

**Final Report  
For  
Colville Tribal Utility Development Project  
To  
Office of Indian Energy**

**September 30, 2016**

**Confederated Tribes of the Colville Reservation  
P.O. Box 150  
Nespelem, WA 99155  
[www.ColvilleTribes.com](http://www.ColvilleTribes.com)**



## Executive Summary

---

The Colville Confederated Tribes are a federally recognized community of 12 bands of Native Americans, with a total tribal enrollment of approximately 9,700 people, approximately 5,000 of whom live within the reservation boundary. Tribal lands cover 1.4 million acres in northeast Washington. The reservation encompasses most of Okanogan and Ferry Counties. The major economic engines for the tribe include forest products and gaming industries.

Following a Strategic Energy Plan that was completed in April 2008, Colville established the objective of forming a not-for-profit tribal utility that would deliver energy to all consumers on the reservation. After being awarded the First Step Grant DE-FOA-0000422, Colville initiated the activities to work towards the goal of forming a tribal utility.

Colville first completed a feasibility study looking at the viability of forming an electric across the entire reservation. The initial report, finalized December 19, 2013, concluded that it would be very challenging for a reservation-wide electric utility to keep rates competitive. This was due to the fact that six different electric utilities served Colville's reservation and Colville's load density was relatively low throughout Colville's territory. Also, the existing utilities already had relatively low rates, which made it difficult to find cost-savings opportunities.

After the Colville Business Council and community members discussed the results, the decision was made to take a more targeted approach that looked at forming a utility that served the higher density areas of Omak, WA and Nespelem, WA.

## Table of Contents

---

Section 1. Project Overview	Page 2
Section 2. Objectives	Page 3
Section 3. Description of Activities Performed	Page 5
Section 4. Conclusions and Recommendations	Page 6
Section 5. Lessons Learned	Page 9
Appendix A. 2013 Feasibility Study	Page A-1
Appendix B. 2015 Feasibility Study	Page B-1

## Section 1. Project Overview

---

Colville applied for this grant intending to form a tribal utility across the entire reservation in northeastern Washington. The reservation is approximately 1.4 million acres and is served by six different utilities, most of them being public utility districts (PUDs). After review by tribal leadership, it was determined that spending federal resources on a detailed cost estimate for a reservation wide utility was not necessary. In 2013, the grant was amended to include an initial high-level review of the six utility service territories within the reservation, to determine where tribal utility efforts would best be focused.

This initial report, finalized December 19, 2013 and provided in Appendix A, assessed the existing rates for the serving utilities compared to a likely tribal utility's rates. It was determined that a reservation wide utility would not be cost effective, but that there were localized options that would provide cost savings or other benefits to the tribe. The report (Appendix A) was presented to the Colville Business Council in 2014. The Tribal Business Council began a process of discussing the results with their community members in order to inform a decision on utility formation. Some contractual charges were made against the grant to update tribal leadership on grant reports and activities.

After internal discussion, in Q1 2015 the Colville Business Council determined that a utility should be considered for the tribal offices in Nespelem, Washington and for large tribal loads in Omak, Washington. The study included a cost analysis of the necessary facilities and overall feasibility of a utility for these areas, as well as the initial steps described in the grant for formation of a utility in either of these service territories.

In October 2015, the targeted utility feasibility study (Appendix B) was presented to the Colville Business Council. The conclusion of the study was that a phased approach that started with a small utility serving the large loads in the Omak, WA area was a viable utility formation strategy. The Colville Business Council decided to move forward with preliminary formation activities based on the results of the study. On December 17, 2015 the Colville Tribal Utility Corporation (CTUC) was formally approved as an instrumentality of the Colville Tribal Government.

Since December 2015, formation activities have continued, including an evaluation of the interconnection alternatives, discussions with the incumbent utility, preliminary engineering activities, and discussions with financing providers.

Currently, CTUC is going through BPA's interconnection process and is focused on appointing a Board of Directors to provide leadership and governance over the remainder of the formation activities necessary for CTUC to take power from BPA.

---



## Section 2. Objectives

---

The focus of this project was to support research and activities necessary to determine the feasibility of implementing a tribal electric utility program to unify electric service on the reservation under a single tribally controlled organization and establish opportunities for sustainable and affordable electric service for tribal members utilizing a variety of Colville resources.

A list of the specific project objectives is provided below:

- 1. Complete the Load and Resources Study**—Determine the future load requirements for existing and future customers. The load forecast will be used to determine the forecast of power requirements to determine future resource needs.
- 2. Complete the System Valuation Study**—Visually inspect all electric facilities to determine the condition of the equipment, estimate costs to make repairs, if needed, and determine the value of the facilities.
- 3. Complete Regulatory Assessment**—Consultant to: conduct a review of the relevant existing generation, transmission and distribution resources on the reservation; identify the relevant utility entities and industry issues to determine priority actions needed to meet tribal utility goals; review the BPA Standards for Service and other BPA requirements for achieving preference customer status for the type of service contemplated; and draft a report detailing the results of this effort and share the information with the tribe's leadership.
- 4. Complete Draft CTU Ordinance**—After a regulatory assessment has been completed, a consultant will conduct a review of the BPA, relevant tribal laws and codes, and current service provider rules and tariffs to determine the appropriate draft tribal laws affecting the proposed BPA service and other utility functions. Utility, energy, and business laws will be examined. The contractor will then develop a proposed CTU Ordinance for tribal leadership consideration and approval before working through tribal processes to obtain final approval of the CTU Ordinance and assist with the implementation of the CTU Ordinance.
- 5. Complete Draft CTU Business Plan**—Contractor will examine and provide an analysis of current deal structures and agreements that significantly affect potential CTU business. Once complete, contractor will draft a CTU business plan with all standard business plan contents. A presentation will be given to the Colville Tribes leadership regarding the draft CTU Business Plan.

- 6. Initiate BPA Tier-1 Application**—Initiate discussions with BPA and other affected Service Providers. During formation of a tribal utility, the Colville Tribes would meet with both BPA Power Business Line and the Transmission Business Line to initiate discussions regarding power supply and related transmission.
- 7. Complete Final CTU Feasibility Report**—Project participants will compile the results from the system assessment, load forecast, revenue forecast, power purchase forecast, OM&C forecast, and A&G forecast into a pro-forma to evaluate the cost-effectiveness of forming a TUA. Contractor will contribute an analysis of the legal and regulatory framework necessary to implement a tribal utility. All participants will contribute to the development of a legal, financial, and technical implementation strategy. The Final Feasibility Report will be presented to the working group for review prior to being submitted to the Colville Business Council

### Section 3. Description of Activities Performed

---

Below is a summary of the activities performed throughout the project:

- 1) High-Level Review of Utility Potential**
  - a. Overview of Utilities Serving Reservation
  - b. Overview of Infrastructure on Reservation
  - c. Overview of BPA Tier 1 Power Supply
  - d. Preliminary Utility Rate Projections
- 2) Targeted Utility Feasibility Study for Omak and Nespelem**
  - a. Review of Omak and Nespelem Loads
  - b. Select Loads Assumed for Study
  - c. Review Detailed Billing Data
  - d. Develop Projections for BPA Power Supply and Transmission Costs
  - e. Develop Projections for Upfront Formation Costs
  - f. Develop Projections for Utility Management Costs
  - g. Develop Rate Projections and Compare to Incumbent Utilities
  - h. Develop Formation Strategy Alternatives
  - i. Recommend Ownership and Business Structure
  - j. Identify Legal and Regulatory Challenges
  - k. Summarize Benefits and Risks
  - l. Prepare Report and Presentation for Colville Business Council
- 3) Preliminary Formation Activities**
  - a. Engage in Discussions with Incumbent Utility
  - b. Engage in Discussions with BPA
  - c. Initiate BPA Customer and Interconnection Process
  - d. Start Board of Directors Appointment Process

## Section 4. Conclusions and Recommendations

---

**The conclusions and recommendations of the initial study provided in Appendix A are summarized below:**

The formation of a traditional tribal utility in most of the current utility service territories would be difficult mainly due to two factors:

1. The lack of consecutive tribal regulatory jurisdiction over the service territory of any of the existing utilities serving the reservation, and
2. The level of retail rates charged by 5 of the 6 utilities serving electric customers within the reservation and the unlikelihood that a traditional tribal utility could create any cost savings for customers except maybe for customers of Avista.

Currently, most of the utilities serving the reservation have consistent residential rates, except that Douglas County PUD No. 1's rates are considerably lower than the other utilities due to the low cost of the Wells dam power. The average cost of service for Nespelem Coop, Okanagon County PUD, and Ferry County PUD are extremely close. However, the average cost for a residential customer (i.e. 1600 kWh/month) varies considerably. Ferry County PUD's residential rate is the highest and is slightly higher than Avista. Ferry County PUD has a very low cost rate for large industrial customers such as their large gold mine load which appears to support the lower industrial rates with a higher residential rate. Avista has the highest cost of service over the different customer classes.

It is not likely that a tribal utility would provide a cost advantage, except possibly for the Avista system. The biggest uncertainties are the cost of acquiring Avista's distribution system, the size of the load that would be served and the cost of financing the acquisition. In fact, there is the real potential that the cost of a tribal utility to serve Avista's existing customers could be higher. Savings could be relatively small. Additional study is recommended if the tribe is interested in this option.

Ferry County PUD's rate structure favors its industrial customers over its residential customers. We are unaware of any tribal industrial loads or interests related to Ferry County, however the tribe may have economic interests or tribal member jobs at stake if the industrial rate were changed. The tribe does have leverage to address the rate issues, if that is in the tribe's best interests. More discussion of this option is recommended.

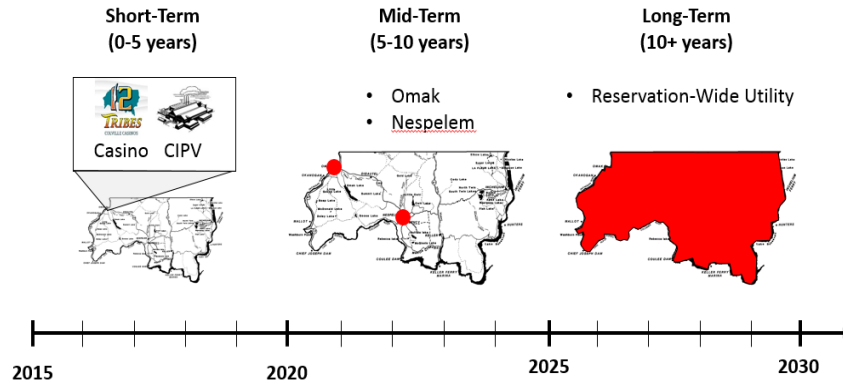
Recommendations include:

1. Tribal Utility Study In Avista Area: Do further costs analysis for a tribal utility on the current Avista system.
2. Ferry County PUD Residential Rates: Determine internally if the tribe has an interest in lowering Ferry County residential rates at the possible expense of the industrial rates. If so, engage Ferry County PUD on the issue of their residential rate helps support the industrial customers.
3. Targeted Utility Bill Reviews: Solicit tribal member residential or tribal commercial bills that appear significantly higher than the average bills noted here. The Tribal Energy Program could utilize one or more staff members with support from experts under contract to the Tribal Energy Program to research the reasons for the high bills and take steps necessary to resolve the problems.
4. Mill Agreements: Update reviews of power related agreements with Okanogan County PUD.
5. Partnerships: Establish one or more energy efficiency partnerships for energy audits, training, or energy efficiency measures on the reservation.
6. Coulee Dam Tribal Loads Review: Because we could not obtain the City of Coulee Dam's rate information from public sources, a review of the tribe's bills, if any, from this utility is warranted.

**The conclusions and recommendations of the initial study provided in Appendix A are summarized below:**

A Colville tribal electric utility could be financially viable if a phased approach is taken that starts with the large loads in Omak. The following sections describe the proposed CCT tribal electric utility formation approach. The phased approach would first serve the large electric loads in Omak. This is the preferred approach because it generates the most revenue and reduces formation costs and risks.

Forming a Reservation-wide electric utility would be costly and risky. This objective may be achievable in the long-term, but alternative utility formation strategies should be considered that address the short-term costs and risks. For example, CCT can take a phased approach to form "CCT Power" by starting small and growing the utility over time. This approach gives the potential to eventually serve the entire reservation. The figure below illustrates the concept of a phased approach to forming "CCT Power".



A phased approach reduces the costs and risks of forming “CCT Power”. The cost is significantly reduced because less infrastructure has to be purchased or leased upfront. A Reservation-wide utility would cost on the order of 10’s of millions of dollar to acquire all of the necessary infrastructure. With a phased approach, the infrastructure would be a fraction of the cost.

The risk is significantly reduced because CCT would not have to negotiate with six different electric utilities to acquire the necessary infrastructure. Each negotiation has inherent costs and uncertainty. By starting small and gradually growing, the uncertainty and risk can be controlled.

Lastly, it takes time to develop a trained staff to manage the utility. By starting with a smaller utility, utility personnel can be trained and better prepared to manage a utility in a shorter period of time.

## Section 5. Lessons Learned

---

Colville has come a long way since the start of the tribal utility project. The project first focused on forming a broad reservation-wide utility that delivered electric and other services to all customers. A number of lessons were learned in this phase that caused a shift in the project scope. After shifting the scope to focus on two targeted locations for an electric utility, Colville found a utility formation option that could be viable and initiated formation activities.

Below are a few of the lessons learned throughout the various phases of the project:

1. The Low Load Density in Rural Areas Makes Utility Economics Difficult

The Colville Reservation is 1.4 million acres. Electric infrastructure is scattered throughout the Reservation to serve homes and business. The low load density (amount of electricity used per land area) makes it difficult to recover enough revenue to effectively operate a utility. This is because the upfront cost and on-going costs of operating a utility are correlated to the amount of infrastructure. Colville learned this lesson in the first phase and pivoted the project to focus on two areas that had a higher load density.

2. BPA's Tier 1 Power has Special Tribal Benefits

BPA's Tier 1 allocation for tribes allows for a tribal utility to secure additional Tier 1 power when the utility grows. This is a special benefit; however, is not available forever since there are limits on the total amount of tribal allocation and there is also a timeline on the availability.

3. Assessing a Utility Requires Evaluating a Wide Range of Areas

Forming and managing a utility requires financial, legal, engineering, and management experience and expertise. Colville worked with numerous legal, energy, and engineering consultants to ensure a comprehensive review was performed.

## **Appendix A**

---

This section contains the feasibility study delivered in 2013 to the Colville Business Council.



# Colville Tribal Utility Formation Options

## TRIBAL UTILITY FORMATION OPTIONS

**December 19, 2013**

**U.S. Department of Energy Grant DE-EE0005047.000**

**Task One**



## Report Authors



Margaret Schaff  
Kanim Associates, LLC  
303-443-0182  
[mschaff@att.net](mailto:mschaff@att.net)  
<http://www.kanimassociatesllc.com/>

Steven D. Kern, Allen Burns and Ronald Sporseen  
Pkenergy Solutions, LLC  
360-887-7001  
<http://www.pkenergysolutions.com/>

**Table of Contents**

**Report Authors ..... 2**

**Scope of Report ..... 4**

**Executive Summary..... 5**

**Introduction..... 7**

Colville Reservation Information.....7

Colville Existing Regional Utility Interests .....9

General Information on Tribal Utility Formation ..... 12

Bonneville Power Administration As Wholesale Power Supplier..... 13

**Tribal Desire for Utility Formation .....16**

**Understanding Electric Utility Rates and Charges .....18**

Components of Utility Bills ..... 18

Average Utility Rates by State ..... 19

**Electric Utility Service Providers on the Colville Reservation .....23**

Types of Utilities: Municipal Utilities, Cooperatives, Public Utility Districts and IOUs ..... 23

Comparison of Utilities Serving the Colville Reservation..... 24

**Likely Costs of a Tribal Utility (Per kWh) .....26**

**“Virtual Utility” Options .....29**

Targeted Utility Reviews ..... 29

Energy Efficiency Partnerships..... 29

Hermiston Model Utility ..... 30

**Recommendations and Next Steps .....30**

## Scope of Report

The Confederated Tribes of the Colville Reservation (Colville) received a grant from the United States Department of Energy to perform research and activities necessary to determine the technical, financial, legal and regulatory feasibility of implementing a tribal electric utility.

**The focus of this Task One of the project is to determine at a high-level the likelihood of a tribal electric utility providing a cost savings to the potential customers of such utility.**

A fully operational tribal electric utility that owns electric facilities and serves power to its customers, if formed, will certainly have other benefits to Colville. For example a tribal utility would:

- Be an exercise of the tribes' sovereignty and authorities within its jurisdiction.
- Unify power rates and service to tribal customers now served by six separate electric utility companies.
- Provide a basis for the tribe to provide other utility services.
- Bring the existing utility jobs under tribal control.

However, it is assumed that if the projected costs of a tribal utility are significantly higher than the costs of existing electric utility service, the tribe will choose not to form a utility in these service territories. This task was therefore designed to provide an indication, in each of the six existing utility service territories serving Colville, where the best opportunities appear to be for tribal utility formation that will provide cost savings to the customers.

This Task One also seeks to identify other major cost related issues with existing electric utility service and to recommend resolution to those issues.

Once this Task One is complete, the Colville Business Council will be presented with the results of this review and will be given the opportunity to further direct where grant funds for tribal electric utility formation should be utilized.

## Executive Summary

We are pleased to provide you with this initial report on the feasibility of a tribal electric utility for the Colville Tribes, with a comparison of existing and potential tribal utility costs.

Factors that indicate a traditional tribal utility is a good option include:

- Tribal regulatory jurisdiction over the service territory,
- Existing high electric utility rates,
- Tribal ownership or ability to acquire key utility facilities such as tribal rights in expired right of ways for certain key electric utility infrastructure and facilities,
- Consolidation of large loads within relatively small areas which are under tribal control and a diversity of load types (including casino/industrial, commercial, residential and seasonal recreational) within the geographic utility service area,
- Tribal ability to manage a complex electric utility business and to provide for operations, maintenance, safety and bill collection,
- Competitive advantage over existing utilities such as the ability to acquire or provide lower cost wholesale power.

The initial application of these factors to the Colville reservation indicates that the formation of a traditional tribal utility in most of the current utility service territories would be difficult mainly due to two factors:

1. The lack of consecutive tribal regulatory jurisdiction over the service territory of any of the existing utilities serving the reservation, and
2. The level of retail rates charged by 5 of the 6 utilities serving electric customers within the reservation and the unlikelihood that a traditional tribal utility could create any cost savings for customers except maybe for customers of Avista.

Currently, most of the utilities serving the reservation have consistent residential rates, except that Douglas County PUD No. 1's rates are considerably lower than the other utilities due to the low cost of the Wells dam power. The average cost of service for Nespelem Coop, Okanagon County PUD, and Ferry County PUD are extremely close. However, the average cost for a residential customer (i.e. 1600 kWh/month) varies considerably. Ferry County PUD's residential rate is the highest and is slightly higher than Avista. Ferry County PUD has a very low cost rate for large industrial customers such as their large gold mine load which appears to support the lower industrial rates with a higher residential rate. Avista has the highest cost of service over all customer types.

It is not likely that a tribal utility would provide a cost advantage, except possibly for the Avista system. The biggest uncertainties are the cost of acquiring Avista's distribution system, the size of the load that would be served and the cost of

December 19, 2013

financing the acquisition. In fact, there is the real potential that the cost of a tribal utility to serve Avista's existing customers could be higher. Savings could be relatively small. Additional study is recommended if the tribe is interested in this option.

Ferry County PUD's rate structure favors its industrial customers over its residential customers. We are unaware of any tribal industrial loads or interests related to Ferry County, however the tribe may have economic interests or tribal member jobs at stake if the industrial rate were changed. The tribe does have leverage to address the rate issues, if that is in the tribe's best interests. More discussion of this option is recommended.

Recommendations include:

- 1) Tribal Utility Study In Avista Area: Do further costs analysis for a tribal utility on the current Avista system.
- 2) Ferry County PUD Residential Rates: Determine internally if the tribe has an interest in lowering Ferry County residential rates at the possible expense of the industrial rates. If so, engage Ferry County PUD on the issue of their residential rate helps support the industrial customers.
- 3) Targeted Utility Bill Reviews: Solicit tribal member residential or tribal commercial bills that appear significantly higher than the average bills noted here. The Tribal Energy Program could utilize one or more staff members with support from experts under contract to the Tribal Energy Program to research the reasons for the high bills and take steps necessary to resolve the problems.
- 4) Mill Agreements: Update reviews of power related agreements with Okanogan County PUD.
- 5) Partnerships: Establish one or more energy efficiency partnerships for energy audits, training, or energy efficiency measures on the reservation.
- 6) Coulee Dam Tribal Loads Review: Because we could not obtain the City of Coulee Dam's rate information from public sources, a review of the tribe's bills, if any, from this utility is warranted.



## Introduction

### Colville Reservation Information

The Colville Confederated Tribes are a federally recognized Indian Tribe of twelve bands of Indians, with a total tribal enrollment of approximately 9700 people.



Approximately 5,000 tribal members live within the Reservation boundary, along with many non-tribal members. The Reservation is rural with a few small towns. It encompasses most of Okanogan and Ferry Counties. The major economic engines for the Tribe include the forest products and gaming industries.

Tribal lands cover 1.4 million acres of land in northeast Washington. However, the reservation is checkerboarded with non-tribal lands where the tribal jurisdiction has certain legal complications. Utility infrastructure serves both tribal and non-tribal members under the jurisdictions of the tribe and of Washington State.

There are six utilities serving tribal customers on the Reservation:

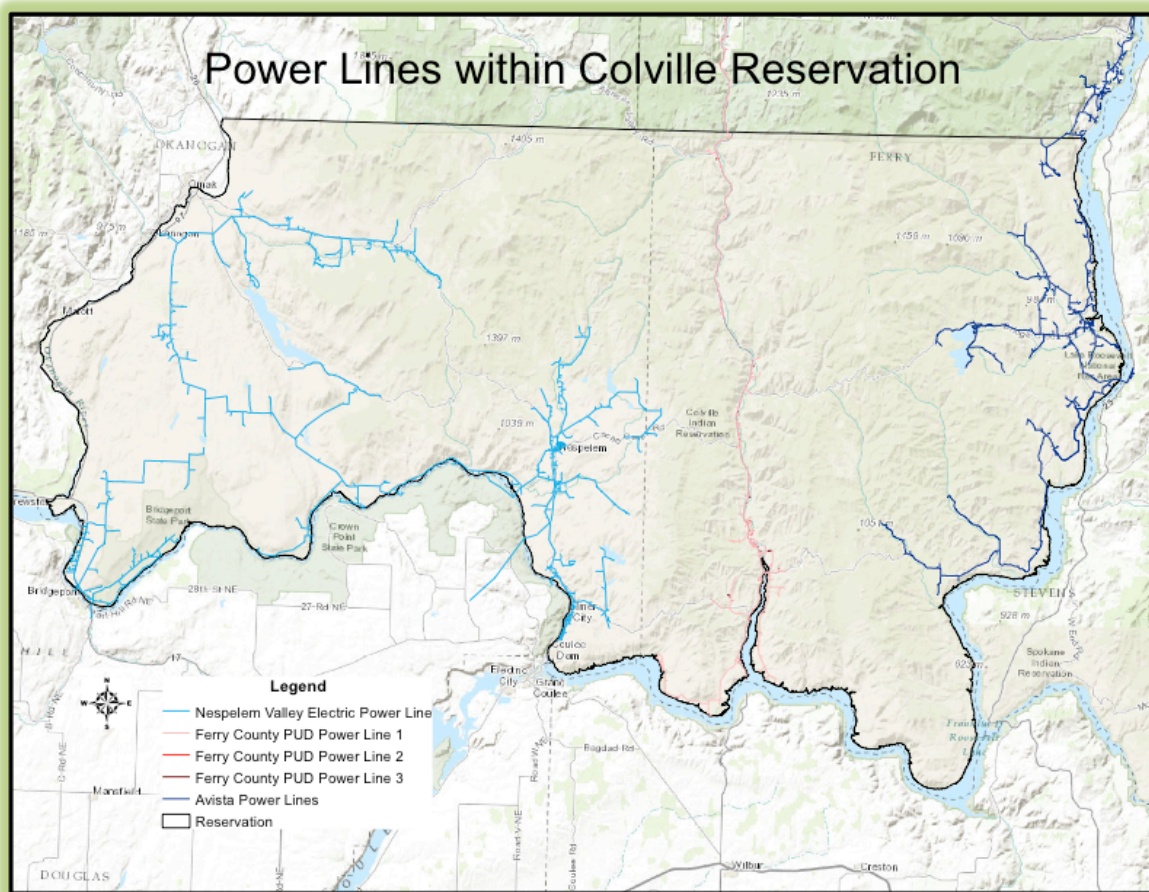
1. City of Grand Coulee
2. Ferry County Public Utility District No. 1

## Colville Tribal Utility Formation Options

December 19, 2013

3. Nespelem Valley Electric Cooperative
4. Okanogan Public Utility District No. 1
5. Douglas County Public Utility District No. 1
6. Avista Utilities

These utilities each have their own power lines, substations and related facilities. A map of “power lines” on the reservation is shown below. These facilities are present on tribal lands, allotted lands, and non-tribal fee lands on the reservation.



This report discusses each of these service providers and compares their cost of service with a likely cost of a tribal utility.

Colville has been actively engaged in developing and implementing strategies to assess and develop energy resources and form organizations to manage those resources on the Colville Reservation. In 2005, the Colville Tribes created an Energy Program to oversee the energy related activities and opportunities available to Colville. The Energy Program was charged with the task of



developing a Strategic Energy Plan. The first draft of the Strategic Energy Plan was completed in April of 2008 and the final draft adopted by the Colville Business Council in March of 2009.

The Colville Tribes' Strategic Energy Plan documents the tribal goals approved by the Colville Business Council and makes various recommendations related to tribal energy issues. This grant effort seeks to provide a deeper and more detailed review of the tribal electric utility related recommendations. The tribal energy goals indicated by the Colville Business Council include:

- Exercising of tribal sovereignty
- Targeting economic development
- Education/training opportunities for tribal decision makers
- Employment for tribal members
- Quality of life for tribal members
- Energy efficiency
- Enforcement of existing agreements
- Better use of water resources and opportunities

### Colville Existing Regional Utility Interests

The Colville Tribes have other important connections to utility matters. The Colville Tribes are historically and culturally tied to the Pacific Northwest region's hydropower system. The Columbia River Basin has always provided for the livelihood of the Colville people, with water, fish, wildlife and other natural resources being the basis of the tribes' culture.

Since early 1960's, the Columbia River and its tributary rivers have been dammed in order to provide water, power, recreation, flood control and other benefits for the region. Parts of the Colville reservation and lands were flooded with the building of various dams, including the federal Chief Joseph and Grand Coulee Dams. In addition, Colville lands and resources were taken when the private Wells Dam was constructed. After legal settlements, the tribes negotiated certain rights and benefits related to the dams.



December 19, 2013

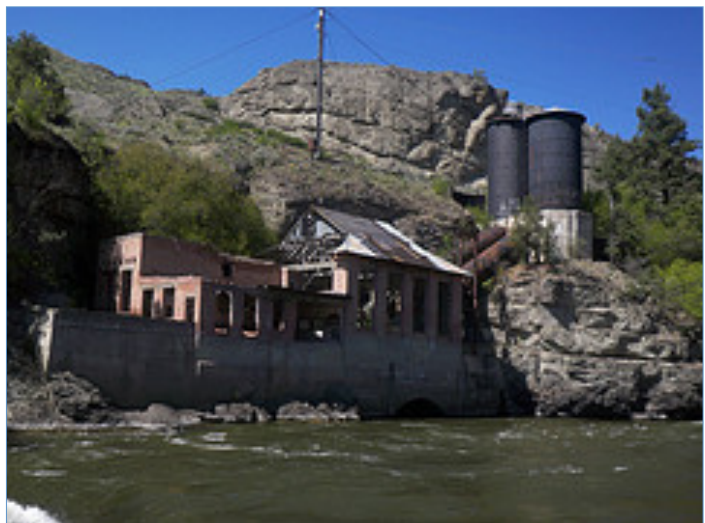
The Colville Tribal Enterprise Corporation, a wholly owned business of the Colville Tribes operates the Colville Indian Power & Veneer (CIPV), a veneer and plywood mill in Omak Washington. The facility includes a veneer and plywood manufacturing mill, a stud mill, a cogeneration plant capable of producing steam and electric power, and a sawmill. The facility has over 25 buildings and is served by rail, with track on site. A fire burned at the mill on June 29, 2006, and the facility has been recently repaired. Currently, the cogeneration plant burns wood waste (sawdust) from the plant and other imported hog fuel, which is an unprocessed mix of coarse chips of bark and wood fiber. A hog fuel handling system consists of two boilers and two turbines with generators of 5 MW and 7.5 MW. The size of existing cooling towers limits maximum output to 8-9 MW. The Colville Tribes own an electrical substation and other power facilities that support the generation plant in Omak.

The facilities are interconnected to Okanogan Public Utility District's electrical system. The cogeneration plant provides steam to CIPV and provides electricity that is used to offset grid energy purchases at three tribal enterprises: CIPV, Colville Indian Precision Pine and Okanogan Bingo Casino. Okanogan credits the plant at a



rate of \$0.0375/kilowatt hour (kWh). CIPV sells excess power above this quantity to OPUD at spot market prices. Recent upgrades improved the efficiency and reliability of one of the boilers and both generators.

The Colville Tribes have an opportunity to participate in another regional hydroelectric generation upgrade at Enloe Dam. The dam is within tribal traditional lands. The recent request to relicense the dam has led to environmental studies and coordination with the Tribes regarding involvement in the project. Enloe Dam on the Similkameen River 3 miles NW of Oroville was built and completed in 1920 and eventually acquired by Okanogan County PUD. The project ceased hydroelectric generation in 1959 due to obsolescence of the generating equipment. On July 9, 2013, the Federal Energy Regulatory Commission issued a new license to Okanogan County PUD for the



December 19, 2013

Enloe Dam Hydroelectric Project. At the time that the Commission issued the license to the District, the Clean Water Act Section 401 Water Quality Certification issued by the Washington State Department of Ecology on July 13, 2012 was the subject of an appeal to the Washington Pollution Control Hearings Board (PCHB). On July 23, 2013, the PCHB issued an order affirming the Section 401 Water Quality Certification “subject to the additional condition that 10/30 cfs minimum instream flows over the Dam and Falls for the aesthetic values shall be further monitored and evaluated by Ecology during initial operation of the Project (within three years).” The decision of the PCHB further requires the Department of Ecology to monitor the 10/30 cfs flows and to obtain additional data regarding alternative flows before determining whether the 10/30 cfs flow shall be confirmed or revised as a condition of continued operation of the Project. The Colville Tribes have a Memorandum of Understanding with Okanogan County PUD for participation in this project.

In May 2007, Okanogan PUD filed for a preliminary permit to study construction of hydroelectric facilities on a new dam on Shanker's Bend of the Similkameen River, 7.3 miles upstream of Enloe Dam. The Colville Tribes and Canadian tribes were interested in studying the proposal as funded by the State of Washington, however support for building the projects will be dependent on the study results. On October 6, 2011, the preliminary permit was surrendered and the project is no longer under consideration by OPUD.

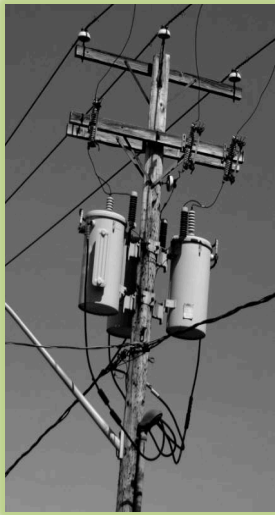


The Tribes are also active participants in other regional water, fish and natural resources projects, discussions and negotiations.

The Colville Business Council administers these opportunities and settlements and has allocated the benefits of the settlements to various tribal priorities, including some direct payments to tribal members. While there is an opportunity for the tribe to use these negotiated benefits for a tribal electric utility, political and fairness issues related to changing the current allocation of the benefits would need to be addressed. These are future decisions for the Colville Business Council.

For purpose of this report, therefore, we will assume that the Colville Tribe would acquire all wholesale power for a proposed tribal utility entirely from the lowest likely cost supplier of wholesale power in the region, and will not use any of their current settlement rights or opportunities for tribal utility purposes.

## General Information on Tribal Utility Formation



Creating a tribal utility is an important element of tribal sovereignty. Creation of a utility can serve as a powerful mechanism for a tribe to deal with surrounding utilities, federal and state agencies as well as its own communities. Generally, a utility is a public or private organization created for the purpose of selling or supplying water, electric energy, telephone service, or other items or services for general public use. Specifically, an electric utility is an entity that purchases or generates then sells or distributes electricity, which recovers the cost of this electricity through rates established by the entity itself or by a separate regulatory authority. An electric utility can also be formed to serve other electricity related functions of a tribe.

A tribal utility is simply a business established by the tribe relating to a utility or energy function. A tribal utility can be created to perform common utility functions like delivering electricity to all consumers within a geographical area, or can be a company that provides certain support services or manages an energy project. The functions of a tribal utility are generally within the discretion of tribal government and as such can be planned to grow over time or take on added responsibilities as certain goals are met. Decisions on tribal utility formation rely on the overall goals of a tribe and the chosen separation of governmental and utility business functions.

Formation of a tribal utility will require a long-term tribal commitment. A dedication to utility management and operations will be required for oversight, facilities maintenance, emergency response, ongoing contractual matters, ongoing policy matters, ongoing interface with local and regional utility bodies and organizations, safety and environmental issues, legal issues and financial commitments.

Tribal utilities are generally much easier to establish if the tribe itself is the only regulatory agency involved in the decision. In our case, the utility facilities in question are on tribal lands, allotted lands and also non-tribal fee lands within the reservation. Past analysis of the various jurisdictions that govern these types of lands indicates that this “checkerboarded” pattern of jurisdiction will require additional steps in the utility formation process. Decisions will be required to determine whether a potential tribal utility would serve only tribal members on tribal lands or whether a potential tribal utility would also serve non-tribal members on non-tribal lands. Either choice will add complications to the planning, costs and execution of utility formation.



To obtain the right to provide all electric service in the selected area would require the tribe to negotiate with current service providers to acquire some or all of their facilities, obtain an appropriate level of power supply and transmission, and then likely need to obtain a franchise and other approvals for these actions from the Washington Utilities and Transportation Commission. These approvals will likely require significant and expensive studies, data and other information for filing with the state commission.

### Bonneville Power Administration As Wholesale Power Supplier



The Federal Power Marketing Administrations, including Bonneville Power Administration (BPA) in the Pacific Northwest, and Western Area Power Administration in 15 other Western states, define Indian Tribes as “preference customers” eligible to receive hydroelectric power from federally owned dams in the Western United States. BPA is a federal agency charged with the responsibility of distributing energy from federal dams on the Columbia River system in the northwestern US. It is the Colville Tribes’ most likely source of wholesale power because it sells cost based power, and therefore generally low cost power to regional utilities.

Most of the utilities currently serving the reservation purchase the majority of their wholesale power suppliers and transmission service from BPA. Therefore, understanding BPA’s power sales and rate policies is instrumental in this discussion.

BPA has established the long-term rules for new utility enterprises. The rules can be found in *BPA’s Long Term Regional Dialogue Policy* (July, 2007), which incorporates the *BPA Standards for Service* (January, 2000) and *BPA’s Tiered Rate Methodology* (July, 2011) and the various supporting policy and rate documents published since. These rules include timelines for notice to BPA, eligibility for various rate tiers, availability of power at each tier, and other

obligations for entities seeking to form new utilities that buy power and related transmission services from BPA.

BPA has established Tiered Rates for service of its customers. Tier 1 power is BPA's lowest cost power supply, as it represents power generated from the federal dams, with limited market "augmentation" or purchases. Up to 250 average MW of market augmentation can be made available for new public utilities, including new tribal utilities. For small utilities under 10 average MW, this power can be available immediately upon the beginning of the next rate period. However, if the Colville Tribes wait until other utilities form which use the entire 250 average MW, they will not be eligible to acquire Tier 1 power, except for the amount of Tier 1 power that already serves their loads from the existing utilities. It is unlikely this level of power use will be reached for a number of years, unless a very large utility forms which the policy does not encourage.

BPA will give each utility a "high water mark", which is the maximum amount of Tier 1 power they can purchase and receive under BPA's current policies. For power needs above the high water mark, a utility can buy power on the market, generate its own power, or buy power from BPA at their Tier 2 rates, which are based on the market cost of the power. However, as a special benefit to tribal utilities, the first 40 average MW of all tribal utility loads that exceed a tribal utility's high water marks will qualify for BPA's Tier 1 rate. Therefore, if the Colville's form an electric utility prior to the use of all the 250 average MW allocated to new public power load, and prior to the use of the 40 average MW for tribal load growth, all the power can likely be purchased at the Tier 1 rate. There are currently only two tribal utilities eligible to use this 40 average MW allocation, Umpqua Indian Utility Cooperative and Yakama Power. Both will likely use some of the 40 average MW but neither utility will likely use all of this power in the foreseeable future.

Once the decision to form a tribal utility is made, the next step will be to qualify for BPA service and provide notices so that utility service can begin pursuant to the various schedules, which qualify a new utility for the lowest rates.

BPA has the legal obligation to stand ready to serve all the fluctuating wholesale electrical needs of preference entities who apply for power. Therefore, BPA requires tribes to form utilities as eligible preference entities to receive electric service and become customers. BPA's current requirements for who constitutes a "utility" are found in their "Standards for Service".

The Standards for Service require BPA customers to be traditional preference utilities with the following characteristics:

- 1) Be legally formed in accordance with local, state, Federal or tribal laws.
- 2) Have a general utility responsibility within the service area.
- 3) Own a distribution system and be ready, willing and able to take power from BPA within a reasonable period of time.

December 19, 2013

- 4) Have the financial ability to pay BPA for the Federal power it purchases, including start-up capital and appropriate banking relationships.
- 5) Have adequate utility operations and structure including sufficient employees and staff necessary to operate a utility.
- 6) Be able to purchase power in wholesale amounts (at least 1 MW).
- 7) Have appropriate enforcement mechanisms for contractual relationships, including standard limited waivers of sovereign immunity and acceptance of federal jurisdiction under BPA's statutes for dispute resolution.
- 8) Meet the requirements of "preference" utilities, (generally one must be a not-for-profit entity).

The following tribal actions are recommended to legally form the utility and provide for its management, operations, initial budget and rate setting structure, as provided in BPA's standards for service:

1. Form a tribal utility entity with obligations and authorities consistent with BPA standards described above. The entities can be:
  - a. Tribal enterprise/arm of government under the direction of the Tribal Council
  - b. Tribal non-profit entity (corporation, LLC, etc.) under the direction of an appointed board
  - c. Tribal cooperative with an elected or appointed board
  - d. Federal corporation under Section 17 of the Indian Reorganization Act.
2. Subject the tribal utility to certain utility standards, either as an obligation written into the entity's charter, or through a tribal regulatory system. These standards should include policies relating to:
  - a. Obligation to serve all qualified customers, with policies for qualification of customers such as disconnection and discontinuation policies
  - b. Rates that are established with public review, are non-discriminatory among customers in like classes and available to customers
  - c. Quality and reliability of service standards
  - d. Metering and billing procedures
  - e. Obligations to act in good faith in the interests of the customers
  - f. Other obligations which the tribe may wish to place on its own utility or on other franchised utilities such as:
    - i. Rules with regard to charging for state taxes to exempt customers,
    - ii. Inclusion of customers in utility decision processes,

December 19, 2013

- iii. Application of any public benefit funds that may be available,
  - iv. Competition provisions among various providers,
  - v. Reporting and data requirements,
  - vi. Tribal employment references,
  - vii. Low income, elderly, disabled persons programs,
  - viii. Obligations regarding the use of facilities by third parties (interconnection standards and obligations)
  - ix. Safety, environmental and cultural obligations,
  - x. Authorities to enter premises,
  - xi. Net metering,
  - xii. Conservation,
  - xiii. Credit policies and procedures
3. Show that the tribe owns utility facilities on trust lands that are used to serve tribal utility loads.
  4. Establish a utility budget (O&M and Capital) bank accounts, and spending authorities.
  5. A tribal utility must appoint a utility manager and appropriate staff. In the past BPA has specified that at least one full time manager is required. However, at least one tribal utility has a part time manager and a part time book keeper, adding up to one full time equivalent. We will also likely seek contracts for utility facility maintenance, either through local engineering firms, or through local service providers.
  6. Establish utility rates sufficient to recover costs and other policies as necessary under the circumstances.
  7. Establish financial policies and procedures for raising capital to purchase and maintain the assets of the tribal utility.

## **Tribal Desire for Utility Formation**

Tribal members, especially those served by Nespelem Valley Electric Cooperative; state that their utility bills are significantly higher than the utility bills for their neighbors in similar homes. Sometimes, bills for small homes exceed \$600 per month in cold weather, which is burdensome for tribal members who sometimes live in poverty or on fixed incomes.

Tribal representatives have stated that with the tribes' vast natural resources, the tribe should be able to generate their own power for local use.



Tribal members have stated that with the tribes' rights to power from the dams, they should receive free or discounted power.

Tribal representatives have expressed desire to add or gain control of utility jobs on the reservation.

Tribal representatives have stated that a tribal utility would benefit the tribe as an exercise of their sovereignty.

These concerns illustrate the following underlying questions:

- 1) Are utility rates on the Colville Reservation too high when compared with other regional and national power rates? **Answer:** Utility rates on the Colville Reservation are among the lowest in the country.
- 2) Are some utility rates on the reservation significantly higher than the other service providers' rates? **Answer:** The utility rates on the reservation are fairly consistent except that Douglas County PUD No 1's rates are significantly lower. Also, while Ferry County Public Utility District No. 1 has low average rates, their residential rate is higher as explained later in this report.
- 3) Should all tribal members be provided with similar utility costs? **Answer:** Because utility rates are fairly consistent, utility costs per household are likely due to other factors like inefficient heating systems, appliances and poor insulation or household practices that do not save energy. Meters could also require calibration. It is recommended that case-by-case review of those significantly high power bills be considered.
- 4) Are the current wholesale power sources serving the reservation higher in cost than power the tribe could generate? **Answer:** The tribe could provide lower cost power if it chose to use its allocation of Wells Dam power to serve the needs of a tribal utility, however that power is already identified for other tribal priorities. Generation of power using wind, solar or hydro power to serve the whole reservation's power needs would likely be more expensive than buying wholesale power from Bonneville Power Administration. Some targeted small generation options are likely to permit a cost savings for higher priced loads or loads not accessible to the current power systems.
- 5) Would a tribal utility provide more reservation jobs than there already are, or would they allow for more tribal member hiring? **Answer:** A tribal utility would provide some tribal member jobs. However some jobs are also likely available at existing utilities for skilled workers. A utility would not

December 19, 2013

likely create significant unskilled worker jobs. A tribal utility could provide training such as an apprentice program for long-term training of skilled workers.

## Understanding Electric Utility Rates and Charges

### Components of Utility Bills

Utility bills reflect the rates approved by the utility's governing body and/or the state regulatory body<sup>1</sup>. Generally one meter measures a customer's usage. Therefore, if a meter is not operating properly, utility bills can be incorrectly recorded. Customers have the right to have their meters tested and calibrated.

Since the tribe is served by six different utilities, the approved charges, known as the utility's "rates", are slightly different in amount and in structure for each. Each utility may have different rates for commercial, residential, industrial and other types of electric customer loads. However, the bills often contain the following (but not necessarily all of the following) billing components that are added together to provide the customer's total charge.

- "Basic" Charge or "Facility" Charge (This charge often covers the utility's cost of administration and is a set amount every month regardless of the amount of power used.)
- Demand Charge (This charge generally covers the cost over time to build power plants and transmission lines. Since power plants and transmission lines must be large enough to provide power during the highest use times, but all other times this "extra" ability to generate or transmit power is unused, this charge is designed to discourage high "peak" usage, or in other words, is designed to keep power usage generally low and constant. The charge is typically based on the highest amount of usage by a customer over an hour during each billing period.)
- Energy Charges (This charge generally covers the cost to run power plants including the power plant fuels. It is based on the total amount of power used in a month. It is expressed in the number of kilowatt hours used.)
- "Adjustments" (Utility rates allow for certain exceptions, additions or other changes depending on certain conditions.)
- Taxes (Tribes and tribal members receiving service on the reservation should NOT pay state taxes. Often, a customer must fill out a form or otherwise do something to "opt out" of the taxes.)

---

<sup>1</sup> State regulations may not apply to tribes or tribal customers receiving service on the reservation, however, most tribes accept the state oversight. When tribes have jurisdiction, they have the right to determine their own rate approval processes and all other terms of service on the reservation. Regulation of existing utilities is an alternative to a tribal utility.

## Report Authors



Margaret Schaff  
Kanim Associates, LLC  
303-443-0182  
[mschaff@att.net](mailto:mschaff@att.net)  
<http://www.kanimassociatesllc.com/>

Steven D. Kern, Allen Burns and Ronald Sporseen  
Pkenergy Solutions, LLC  
360-887-7001  
<http://www.pkenergysolutions.com/>

**Tribal Utility Feasibility Study**

**To**

**The Confederated Tribes of the Colville  
Reservation**

**October 13, 2015**

**Avant Energy, Inc.  
220 South Sixth Street, Suite 1300  
Minneapolis, MN 55402  
612-349-6868  
[www.avantenergy.com](http://www.avantenergy.com)**



## Table of Contents

---

Section 1. Background	Page 1
Section 2. Service Territory	Page 4
Section 3. Power Supply	Page 8
Section 4. Legal and Business Structure	Page 11
Section 5. Preliminary Financial Evaluation	Page 13
Section 6. Formation Milestones and Timeline	Page 20
Section 7. Risks	Page 23

## Section 1. Background

---

Avant Energy, Inc. was hired to perform a tribal utility feasibility study for the Confederated Tribes of the Colville Reservation (CCT). This section summarizes the benefits associated with forming a CCT tribal electric utility and describes the purpose of the study.

---

### **Energy is One of CCT's Largest Recurring Expenses**

Each month, businesses and homes on CCT's reservation pay for electric expenses. Cumulatively, electricity costs throughout CCT's Reservation cost tribal businesses and members millions of dollars and represents one of the tribe's largest monthly expenses.

---

### **Energy Costs Are All Paid to Non-Tribal Entities**

Currently, all electricity payments are made to non-tribal entities. Electricity payments are made to six electric utilities that serve the Reservation. These include the following cities:

- City of Grand Coulee
  - Ferry County Public Utility District No. 1
  - Nespelem Valley Electric Cooperative
  - Okanogan Public Utility District No. 1
  - Douglas County Public Utility District No. 1
  - Avista Utilities.
- 

### **Energy Decisions Are Made by Non-Tribal Entities**

Energy decisions affect the tribe's businesses, members, and land. Because most energy-related decisions are made by the six utilities that serve the reservation, CCT has limited authority over the tribe's energy supply.

---

### **A Tribal Utility Could Provide Value to CCT**

A tribal electric utility is a tribally-chartered entity that purchases or generates electricity and delivers it to a specific service territory. A tribal electric utility could provide value to CCT because it could provide the following benefits:

- 1) Turn energy costs into tribal revenues
  - 2) Give CCT control of energy decisions on Reservation
  - 3) Improve the lives of tribal members
  - 4) Increase the profitability of tribal businesses.
- 

### **A Tribal Utility Could Turn Energy Costs into Revenues**

A tribal utility would turn the millions of dollars that are currently paid to non-tribal entities for electricity bills into a revenue stream for the tribe.

---

---

**Could Increase  
CCT’s Control of  
Energy Decisions**

Forming a tribal electric utility is an exercise of CCT’s sovereignty. It would give CCT the authority to make energy-related decisions that affect the tribe’s businesses, members, and land. CCT would have the authority to determine where the electricity supply comes from, how to deliver the electricity to customers, and what rates to charge customers.

---

**Could Improve the  
Lives of Tribal  
Members**

A tribal electric utility has the potential to improve the lives of tribal members by reducing their electricity bills, improving customer service, and generating jobs on the Reservation.

Compared to the utilities currently serving the Reservation, a tribal electric utility would be more aligned with the needs of the tribe and the needs of the tribal members.

---

**Could Improve the  
Profitability of  
Tribal Businesses**

A tribal electric utility has the authority to set electricity rates, which provides the opportunity to control electricity rates for tribal businesses. This could improve the profitability of tribal businesses and drive for economic development on the Reservation.

---

**Must be a  
Financially Viable  
Business to Achieve  
Benefits**

The potential benefits listed above can only be achieved if the tribal electric utility is financial viable and can compete financially with the current electric utilities that serve the Reservation.

If the tribal electric utility is not financially viable, electric rates will increase and tribal businesses and members would be adversely affected by increased electricity expenses.

---

**Previous Studies  
Evaluated  
Reservation-Wide  
CCT Electric Utility**

As part of the U.S. Department of Energy Grant DE-EE0005047.000, previous studies have been completed that evaluated the potential of a tribal electric utility that served the entire Reservation. These studies concluded that a tribal electric utility would be difficult to form and would be difficult to keep electricity rates competitive with current rates if it served the entire Reservation.

---

**Reservation-Wide Utility Presents Formation Challenges**

A tribal electric utility that serves the entire Reservation would allow CCT to control electricity rates and control the energy supply on all of its tribal lands; however, there are significant challenges to forming a Reservation-wide electric utility. The challenges include:

- 1) High upfront cost to form tribal electric utility
  - a. High legal fees to negotiate with six different utilities
  - b. High acquisition fees for the distribution lines
- 2) Lack of consecutive tribal regulatory jurisdiction over the service territory of any of the existing utilities serving the Reservation
- 3) High complexity and risk to form and manage Reservation-wide utility

**This Study Evaluates a Utility Formed in Omak or Nespelem**

This study builds on the previous tribal utility studies and evaluates the financial viability of forming a tribal electric utility in Omak or Nespelem. Figure 1 illustrates the locations evaluated in this study.

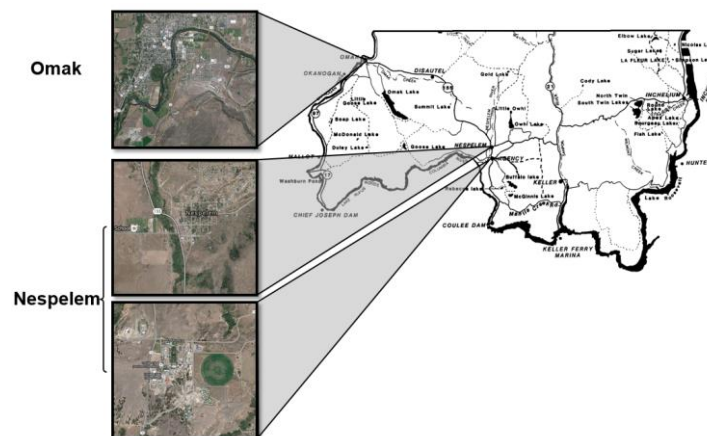


Figure 1 – Map of Electric Loads Evaluated in Omak and Nespelem

For each area, Avant evaluated the financial viability by:

- 1) Identifying the electric loads served by the proposed tribal utility
- 2) Developing revenue projections
- 3) Developing cost projections
- 4) Comparing tribal utility revenues to tribal utility costs

**CCT Electric Utility Can be Viable**

Based on Avant’s preliminary evaluation, a CCT tribal electric utility may be financially viable if a phased approach is taken that starts with the large loads in Omak. The following sections describe the proposed CCT tribal electric utility formation approach. The phased approach would first serve the large electric loads in Omak. This is the preferred approach because it generates the most revenue and reduces formation costs and risks.



## Section 2. Service Territory

---

This section summarizes Avant’s evaluation of potential service areas for a CCT tribal electric utility (“CCT Power”).

---

### A Phased Approach Can Guide CCT to a Reservation-Wide Utility

As stated in previous tribal utility feasibility studies, forming a Reservation-wide electric utility would be costly and risky. This objective may be achievable in the long-term, but alternative utility formation strategies should be considered that address the short-term costs and risks. For example, CCT can take a phased approach to form “CCT Power” by starting small and growing the utility over time. This approach gives the potential to eventually serve the entire reservation. Figure 2 illustrates the concept of a phased approach to forming “CCT Power”.

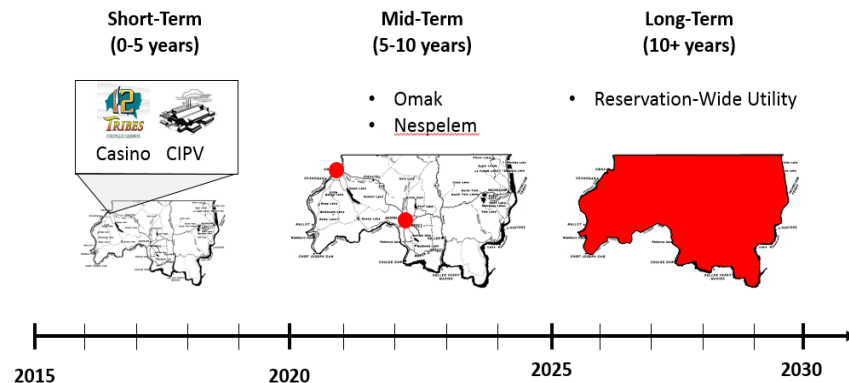


Figure 2 – Phased Approach to Formation and Growth of “CCT Power”

---

### A Phased Approach Reduces Formation Cost and Risk

A phased approach reduces the costs and risks of forming “CCT Power”. The cost is significantly reduced because less infrastructure has to be purchased or leased upfront. A Reservation-wide utility would cost on the order of 10’s of millions of dollar to acquire all of the necessary infrastructure. With a phased approach, the infrastructure would be a fraction of the cost.

The risk is significantly reduced because CCT would not have to negotiate with six different electric utilities to acquire the necessary infrastructure. Each negotiation has inherent costs and uncertainty. By starting small and gradually growing, the uncertainty and risk can be controlled.

Lastly, it takes time to develop a trained staff to manage the utility. By starting with a smaller utility, utility personnel can be trained and better prepared to manage a utility in a shorter period of time.

---

**Phase 1: Serve the Largest Electric Loads**

“CCT Power” should start by serving the area with the largest electric load. The electric load is what generates revenue for “CCT Power”. Serving the area with the largest electric load will give “CCT Power” the greatest opportunity to recoup all of the costs associated with forming an electric utility.

Avant evaluated the electric loads in Omak and Nespelem to determine which location is the better territory for starting “CCT Power”.

**Omak Has the Largest Electric Load**

Based on a preliminary review of the electric loads in Omak and Nespelem, Omak has the larger electric load. Figures 3, 4a, and 4b illustrate the load distribution in Omak and Nespelem.

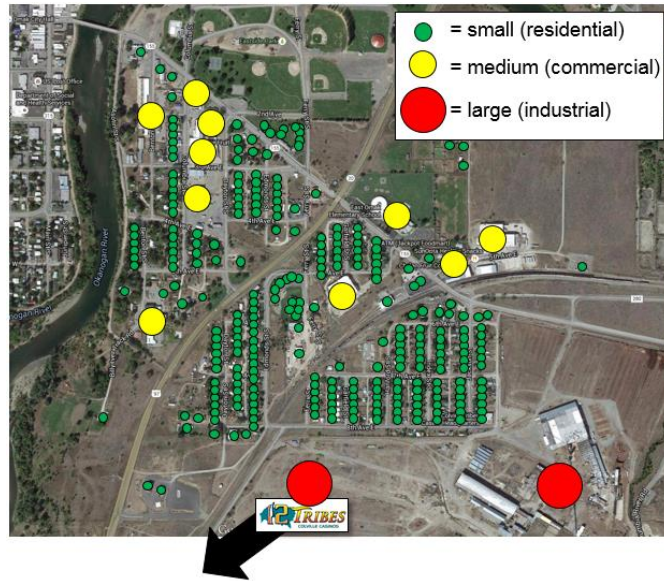


Figure 3 – Map of Electric Loads in East Omak

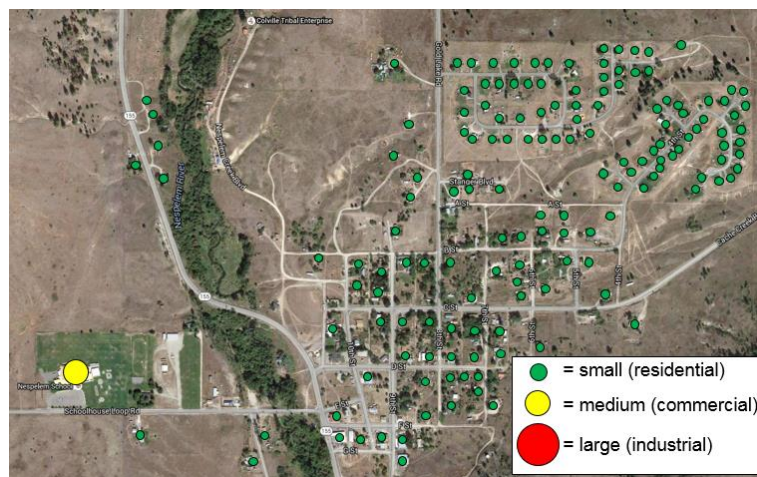


Figure 4a – Map of Electric Loads in Nespelem

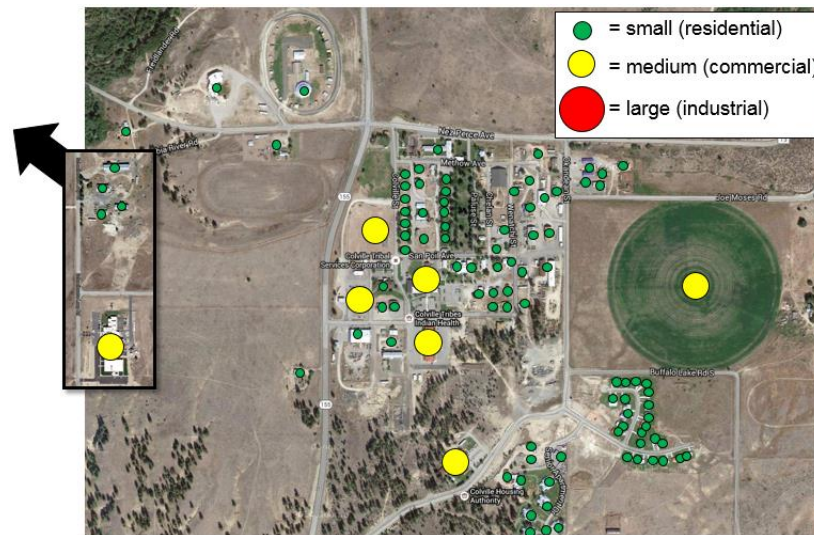


Figure 4b – Map of Electric Loads Near Tribal Headquarters

**The Casino and Mill are the Largest Loads in Omak**

The 12 Tribes Casino and Colville Indian Power & Veneer (CIPV) are the two largest loads in East Omak. Combined the two businesses have an average monthly peak load of approximately 5 MW and pay more than \$1.7 million annually in electricity expenses.

**CCT Power Should Start by Serving the Casino and Mill**

“CCT Power” should start by serving only the Casino and CIPV. CCT is working to re-open Precision Pine in East Omak, which could be another large load worth adding to the list of initial loads served by the first phase of “CCT Power”.

**Generates Enough Revenue to Cover Utility Costs**

These large loads give “CCT Power” the opportunity to generate enough revenue to recover the costs associated with forming and managing a tribal electric utility. This also means that “CCT Power” would be able to keep electricity rates equal to or below the electricity rates charged by Okanogan Public Utility District (OPUD).

**Simplifies Utility Formation and Management**

By starting “CCT Power” with a small number of large loads, it simplifies the formation and management of “CCT Power”. CCT would not have to acquire as much infrastructure and would only have to negotiate with one electric utility, OPUD, in order to secure the necessary infrastructure.

Furthermore, the management of “CCT Power” would be simpler compared to managing a Reservation-wide utility that serves industrial, commercial, and residential customers. With only a few customers, the billing operations would be simple and it would be easier to achieve high customer satisfaction.

---

**Allows CCT Power to Gain Utility Experience Prior to Expanding**

This approach allows “CCT Power” to gain utility experience prior to expanding into larger service areas. “CCT Power” management could develop the skills, processes, and resources needed to effectively operate and grow an electric utility.

---

**Nespelem is a Strong Candidate for Utility Expansion**

Although Nespelem does not have as large of a load as Omak, it is a strong candidate for utility expansion. The new tribal headquarters is a relatively large load and the existing substation in the area may reduce the infrastructure acquisition costs.

---

## Section 3. Power Supply

---

This section summarizes the power supply alternatives available to “CCT Power”.

---

### **“CCT Power” Can Either Generate or Purchase Power**

“CCT Power” can choose to either generate power or purchase power. Each of these options has its own benefits and risks. In general, generating power puts more responsibility on the generation owner, but can be an effective way to take on more control of power supply and protect a utility against swings in the market price of electricity.

Purchasing power either from the wholesale electricity market or from another generation owner requires less day-to-day management. Compared to managing a generation asset, purchasing power is simpler.

---

### **BPA is the Largest Wholesale Power Provider in the Northwest**

Bonneville Power Administration (BPA) is a federal agency that is the largest wholesale power provider in the Northwest. BPA markets electricity generated from the federal dams on the Columbia river system.

---

### **Low-Cost, Reliable Power Available from BPA**

“CCT Power” would have the opportunity to purchase low-cost, reliable power from BPA to serve the Casino and CIPV. BPA’s electricity rates are among the lowest in the country and are based on the costs of operating the federal dams.

---

### **Tribal Utilities Have Special Access to BPA’s Lowest-Cost Power**

Tribes like CCT are considered “preference customers” by BPA and have special access to BPA’s lowest-cost power, called “Tier 1” power. Up to 250 MW of “Tier 1” power has been reserved for newly formed public and tribal utilities. Furthermore, as a special benefit to tribal utilities, 40 MW of additional “Tier 1” power is reserved to serve the growth of tribal utilities.

The 250 MW and 40 MW reserved “Tier 1” power is still available such that if “CCT Power” were to form in the next couple of years, it is projected that all of the electricity could be purchased from BPA’s “Tier 1” power.

---

---

**“Take-or-Pay”  
Contract with BPA  
Requires  
Commitment**

One important aspect of the contract to purchase “Tier 1” power from BPA is that it is a “take-or-pay” contract. This means that whether or not “CCT Power” uses the electricity, it has to pay for the contracted amount. Because of the “take-or-pay” aspect of the BPA contract, CCT has to be fully committed to the tribal utility before signing a contract. Furthermore, CCT should ensure that both the Casino and CIPV are planning on staying in operation for the foreseeable future. If either of those businesses stop operating (and stop using electricity), CCT would still have to pay for power from BPA.

---

**Other Power Supply  
Options Not as  
Attractive for Initial  
Power Supply**

BPA is not the only power supply option for “CCT Power”. Below is a summary of some of the power supply alternatives.

Wells Dam: One option is to use CCT’s allocation of Wells Dam to serve the utility customers. Currently the Wells Dam allocation is being sold into the wholesale electricity market to generate revenues for CCT. In general, if wholesale electricity prices are higher than BPA’s Tier 1 power costs, it is more advantageous to sell the Wells Dam allocation and purchase Tier 1 power from BPA. If “CCT Power” were to use the Wells Dam allocation for its power supply, there would be a number of challenges that CCT would have to address to link Wells Dam’s generation to CCT’s electric load and to ensure reliable power 24 hours a day and 7 days a week. These challenges would take time and money to address. BPA’s Tier 1 power offers a simpler and more reliable power supply alternative.

Enloe Dam: Another option is for CCT to participate in the reconstruction of Enloe Dam and use the electricity generated to serve “CCT Power”. Although the license for the dam has been reissued to OPUD, there is still a substantial amount of work that would be needed to recommission the dam. The project has significant risks and costs associated with it and there is a very low probability the project can generate electricity at a cost competitive with BPA’s Tier 1 power.

New Renewable Generation: New renewable generation, like wind or solar, offers a unique opportunity to self-generate clean electricity. Costs for wind and solar continue to drop and become cost-competitive with conventional sources of generation; however, they are still more expensive than BPA’s Tier 1 power.

Figure 5 shows the results of a comprehensive cost analysis of renewable energy options conducted by Lazard. The figure illustrates that the lowest cost wind and solar projects are still higher than BPA’s Tier 1 power, which averages around \$33/MWh.

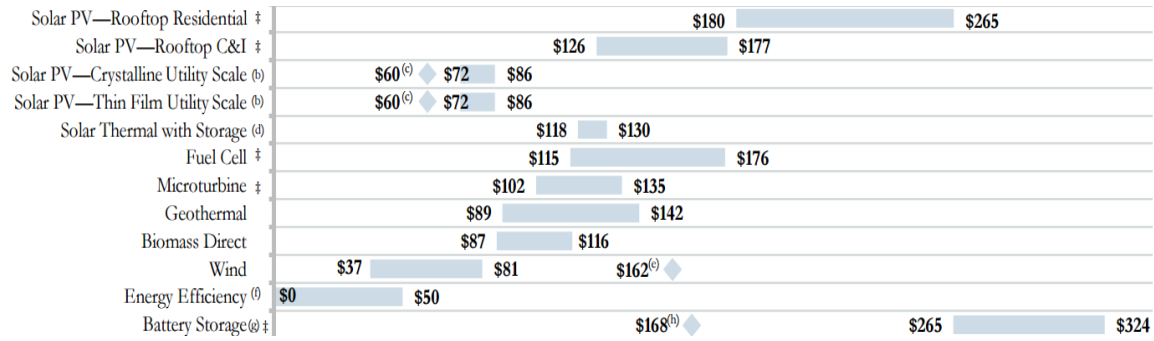


Figure 5 – Ranges of Levelized Cost of Energy (\$/MWh)

**Long Term Power Supply Could Include Generation**

Generating power as opposed to purchasing power can be an effective way to take on more control of power supply costs and protect a utility against swings in the market price of electricity, but is generally more complex than purchasing power. CCT’s long term power supply could include generation, but in the first phase of utility formation, purchasing power is a simpler solution that can provide low-cost, reliable energy.

## Section 4. Legal and Business Structure

---

This section describes the recommended legal structure of “CCT Power”.

---

### **Tribes Face Unique Factors When Forming Businesses**

Tribes have unique options when forming businesses. The key factors that “CCT Power” must consider when determining on the business structure of a tribal utility include, but are not limited to:

- Balance between tribal political and business decisions
  - Organizational considerations
  - Sovereign immunity
  - Liability
  - Tax considerations
  - Financing
- 

### **“CCT Power” Should be Formed as a Tribally-Chartered Corporation**

A tribal electric utility can be formed under tribal, state or federal law. Each option offers different advantages and disadvantages in regards to the considerations listed above. The main types of entities formed under tribal, state and federal law are listed below:

#### **Federal:**

- Section 17 Corporation

#### **Tribal:**

- Tribally Chartered Corporation
- Tribal Instrumentality
- Tribal Political Subdivision

#### **State:**

- State Law Corporation
- State Chartered Limited Liability Company

Typically, tribes choose to form tribal electric utilities under tribal law, as a tribally-chartered corporation. This entity could be formed as a tribally-owned enterprise corporation or it could be formed as a “utility authority”. In both cases, the entity would be formed as a separate business entity with assets segregated from the tribal government’s assets.



---

**CCT Governing Board**

Typically, the tribally-chartered utility would have its own governing board and staff. The utility would act semi-autonomously, separated from tribal government activity.

---

**Business Decisions Should be Separated from Tribal Government**

A challenge of running a tribal electric utility as a tribally-chartered entity would be keeping business decisions of the utility separated and firewalled from tribal government decisions and activities. When political considerations are intertwined with business decisions, it can result in delayed and biased decisions that are not in the best interest of the utility as a separate business. “CCT Power” should ensure it is structured that utility decisions can be firewalled from tribal government activities.

---

**“CCT Power Utility Authority” Document Would Define Structure and Authority**

The legal and business structure of “CCT Power” should be defined early on in the planning stages. Typically, a “Utility Authority” document is established to legally form the utility, define the organization structure, and establish the operating authority of the electric utility.

## Section 5. Preliminary Financial Evaluation

---

This section describes Avant’s preliminary financial projections for “CCT Power”. It is divided into three subsections:

- 5.1 Revenue Projections
  - 5.2 Formation Costs
  - 5.3 Recurring Costs
-

## Section 5.1. Revenues

---

This section describes Avant’s preliminary revenue projections for a tribal electric utility in Omak or Nespelem. Limited electric utility bills were available which required assumptions to be made relating to the commercial and residential loads in the area.

---

### Avant Developed Revenue Projections for “CCT Power” in Omak and Nespelem

A tribal electric utility, like any business, is fueled by revenue. Avant developed revenue projections to help determine the financial viability of “CCT Power” servicing Omak or Nespelem.

---

### Electric Usage and Electric Rates Needed for Revenue Projections

An electric utility’s revenue can be projected by multiplying the projected electricity usage by the electricity rates. Figure 6 shows a simplistic look at how utility revenue projections can be developed.

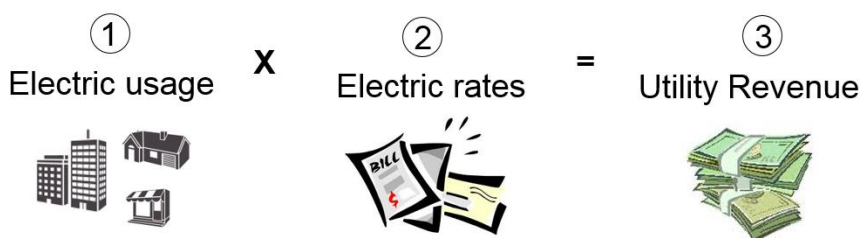


Figure 6 – Utility Revenue Projections

Revenue projections in reality are more complicated than depicted in Figure 6. Electric rates are comprised of different elements. For example, they often contain an “energy charge” which is applied to the number of kilowatt hours (kWhs) of electricity consumed, and a “demand charge” that is applied to the peak kilowatt (kW) demanded in a month. Furthermore, electric rates are typically different for different “customer classes” like residential, commercial and industrial.

---

### Assume “CCT Power” has Same Electric Rates as Current Utility

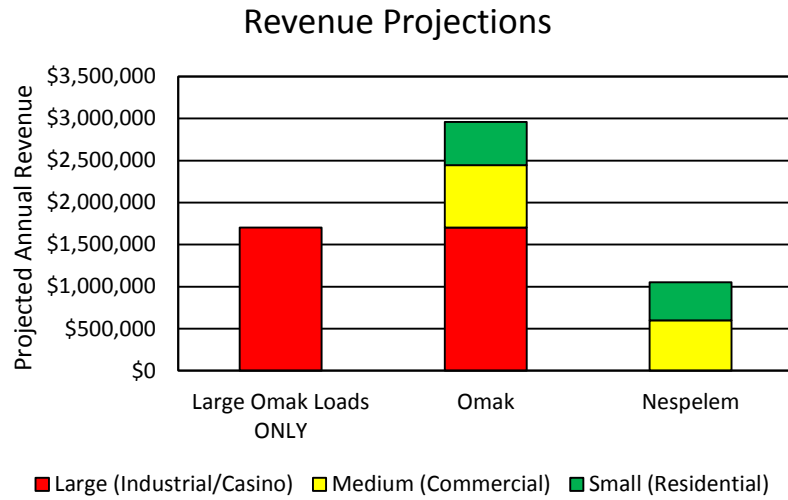
For simplicity, Avant’s revenue projections assume that the electric rates “CCT Power” initially charges customers are the same as the rates that the current utility charges. For example, the revenue projections for “CCT Power” in Omak assume the same electric rates as Okanogan PUD currently charges.

---

**Significantly More Revenue Potential in Omak**

As shown in Figure 7, there is significantly more revenue potential in Omak as compared to Nespelem. This is driven by the two large loads in Omak that account for more than \$1.7 million in potential electricity revenues.

**Figure 7 – Revenue Projections for Omak and Nespelem**



## Section 5.2. Formation Costs

---

This section describes Avant’s preliminary projections for “CCT Power” formation costs.

---

### **Formation Costs are a One-Time Expense**

The formation costs are one-time expenses and cover the following formation activities:

- Establishing tribal utility authority
  - Establishing utility management and operations
  - Establishing utility finances
  - Acquiring utility distribution infrastructure
- 

### **Formation Costs are Recovered**

The electric rates “CCT Power” charges its customers should account for the original investment CCT made to form the utility.

---

### **The Majority of the Formation Cost is Acquiring Distribution Infrastructure**

The majority of the cost associated with forming a tribal electric utility is for acquiring the distribution infrastructure that is needed to deliver electricity to end users. Acquiring distribution infrastructure is costly not only because of the high cost to purchase the physical distribution lines, but also because of the cost to negotiate the acquisition.

---

### **Serving Only the Large Loads in Omak Significantly Reduces Formation Cost**

Serving only the large loads in Omak significantly reduces the formation cost because less distribution infrastructure is needed. Since formation costs are linked to the amount of distribution infrastructure needed, as well as the complexity of the negotiation, CCT can benefit from starting a utility that serves only the Casino and CIPV. This would reduce the complexity of the negotiation and reduce the amount of distribution infrastructure needed to start a utility.

---

### **Projected to Cost Between \$2.5 and \$3.5 Million to Form a Utility that Serves Casino and CIPV**

If CCT decided to form an electric utility that serves the Casino and CIPV, Avant projects that the upfront capital cost would range from \$2.5 and \$3.5 million. This assumes that CCT purchases approximately 5 miles of distribution lines to transport electricity from BPA’s substation to the Casino and CIPV. Figure 8 shows that the straight line distance from the Casino to the BPA substation is approximately 3.8 miles.

---

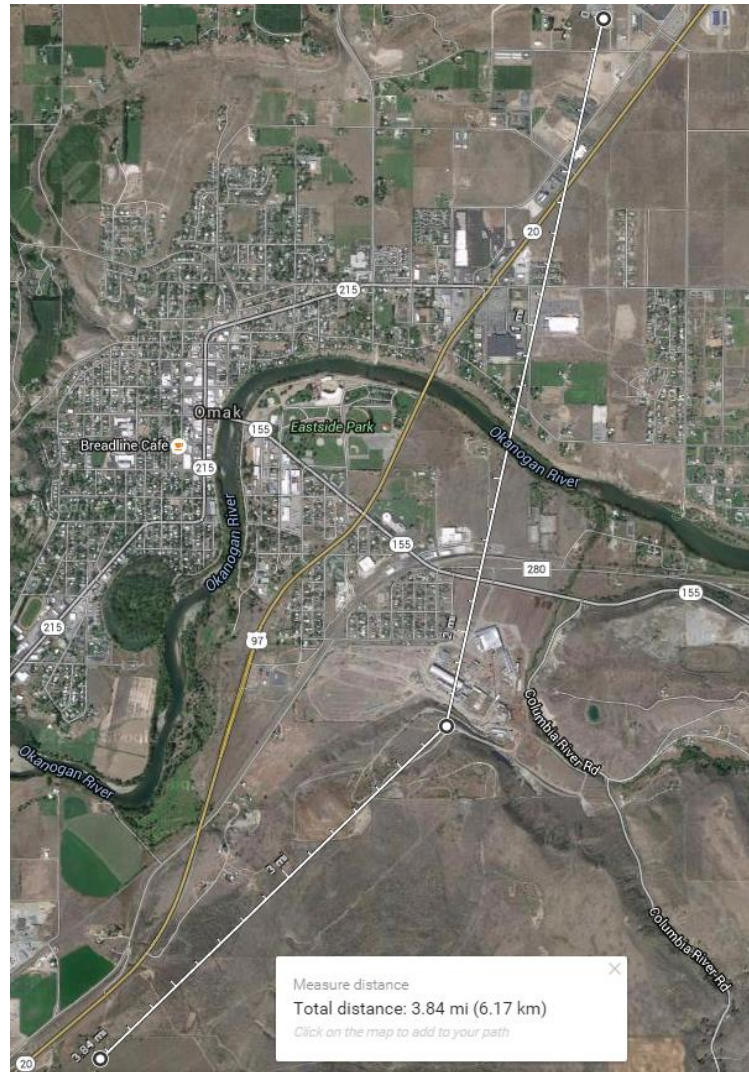


Figure 8 – Approximate Distance to BPA Substation

**Upfront Cost Can be Reduced if Distribution Infrastructure is Leased**

Given the high upfront cost needed to acquire the distribution infrastructure, CCT should consider leasing the infrastructure instead of purchasing it. By leasing the infrastructure, the upfront cost to form a utility is projected to be approximately \$500,000. The cost to purchase the infrastructure would be replaced by a lease payment made to the owner of the distribution infrastructure (OPUD).

## Section 5.3. Ongoing Utility Operating Costs

This section describes Avant’s preliminary projections for the ongoing utility operating costs.

### Ongoing Costs Include Power Supply and Power Delivery Expenses

After forming an electric utility, “CCT Power” will be responsible for supplying and delivering power to its customers. The ongoing costs can be broken down into power supply expenses and power delivery expenses, as shown in Figure 9.

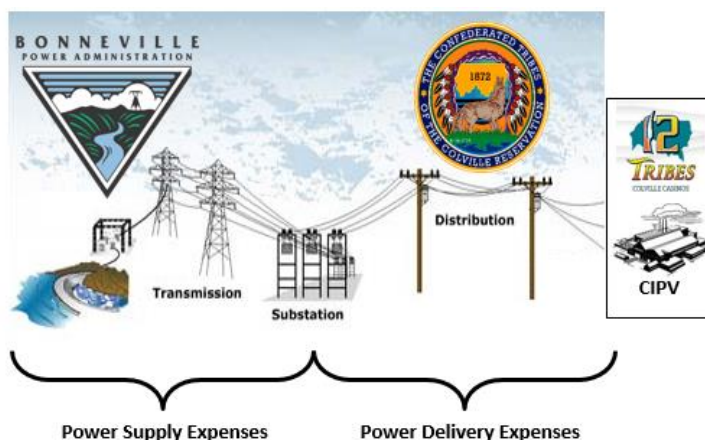


Figure 9 – Power Supply vs Power Delivery Expenses

Power supply expenses include the costs necessary to get electricity to the substation(s) that serve the utility’s customers. This includes the cost of purchasing electricity and the cost of transporting the electricity to the substation(s) over high-voltage transmission lines.

Power delivery expenses include the costs necessary to deliver the electricity to customers. This includes maintaining and repairing infrastructure, day-to-day management, billing/accounting services, and customer service.

### Power Supply Expenses are the Largest Ongoing Operating Expense

Power supply expenses generally make up more than 60% of a utility’s operating expenses. For this reason, power supply decisions are very important to maintaining competitive electricity rates.

---

**BPA Power Supply is Projected to Cost \$35 per MWh**

If “CCT Power” is formed to serve the Casino and CIPV power supply costs are projected to be approximately \$35/MWh or \$1.1 million annually. This is based on the Casino and CIPV’s current electric loads and BPA’s PF-16 rate schedule that applies from October 2015 through October 2017. Longer term, BPA’s Tier 1 supply rates are likely to increase to cover the cost of maintaining and repairing the Federal dams; however, other utilities face the same upward power supply price pressure and BPA’s rates have historically been relatively stable over time.

---

**Power Delivery Expenses Projected to Cost Between \$8 and \$10 per MWh**

The cost to manage the utility, maintain and repair distribution infrastructure, perform the billing/accounting functions, and provide customer service is projected to be \$8 per MWh. This assumes “CCT Power” would only serve the large loads in Omak, which would keep utility operations relatively simple.

---



## Section 6. Formation Milestones and Timeline

---

This section describes the tasks and timeline necessary to form “CCT Power” in order to receive power by October 1, 2017.

---

### **Four Tasks Will Enable CCT to Receive Power by 2017**

BPA has a very prescriptive process for new public and tribal electric utilities. BPA defines Standards of Service that new utilities must meet in order to become a purchaser of BPA’s Federal power. BPA’s Standards of Service require “CCT Power” to:

- Be legally formed in accordance with local, state, tribal or federal laws
- Have a general utility responsibility within the service area
- Own a distribution system and be ready, willing and able to take power from BPA within a reasonable period of time
- Have adequate utility operations and structure
- Have the financial ability to pay BPA for the federal power it purchases
- Be able to purchase power in wholesale amounts (>1 MW)

A detailed description of these Standards of Service can be found on BPA’s website:

<https://www.bpa.gov/news/Tribal/Documents/sfs-policy.pdf>

CCT will need to complete four tasks in order to meet these Standards of Service and receive power by 2017.

Task 1 – Establish Tribal Utility Authority

Task 2 – Acquire Utility Distribution Infrastructure

Task 3 – Establish Utility Management and Operations

Task 4 – Establish Utility Finances

---

### **Complete Tasks by July 1, 2016**

BPA operates on a two-year planning cycle. In order to adequately plan for the next cycle, BPA has a deadline of July 1, 2016 for utilities planning on purchasing power starting on October 1, 2017.

If CCT desires to form a tribal electric utility, the tribe should aim to complete the four tasks listed above by July 1, 2016. Completing all tasks prior to the July 1, 2016 deadline will require an aggressive schedule and dedicated resources to complete the tasks.

Figure 10 shows a high-level schedule that would enable CCT to purchase power from BPA in 2017.

---

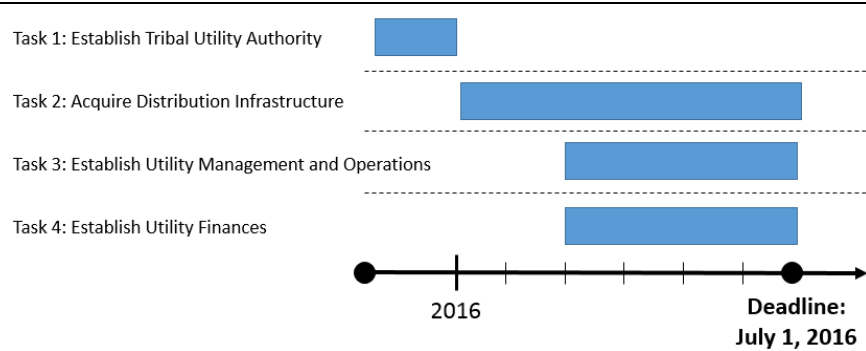


Figure 10 – Timeline to Complete Tasks by July 1, 2016

**Task 1: Establish Tribal Utility Authority**

The first task is to establish the tribal utility’s authority. This is a relatively straightforward task that takes an important first step in formally creating an electric utility.

Typically, a “Tribal Utility Authority” or Charter document is created to legally form the utility, define the authority structure (Board of Directors), and establish the operating authority of the electric utility in a specific service territory.

As shown in Figure 10, Task 1 takes approximately 2 months. To meet the schedule, CCT could target a completion date of December 31, 2015 for Task 1.

**Task 2: Acquire Utility Distribution Infrastructure**

The second task is to begin the activities necessary to acquire the distribution infrastructure. This task takes the longest and is the most important task since it has a significant impact on the utility formation cost.

Acquiring the distribution infrastructure will involve the following:

- 1) Developing the strategy for negotiation
- 2) Engaging in negotiations with infrastructure owner (OPUD)
- 3) Executing purchase or leasing agreement

CCT should aim to finish negotiating and acquiring the infrastructure from OPUD by the July 1<sup>st</sup>, 2016 deadline. The agreement to purchase or lease the infrastructure should be contingent on successfully meeting BPA’s Standards of Service and signing a Regional Dialogue Contract with BPA to obtain power in 2017.

**Task 3: Establish Utility Management and Operations**

BPA requires new public and tribal utilities to demonstrate they are willing and able to take power from BPA within a reasonable period of time. This requires adequate utility management and operations. Task 3 involves developing a “Plan of Service” deliverable that outlines the people, processes, and structure “CCT Power” will employ to effectively deliver power to customers.

If CCT uses a phased approach that starts with serving only the Casino and CIPV, the “Plan of Service” would be relatively simple. Effective utility management and operations could be achieved with the following:

- **Utility Manager** – full-time employee responsible for strategic planning, day-to-day management, and managing contractors.
- **Accounting/Billing Employee** – part-time employee responsible for monthly billing and accounting activities. This employee could be an existing CCT accountant that takes on two new accounts (Casino and CIPV).
- **Third Party O&M Contractor** – responsible for maintaining and repairing distribution infrastructure. CCT could contract these services to a third party during the first phase of “CCT Power” and train internal staff to perform or manage these services in later phases.

As the utility expands, the employees, processes, and structure will need to adapt to maintain effective operations.

**Task 4: Establish Utility Finances**

The last task CCT must complete to meet BPA’s Standards of Service is to establish the utility’s finances. BPA requires electric utilities that purchase power from BPA to have the authority to bill and collect money from its retail customers. CCT will need to establish an account that is segregated from the tribe’s general fund to demonstrate that the tribe is able to pay for the Federal power. Furthermore, CCT will have to demonstrate that the staff is fully capable of the billing and collection activities.

## Section 7. Risks

---

This section describes the risks CCT should consider as the tribe decides whether or not to form “CCT Power”.

---

### **Risks of Forming and Managing a Utility**

While forming an electric utility can provide value to CCT as described in Section 1, there are risks to forming and managing an electric utility. The consequences of most of the formation and management risks are higher rates to customers. These include risks include the following:

- Schedule risk
  - Uncertainty of cost to acquire distribution infrastructure
  - Loss of load
  - Preparation of utility management staff to operate utility
  - Increased rates for tribal members not served by utility
- 

### **Schedule Risk**

The July 1, 2016 deadline requires an aggressive schedule. If the schedule is not met, CCT may not be able to receive power until BPA’s next planning cycle. This means CCT would not receive power until 2019. This risk should be addressed by putting together dedicated resources to complete the utility formation activities.

---

### **Uncertainty of Acquisition Cost**

The largest cost associated with forming an electric utility is the cost to acquire the necessary infrastructure to deliver power to customers. Acquiring the infrastructure involves a negotiation with the owner of the infrastructure, which is typically the current utility serving the territory. In some cases, the current utility will fight hard to keep their infrastructure and keep their customers to avoid losing revenues. In these cases, the negotiation can take a considerable amount of time and be costly. In other cases, the negotiation is less contentious, shorter, and less costly.

The inherent uncertainty associated with the negotiation to acquire distribution infrastructure is a risk that should be addressed by developing a strong negotiating strategy before engaging in a discussion with the current utility. Leasing the infrastructure should be considered as an option to reduce the upfront acquisition cost.

---

---

**Loss of Load**

An electric utility's revenue is based on how much electricity the utility sells. If a major electric load like CIPV is lost, the utility's revenue will decrease significantly. Especially since BPA's power supply contracts are "take-or-pay" agreements, losing electric load can be costly.

CCT should have a discussion with CIPV management to fully understand the long-term stability of the mill.

---

**Preparing Utility Management for Operations**

Managing an electric utility can be challenging. It involves long-term strategic planning, monthly billing, and day-to-day management and customer service. Customers expect affordable and reliable power. They expect power to be available in their factory, building, or home 24 hours per day, 7 days per week. When the lights go out, it is the utility's responsibility to restore power.

CCT would need to hire or train the resources to manage a utility. This takes time and is an important task to enable success of the utility. Without effective utility management, there is a risk of unreliable service, expensive electricity and customer dissatisfaction.

---

**Increased Rates for Tribal Members not Served by "CCT Power"**

There is a valid concern that if "CCT Power" forms, the tribal members who are not served by "CCT Power" will be negatively impacted by increased electric rates. For example, if "CCT Power" were to take away some of the customers away from OPUD in East Omak, there is the concern that non-tribal members served by OPUD would see higher electricity rates. In theory, this is true since OPUD would have to find a way to make up for some of the lost revenue.

The extent of this risk is related to how much revenue "CCT Power" would be taking away from the current utility relative to the current utility's total revenue. If "CCT Power" is taking away a high percentage of the current utility's revenue, this risk is a real concern.

Forming "CCT Power" in East Omak to serve only the Casino and CIPV addresses this risk. If "CCT Power" serves only the Casino and CIPV and not any residential customers, OPUD would likely not be able to justify increasing residential electric rates since "CCT Power" did not take over any of OPUD's residential customers.

---