

## **Hualapai Tribal Utility Authority (HTUA) Meeting Minutes**

October 18, 2017, 9:10 AM to 12:10 PM, Hualapai Health Department, Peach Springs.

Board members:

Charles Vaughn, Chairman – present

Joe Montana, Vice-Chairman – present

Jamie Navenma, Secretary – present via telephone

Bill Cyr - present

Rory Majenty – absent

Support personnel and guests:

Kevin Davidson, Planning Director

Tom Mason, Rock Gap Engineering

Lauren Ferrigni, Fennemore Craig (via telephone)

Patrick Black, Fennemore Craig (via telephone)

Bob Becherer, IMEG (via telephone)

### **1) Call to Order**

### **2) Roll Call**

### **3) Review and Approval of Minutes from September 13, 2017, meeting**

In reviewing the discussion on tapping the AT&T fiber optic line for Ethernet service, Mr. Vaughn said the HTUA must first discuss the terms and conditions of the existing AT&T right-of-way and asked for a copy of the existing right-of-way agreement. Mr. Davidson said the offer from ACC Business to tap the AT&T fiber optic would be a wholesale contract with the tribe; however, the contract requires that Frontier Communication be the “last mile” provider. The HTUA may consider becoming the last mile provider or Competitive Local Exchange Carrier (CLEC). Mr. Black said becoming a CLEC would require the HTUA demonstrate some capacity to serve customers. This may require the HTUA to submit to the Arizona Corporation Commission’s (ACC) authority and infringe upon the tribe’s sovereign immunity. The Federal Communication Commission (FCC) regulates CLEC’s wheeling costs to prevent price gouging. Mr. Cyr advised the tribe not submit to the jurisdiction of the ACC. The Fort Mohave Tribal Utility

Authority has “last mile” provider status without oversight from the ACC. Mr. Vaughn advised we have Chairman Clarke send a letter to AT&T asking for the existing right-of-way agreement. Mr. Black added that the FCC has regulatory authority for fiber optic communications and the ACC oversees telecommunications in Arizona. Given these limitations, the tribe should look for other options to provide community wi-fi. Mr. Vaughn entertained a motion to approve the meeting minutes of September 13, 2017, as written. Mr. Montana made a motion to approve the minutes. Mr. Navenma seconded the motion. Motion carried 3-0-1.

#### **4) Project Updates**

##### **a. Proposed Power Line to Grand Canyon West**

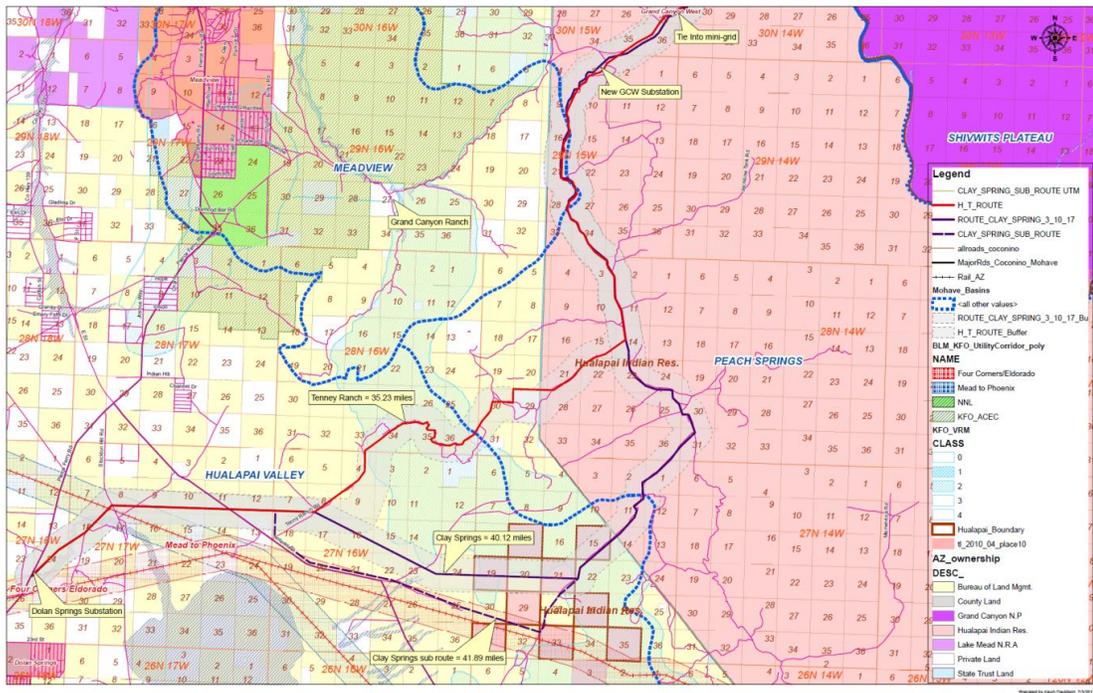
- i. Draft Interconnect agreement with UniSource and possible action** Mr. Davidson introduced the draft contract by saying the Board had tabled it at their September meeting to allow Mr. Black and Ms. Ferrigni to draft additional language, to wit, new Section 12.14. Ms. Ferrigni said the new section makes it clear that both parties contributed to the writing of agreement, have had it reviewed by their respective counsels, enter into it of their own free will, and will not construe the agreement against the other party. Mr. Vaughn said he liked the new language in Section 12.14. Mr. Black also pointed out minor changes to Section 3.2 and 3.3. Mr. Cyr asked if UniSource has seen the contract. Mr. Black replied that the contract will be sent to UniSource once the HTUA and Council agree to the draft.

Mr. Cyr asked about the urgency and sequence of presenting items to tribal council for approval. Mr. Davidson said the draft interconnection agreement is the most urgent, then the surveying and the environmental contracts. Mr. Cyr asked about the source of funding for the power line. Mr. Davidson replied the funding will be coming from a RUS/USDA grant, a RUS/USDA loan and possibly tribal cash. Mr. Vaughn noted that tribal council may show hesitation in approving a contract which contains a limited waiver of sovereign immunity. Mr. Cyr noted that Aha Macav Power Service (AMPS) has agreed to limited waivers of sovereign immunity to do business with outside power providers.

In regard to the 69 KV power line, Mr. Vaughn said this higher voltage is required to make Grand Canyon West a viable option as a water take out point for the yet to be settled Hualapai water rights case (Senate Bill 1770 has been introduced by John McCain and Jeff Flake). Mr. Vaughn also noted the ongoing northern border issue with the National Park Service and language in S.1770 which could affect the design of the take out point. Mr. Vaughn's preference is to have the take out point be at Grand Canyon West vs. Diamond Creek to reduce the cost of the project and deliver the water directly to the major user on the reservation. Mr. Cyr made a motion to approve the draft agreement and forward it to tribal council so they in turn may authorize the HTUA to transmit it to UniSource. Mr. Montana seconded the motion. Motion passed 4-0-1.

- ii. **Update on Right-of-Way application and Plan of Development for BLM** Mr. Davidson said in order for the BLM to process the tribe's SF-299 application for the right-of-way and the Plan of Development (POD), which describes the power line design and construction in detail, the tribe must enter into a cost reimbursement agreement with BLM. Mr. Whitefield has prepared the agreement and estimates the amount to be \$33,723. Mr. Cyr asked about funding sources. Mr. Davidson said this will be paid for by the tribe. By consensus, the Board forwarded the cost reimbursement agreement with BLM to council for consideration.

69 KV Powerline Routes from Dolan Springs Substation to Grand Canyon West



**iii. Review and possible action on bids for power line survey** Mr. Davidson referred to the five bids received on RFP for the survey of the power line route to Grand Canyon West from Hunter/Atwell, Wilson & Company, Taney Engineering, Rick Engineering and Goldtooth Precision Solutions (GPS), with GPS having the lowest bid amount. Mr. Cyr asked if the survey is necessary to establish the route for the environmental consultant to follow. Mr. Davidson said the need for the preliminary survey was discussed with IMEG after the bids were received in 2016 when UniSource was managing the project and each interviewee expected the route to be marked. Mr. Vaughn asked Mr. Becherer if the surveyor must have experience in marking a power line. Mr. Becherer replied that having experience with linear infrastructure is the perquisite whether it is a power line, pipeline or roadway. Mr. Becherer said the surveyor the tribe selects should have enough staff to perform the survey in a timely manner so as not to slow down the field work by the environmental consultant. Mr. Vaughn asked if GPS has enough staff to meet the tribe's time line. Mr. Becherer said they appear to be a small outfit and he has concerns. Mr. Vaughn said GPS should stand behind their bid promise, regardless. Mr. Black suggested an in-person interview and Mr. Cyr requested a reference check of each bidder's clients. Mr. Davidson noted that GPS will be using their own unmanned aircraft (drone) to aerial photograph the routes. This may be a significant cost savings vs. contracting with an aerial reconnaissance company using manned aircraft. The board directed Mr. Davidson to set up interviews with GPS and Taney Engineering on Monday, October 30, 2017.

**iv. Review and possible action on bids for environmental services for power line** Mr. Davidson next referred to the four bids received from SWCA, Transcon, Tierra Right-of-Way, and Westland for the environmental review of the power line. Given that the bids were received less than 48 hours before the meeting, the Board directed Mr. Davidson to invite the top three bidders to an in-person interview on Monday, October 30, 2017.

**b. Cost of Service Study**

**i. Progress to Date** Mr. Davidson gave an overview of new information on MEC's electrical distribution system on the Hualapai Reservation which includes the book value of the capital, cost of power delivery, and operational costs. This information was obtained with the HTUA's \$6,100 payment to MEC. The original electrical distribution system dates from 1947, with

several line extensions over the years, most notably the construction of the 70-mile power line between the Nelson Substation and the Havasupai Reservation in 1981. The gross book value is estimated to be \$5,164,173.33 which includes structures (poles), assemblies (anchors, cross-arms, insulators, switches, etc), circuits (lines), transformers, regulators and meters. The average cost of monthly maintenance, based on the past 20-months, is \$5,521.42. MEC's cost of bringing energy and transmission to Hualapai in 2016 was \$543,801.73 and \$4,869.62, respectively.

Mr. Cyr said the consultant's use of comparables from other small utilities throughout the nation may not be relevant to the HTUA, nor is looking at the original HTUA feasibility studies from 2007 and 2009. The Cost of Service study should address the HTUA's unique situation and provide the best strategy for the HTUA to move forward to become a distribution utility. The study should take into account future electrical loads, as well as forecasts for expenses and revenues. Mr. Vaughn said the HTUA's taking over of the electrical distribution system in Peach Springs before we deal with the cause of the power outages, which appear to be mostly off-reservation, is putting the cart before the horse. Mr. Cyr said one way to improve reliability of service is to have multiple transmission lines serving the community. In regard to the cost of power for the HTUA, these amounts will be likely lower than what MEC is currently paying for electricity. Providing power to Peach Springs should be developed as a pilot project so the HTUA can gain experience and leverage future capital.

Mr. Cyr added that Western Area Power Administration has an obligation to serve tribes. Mr. Davidson asked if that obligation would go so far as building a substation on one of their high-voltage transmission lines. The new power line to Grand Canyon West will cross under both the Mead-Phoenix (500 KV) and Mead-Liberty (345 KV) power lines and could obviate the need to tap into UniSource's grid. Mr. Davidson said a Western substation in the Hualapai Valley would also allow the tribe to construct a utility-scale solar array on its trust lands south of Clay Springs. Mr. Vaughn said that the Hualapai perspective on the power issue is somewhat different.

Mr. Montana noted MEC's attempt to abandon its infrastructure within the Hualapai portion of its CC&N, namely the 70-mile line to the Havasupai Reservation. Mr. Vaughn reiterated that reliability of service must be solved before the HTUA takes over the distribution system. Mr. Cyr

emphasized that having electricity come from multiple sources/lines will provide system redundancy.

**c. Community-Scale Solar Array Feasibility Study**

**i. Presentation by Mr. Mason** Mr. Mason began his presentation by saying that Rock Gap Engineering is the only Native American-owned company that designs and constructs large-scale energy projects. The solar feasibility study will be integrated into the upcoming DOE grant application which may be used by the tribe to off-set up to \$1 million in construction costs. The key elements for a successful solar project include: 1) abundant sunlight – 8.5 kWh/day/square meter, 2) adequate land area, 3) access to electrical transmission, 4) low project costs, 5) a Power Purchase Agreement (PPA) with a buyer, 6) cultural appropriate land site, and 7) allocation of benefits to the tribe. Mr. Davidson said the first site considered was the area next to the Hwy 66 Mile Post 96.4 pump house. This site has access to a three-phase power line and is adjacent to two of the largest users of electricity on the reservation - the well field and the Music Mountain School which now houses Grand Canyon Resort Corporation's headquarters. However, the site may not be in line with MEC's expectations of having most of the load between the solar array and the nearest substation. The site will also require additional land clearing to make suitable for construction. Mr. Vaughn asked if the study will be considering a location in the Truxton Triangle which is just across the highway to the west. Mr. Davidson said this property had not yet achieved trust status when the project began, so no.

The second site is located along Nelson Road, just west of the Hualapai Reservation's southeastern boundary with the Lhoist Lime Plant. Mr. Mason noted the site has adequate land area (7-acres), good access to three-phase transmission, should not have high construction costs and may be culturally appropriate given the findings of the Tribal Historic Preservation Office. However, the site is next to the Nelson substation with the electric load centered to the west in Peach Springs, so a PPA may not be readily forthcoming from MEC. On the other hand, the site is about one half mile from the lime plant, so it may be possible to negotiate a PPA with Lhoist to sell them electricity. Mr. Cyr asked if emissions from the lime plant would affect the array by causing residue to accumulate on the solar modules. Also, is Lhoist open to a PPA? Mr. Vaughn said sometimes emissions from the plant roll into Peach Springs. Mr. Davidson said the plant's

emissions should be under the jurisdiction of ADEQ. The biggest source of air pollution is most likely from the vehicles driving on the adjoining gravel road and kicking up dust. To limit dust, the road may be treated with magnesium chloride, akin to the application on Buck and Doe Road adjoining the Westwater solar array.

The third site, and most likely candidate for the array, is west of Peach Springs along the railroad at BNSF's West Peach Springs Signal. Mr. Davidson said the site may be obscured from view when standing in the Peach Springs cemetery, some 2,000 feet away and on the opposite side of the railroad tracks, because the railroad bed is raised above the Truxton Wash flood plain and prevents the viewer from seeing the land where the array will sit. However, the array will be visible from Highway 66 on either side of Mile Post 102. Mr. Mason said this site has similar attributes as the second site; however, a PPA may still be an issue, even though it fits MEC's sequence of array-load-substation, the price MEC is willing to pay the tribe makes the project unfeasible without significant grant support. Mr. Vaughn asked if the site requires much grading. Mr. Mason said the site's gentle downward slope from north to south will actually help the array's output. The Nelson site is nearly flat.

To continue with the PPA, MEC is asking for the size of the array to be no more 500 KW and that the PPA be priced at no more than \$30/MWh. MEC's restrictions put a severe financial restraint on the economic model and makes either a fixed-tilt or tracking array unfeasible, with paybacks estimated at 48 years and 39 years, respectively. This is longer than the warranty on the solar modules or PPA which are typically 25 years each. A third-party investor could be sought who can take advantage of the federal tax credits for solar. Given these limitations, Mr. Cyr said that a community-scale solar array placed "in front of the meter," may not make sense, and that placing solar arrays on individual roof tops may make more sense because MEC offers a net-metering program for solar arrays that are placed "behind the meter."

Mr. Mason said the DOE's 50/50 matching grant would make the community-scale project somewhat more palatable, by reducing the construction cost some 50%. Increasing the array's size to 1 MW will reduce the payback to 30 years or less depending upon the use of a fixed-tilt or a tracking array. Increasing the PPA's value to \$60/MWh will reduce the payback 15.14 years using the fixed-tilt array and 12.26 years using tracking technology. Adding the DOE's matching

grant would reduce the payback time frames by half. If the Lhoist is open to negotiating a PPA at \$75/MWHR, a 1 MW tracking array without a DOE grant, would see a return on investment in less than 10 years. Mr. Vaughn asked if the Nelson site could provide electricity at the proper voltage to the mine. Mr. Mason replied that the electric voltage could be stepped up to meet their needs. Mr. Davidson asked if the language in the draft PPA he presented at the September Board meeting would be appropriate to for Lhoist? Mr. Black said that the ACC is looking to phase out net-metering. The \$30/MWh offer from MEC is typical of the current power market, with some PPAs being lower still. Mr. Vaughn noted the benefits of producing the power locally and not supplying it to MEC.

**d. Community Wi-Fi**

Given the above discussion on determining the status of the AT&T right-of-way as a prerequisite to entering into a contract with ACC Business for Ethernet service, this item was continued to a later Board meeting.

**5) Review of FY 2017 Budget and FY 2018 Budget Request (Planning)**

- a. Expenditures to date** Mr. Davidson said the HTUA has spent \$138,747.36 as of October 9, 2017. These have largely been payments for professional services related to the power line to Grand Canyon West.
- b. Expenses for FY 2018** Mr. Davidson reviewed the proposed HTUA budget for 2018 with funds set aside for a General Manager (\$64,824) legal counsel (\$90,000), engineering consultants (\$351,100), and training for linemen apprenticeship program (\$20,000). The Finance Department asked for the budgets early this year so the draft budget showing a total request of \$668,015.04 was submitted on October 13, 2017. Mr. Cyr asked if the HTUA had a source of revenue. Mr. Davidson a new solar array could be a future source of revenue for the HTUA. Currently, the benefit arrangements with Navajo Tribal Utility Authority and Pechanga Tribal Utility Authority for the tribe's two WAPA hydropower allocations are deposited into the General Fund. Given the uncertainty of the contract awards, the HTUA's 2018 budget may be

modified. The HTUA Board may consider the budget again at their October 30, 2017, meeting after interviewing the prospective bidders and making a selection

**6) Other Matters (Planning)**

- a. Preparation of Annual Report to Tribal Council per Section 110, HTUA Ordinance** Mr. Davidson will have the draft annual report ready for the HTUA to review at their November Board meeting.
- b. Distribution of WAPA Contract 17-SLC-0817** Mr. Davidson will bring the WAPA contract to the meeting on October 30, 2017.
- c. Announcements** Mr. Davidson announced the DOE will be holding their annual program review of tribal renewable energy projects in Denver from November 13<sup>th</sup> to the 17<sup>th</sup>. No other announcements.

**7) Set time and location for next meeting** The next meeting will be held on Wednesday, November 15, 2017, at 9:00 AM at the Hualapai Health Department, Peach Springs.

**8) Adjourned at 12:10 PM**