					
		x			Staff can explain/locate oil spill response plan
		x			Written safety policy

Comments:

General Operations

The utility manager and lead operator had internal policies and procedures in place to implement many of the daily management and operation responsibilities of the new power generation facility. Willie Phillip, Utility Manager, has an open and information-sharing management style with his plant operator staff. This was demonstrated by the utility manager stepping aside during the onsite visit and allowing the lead operator to guide us through the Facility and to demonstrate his knowledge of the Facility maintenance and operation.

Twice a day the on-duty plant operator reads and enters data into the *Master Plant Log* that records the following:

- generator number, time of day, inside and outside temperature
- description of exhaust smoke
- total engine hours
- engine coolant temperature
- engine oil pressure (psi) and level
- battery voltage
- maximum Kw
- frequency cycles
- voltage
- amp line 1, 2 & 3
- total Kwh generated
- station service Kwh
- fuel meter reading
- gallons pumped
- coolant temperature out of engine
- coolant temperature return to engine

The power plant operator's daily tasks are printed, laminated and hanging above the office at the Facility. Additionally, a white marker board is hanging in the office that is used to record when oil and air filters are changed or scheduled to be changed for each of the four generators. The white marker board is also used to track fuel levels in the intermediate tank.

Power plant operators schedule Facility maintenance on the white marker board hanging in the office. Additionally, posted next to the phone in the Facility office is the business card of the Alaska Energy Authority's RPSU maintenance staff.

The on-site Facility tour included the lead operator, the manager and two other TTPU staff. The Facility appeared clean and organized and well-maintained both inside and outside the building. The Facility was secure with the exception of an unlocked dispensing storage for the intermediate tank, about which the utility manager expressed concern. The Facility is located a short distance outside of the village, and the plant operators reported that very few residents are ever around the Facility. The lead operator appeared knowledgeable about the operation of the generators and was able to articulate clearly how the equipment worked and how to read and interpret gauges.

Inventory Control

The Facility's storage room appears to maintain an adequate inventory for each of the four generators that include oil and air filters. A storage cabinet houses two copies of the Facility's operating and parts identification notebooks. The storage room appeared clean and organized.

Emergency/Spill Response

The Facility's *EPA Spill Prevention Control & Countermeasures (SPCC) Plan* is kept at the TTPU's office located in the TNC office. The utility manager reported that no oil spill response drills have been conducted since the new Facility was completed in September 2003.

Shortly after the Facility was completed, in the winter of 2003, one of the generators developed an oil leak in the tubing; due to defective tubing. The manager reported that the Alaska Energy Authority quickly responded by replacing the defective tubing and cleaning up the oil spill. The area around this generator was clean and showed no signs of an oil spill.

BUSINESS OPERATING PLAN COMPLIANCE

Financial Management

Yes	No	NA	<i>Financial Management Compliance Areas</i>
<i>O&M Account</i>			
x			Accounting established
x			Regular deposits into account
	x		Systems in place for \$5,000 authorizations*
<i>R&R Account</i>			
x			Accounting established
x			Regular deposits into account
x			Interest-bearing savings account
		x	Escrow account established*
		x	Resolutions required
		x	2 signatures required
<i>Budgets</i>			
x			O&M Budget
x			Prior to fiscal year
x			R&R budget
x			Prior to fiscal year
<i>Business Plan Updates</i>			
	x		Review assumptions*
	x		Update tables*
<i>Audits</i>			
Pending			Annual audit conducted by qualified, independent auditor
Pending			Copy to Denali Commission
<i>Annual Report</i>			
Due 1/05			Submitted to Denali Commission timely
Due 1/05			Summary of O&M and R&R projects
Due 1/05			Expenditures and account balances
Due 1/05			Upcoming O&M and R&R budgets
Due 1/05			Updated business plan financial tables
Due 1/05			Other information
<i>Insurance</i>			
	x		General liability insurance in place*
		x	Other insurance in place

* Per Tuluksak office staff.

Comments:

O&M Account

The TTPU has a separate O&M checking account at Northrim Bank. The utility clerk produced a bank deposit slip to verify this account. A copy of a bank statement was obtained from the Anchorage financial office that verified this account.

R&R Account

The TTPU office staff was uncertain as to whether or not they had established a separate R&R savings account to comply with the business operating plan requirements. Staff was not able to produce a bank statement to verify this account and referred us to the Anchorage financial office. Subsequently, a copy of a Northrim Bank statement was obtained from the Anchorage financial office. We reviewed the R&R fund and the business operating plan requirements with the utility manager and utility clerk. We explained that, based on the Plan, TTPU was required to deposit \$5,346 into the R&R account by the end of their fiscal year, December 31, 2004. The utility manager indicated that the deposit amount would not be a problem for TTPU.

Budgets

The utility manager and utility clerk were uncertain as to whether or not a formal budget had been prepared for the utility. Subsequently, a copy of the annual budget and profit and loss statement for the current fiscal year, which compares budget to actual, was obtained from the Anchorage financial office. We reviewed the Plan's annual budget requirement with the utility manager and utility clerk and explained that TTPU was required to submit an annual budget to the Denali Commission by the end of their fiscal year, December 31, 2004.

Since the utility manager and utility clerk were not even aware that a budget existed and did not seem to have an understanding of how to develop a budget, they would benefit from training on how to develop and use a budget as a tool to manage the utility.

Business Plan Updates

The utility manager and utility clerk could not locate the utility's copy of the Plan and were not familiar with the management and reporting requirements and updating tables to calculate the utility rate. They would benefit with having training on implementing the Plan's requirements and updating the utility rate annually.

Audit

According to the utility manager, TNC is currently soliciting bids for a FY04 audit, which will include TTPU financial records. According to the CFO, the FY03 audit conducted by Doug E. Hanson, CPA, has been extended to December 31, 2004.

Annual Report

TTPU's annual report to the Denali Commission is due January, 2005. In order to comply with this requirement TTPU staff will probably need assistance with updating the tables to calculate the utility rate.

Insurance

We reviewed the Plan's insurance coverage requirements with the utility manager and explained that insurance costs are included in the O&M cost calculations. The utility manager reported that TTPU did not have a general liability insurance policy.

Personnel Management

Yes	No	NA	<i>Personnel Management Compliance Areas</i>
<i>Facility Manager</i>			
x			Manager designated
		x	Changes reported to Denali Commission
<i>Staffing Adequate</i>			
x			Staffing adequate
<i>Training Plan</i>			
x			Training plan in place

Comments:

Utility Manager

Utility Manager, Willie Phillip, was identified in the Plan and is still responsible for overall management of the Facility.

Staffing Adequate

Since the Plan dated June 1, 2003 was finalized, TTPU has created one new staff position titled Utility Clerk, promoted the Backup Operator to Lead Operator, hired a new operator and hired an Anchorage-based Chief Financial Officer and Accountant for accounts receivable, accounts payable and accounting services. As a result, four new staff members were hired.

Training Plan

TTPU management is striving to provide adequate training for all staff. A sample of recent training includes: Sharon Peter, Utility Clerk, who started April 1, 2004 attended an Utility Clerk Training with AEA in Anchorage, AK. Danny Allain, Operator, who started in June 2004, is currently being trained by the utility manager and lead operator. Additionally, he is scheduled to attend an 8-week Power Plant Operator Training with AVTEC in Seward, AK that starts in September 2004. Willie Phillip, Utility Manager, attended an Utility Clerk Training with AEA in Anchorage, AK and in May 2003, he attended an Above Ground Tank Storage Training with AVTEC in Seward, AK.

Additional training and technical assistance will be required to ensure that the management and staff understand and can implement the specific requirements of the Plan. The utility manager and utility clerk would benefit with having training on implementing the Plan's requirements and updating the utility rate annually.

Operations Management

Yes	No	NA	<i>Operations Management Compliance Areas</i>
<i>Facility Components in Good Working Order</i>			
x			Facility components in good working order
<i>SPCC</i>			
x			SPCC on-hand
x			SPCC current
<i>Regulatory Commission of Alaska</i>			
x			Certificated

Comments:

Facility Components in Good Working Order

See comments from previous section.

SPCC

TIPU has a current copy of its SPCC readily available.

Regulatory Commission of Alaska

TIPU has been certificated by the Regulatory Commission of Alaska.

RECOMMENDATIONS

Although the utility manager and Tuluksak-based staff of the TTPU were unable to locate the copy of the Plan, they did demonstrate an interest and effort to understand and implement the Plan's management and operations requirements. Additionally, the utility manager and Tuluksak-based staff seem very interested in learning about how to update the utility rate annually. An electronic version of the Plan was loaded on the utility clerk's computer for their use. However, due to software incompatibility issues the financial tables were not loaded onto the clerk's computer.

	ASAP	Within year	Long Term
Systems and Procedures for the Tuluksak Office			
Purchase MSEXcel Software (MS Office)	X		
Develop written job descriptions for all staff		X	
Develop policy & procedures for R&R interest-bearing account withdrawals	X		
Develop policy & procedures for issuing O&M checks for over \$5,000	X		
Obtain general liability insurance		X	
Develop procedures for completing & submitting annual report		X	
Technical Assistance for Tuluksak-based Staff			
Train utility manager & utility clerk on how to use the annual budget for TTPU		X	
Identifying and distinguishing O&M and R&R costs	X		
Bookkeeping assistance for tracking O&M and R&R with the utility manager and utility clerk		X	
Updating business operating plan and financial assumptions		X	X
Training for Tuluksak-based Staff			
MSEXcel training for utility manager and utility clerk		X	
Operations			
No recommendations			