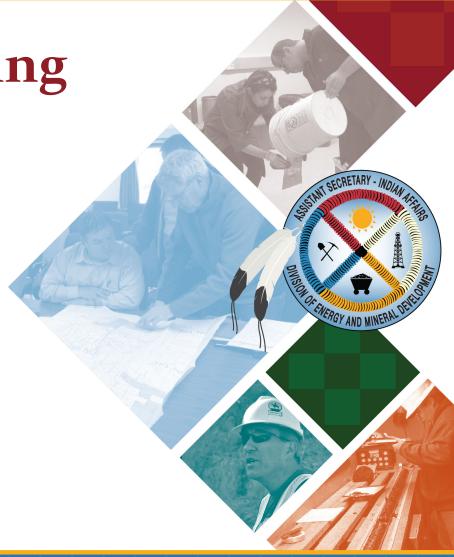
NAFOA: Powering Up, Financing Tribal Energy Projects



Payton Batliner CHEROKEE NATION Economic Development Specialist Acting Branch Chief, Business Services Branch



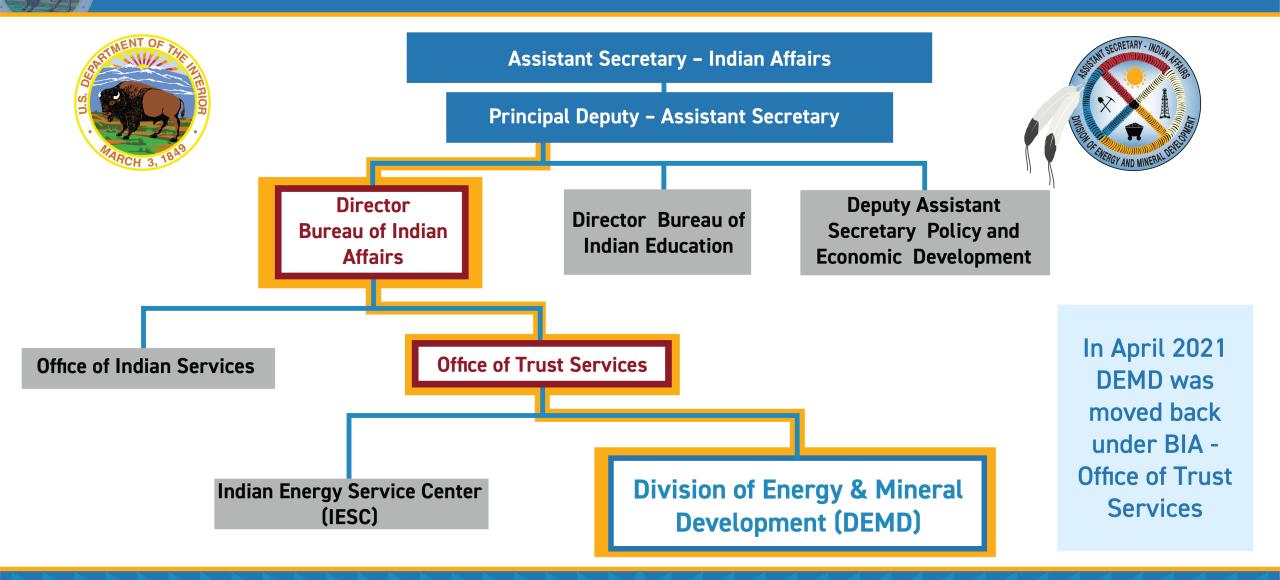
BUREAU OF INDIAN AFFAIRS DIVISION OF ENERGY AND MINERAL DEVELOPMENT

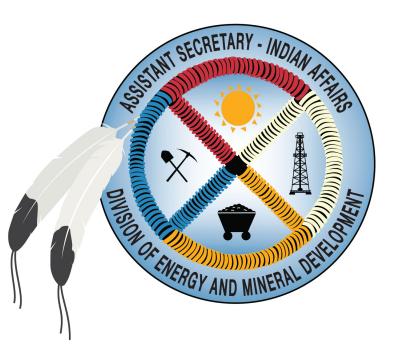




Payton Batliner CHEROKEE NATIONEconomic Development SpecialistActing Branch Chief, Business Services Branch

Payton Batliner is an Economic Development Specialist and Acting Branch Chief of the Business Services Branch within the Department of Interior's Division of Energy and Mineral Development (DEMD). He has worked at DEMD since 2009. He works across all commodity groups in the Division and specializes in business planning, financial analysis, and Tribal Utility Formation. Payton holds an MBA with an emphasis in finance and entrepreneurship from the University of Colorado at Boulder. He is an enrolled member of the Cherokee Nation of Oklahoma, and was born on the Pine Ridge Reservation in South Dakota.





DEMD Mission

Provide the best possible technical and economic advice and services in assisting Indian mineral owners to achieve economic self-sufficiency by creating sustainable economies through the environmentally sound development of their energy and mineral resources.

FLUID MINERALS

Team of professionals provides technical support, mineral assessments, economic analysis, lease negotiations and recommendations for all oil and natural gas energy resources.

SOLID MINERALS

Solid Minerals staff supports Tribes and allottees in assessing and developing their mineral and aggregate resources, resource evaluation and bringing resources into production and profitable joint ventures.

GEOTECHNICAL DATA SERVICES

Geotechnical Data Team maintains seismic datasets and provides data to oil and gas companies or other investors who are interested in exploration and developing new reserves on Indian lands.

NIOGEMS

NIOGEMS is a map-oriented computer software application for managing reservation oil and gas lease, well, production, and other energy/mineral resource data. Training and support are all provided at no cost.

RENEWABLE & DISTRIBUTED GENERATION

Renewable and distributed energy team is committed to helping Tribes formulate and implement energy development strategies, pre-feasibility studies, and consultation to best fit with their unique circumstances and long-term visions.

ed energy team

DEMD Branches provide the best technical assistance to federally recognized Tribes, including Alaska Native Villages to identify and implement opportunities to maximize their revenue stream and resource development.

BUSINESS SERVICES

Business Services provides strategic and economic planning guidance and business structure. Grant Programs and Marketing services.



Business Services Branch

Provides strategic financial analysis, business structure consultation, and economic development planning guidance across all energy and mineral development projects.

Key Services offered to Tribes:

- » Business Planning, Entity Formation & Project Management
- » Deal Structuring & Evaluation
- » Financial Analysis

- » Assistance Accessing Grant Funding and Loan Guarantee Financing
- » Marketing Department offers a wide variety of marketing services to energy and mineral projects

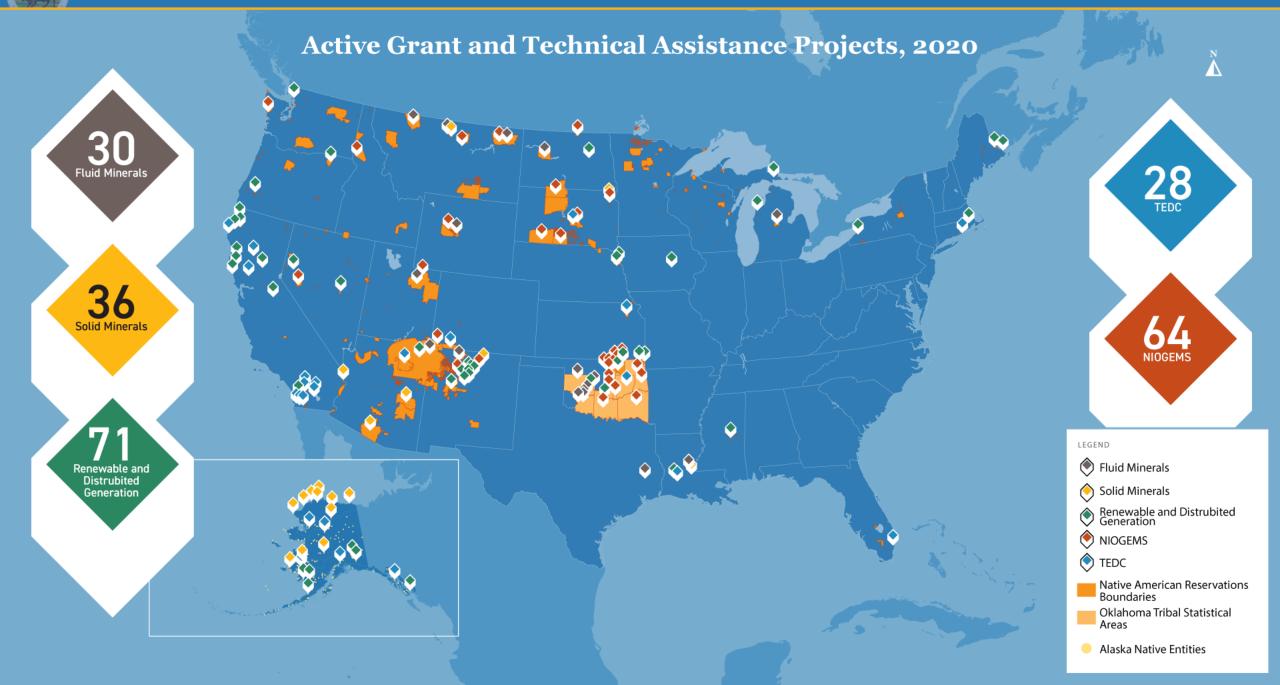
DEMD Grants: TEDC & EMDP

229	\$8.1мм	~\$6мм	~\$1.5мм
Active Grant and Technical	Grant Funded	Awarded Annually	Awarded Annually
Assistance Projects	to Tribes	Energy and Mineral Development Program	Tribal Energy Development Capacity
2020 Funding	2020 Funding	(EMDP) Grant	(TEDC) Grant

To develop tribal economies and promote development that maximizes the economic impact of energy resources on tribal lands







Grant Programs and Services

EMDP-Energy and Mineral Development Program

FOAs Coming Soon!

- Grant program to assess, evaluate and promote development of tribal energy and mineral resources
- \$5 Million to \$9 Million Annually

TEDC-Tribal Energy Development Capacity Program

- Grant program to develop tribal managerial, organizational, and technical capacity to maximize the economic impact of energy resource development on Indian land.
- \$1 Million to \$1.5 Million Annually

Technical Assistance

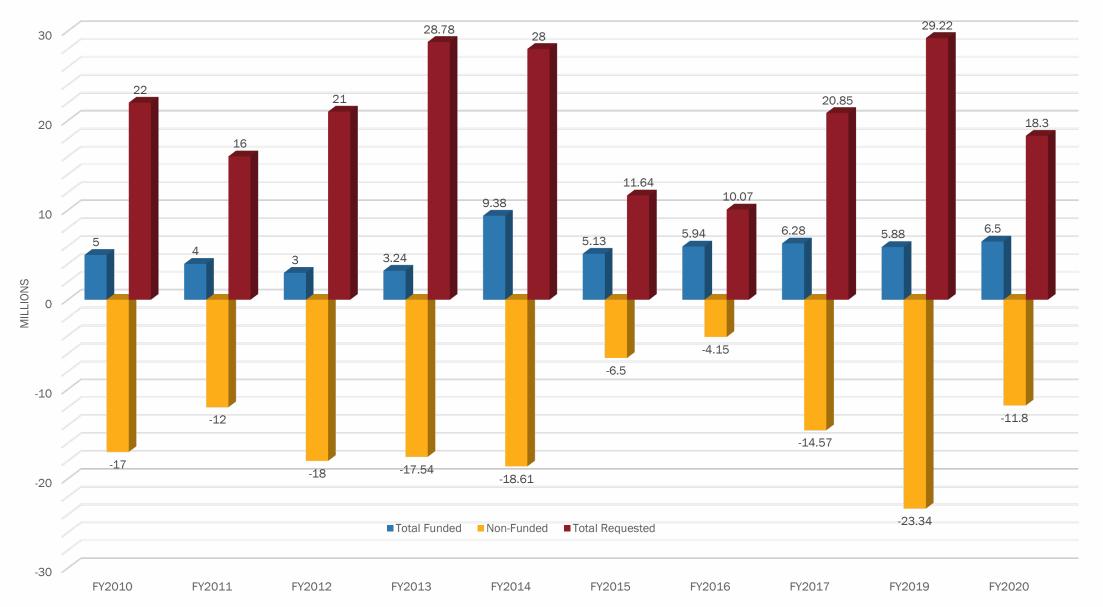
BUSINESS SERVICES

- Liaison between Tribes and Industry
- Consultation on developing business models on reservations
- Assist Tribes with negotiation of resource development agreements
- Strategic and economic planning





Energy and Mineral Development Program (EMDP) Grants - Unmet Need



FY2015 FY2016 FY2017 FY2019 FY2020 10 8.4 7.18 8 4.61 6 3.26 3.11 1.73 1.55 1.42 1.6 1.03 2 Millions 0 -1.56 -1.53 -2 -3.58 -5.76 -6 -6.9 -8

Tribal Energy Development Capacity (TEDC) Grants - Unmet Need



TRIBAL ENERGY DEVELOPMENT CAPACITY (TEDC) GRANT PROGRAM

- Grant program to develop tribal managerial, organizational and technical capacity to maximize the economic impact of energy resource development on Indian land
 - Establish business entity structures and/or organizational structures related to energy resource development Business development capacity
 - Develop or enhance key regulatory activities

FY 2015 over \$1.5 Million awarded

• 10 Total Project Awards

FY 2016 over \$1.4 Million awarded

• 16 Total Project Awards

FY 2018 \$1.488 Million awarded

• 16 Total Project Awards

FY 2019 \$1 Million awarded

• 12 Total Project Awards

FY 2020 \$1.55 Million awarded

• 16 Total Project Awards



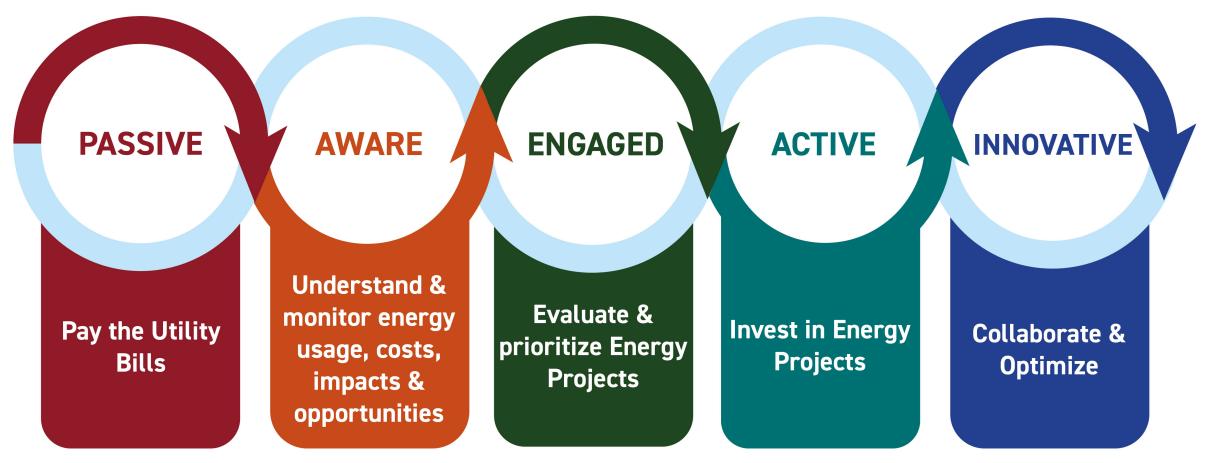
TEDC Grant Program Activities

- Developing legal infrastructure for business formation
- Establishing tribally chartered corporations under tribal corporation codes
- Establishing tribal business charters under federal law (IRA Section 17 corporation)
- Establish Tribal Utility Authority
- Developing or enhancing tribal policies, codes, regulations, or ordinances related to regulating and developing energy resource(s)
 - Land lease regulations for energy development purposes
 - Helping Expedite and Advance Responsible Tribal Homeownership (HEARTH) Act
- Adopting secured transaction codes and subsequent joint power agreement with the tribe's respective state.



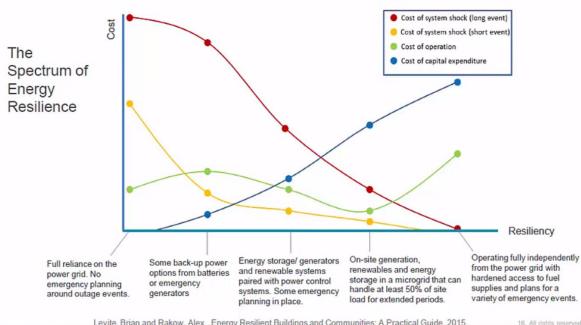
ENERGY DEVELOPMENT CAPACITY

Capacity Development Process



Source: Midwest Tribal Energy Resources Association (MTERA)

Planning With Resilience In Mind



Range from low to high preparedness

BUSINESS SERVICES

Comprehensive Energy Infrastructure Planning and Deployment

- Microgrids identify critical functions, design the best system to maintain during crisis.
- Tribal Utility Authority first step in taking true ownership of critical utility functions including resiliency planning for critical infrastructure

Levite, Brian and Rakow, Alex. Energy Resilient Buildings and Communities: A Practical Guide, 2015.

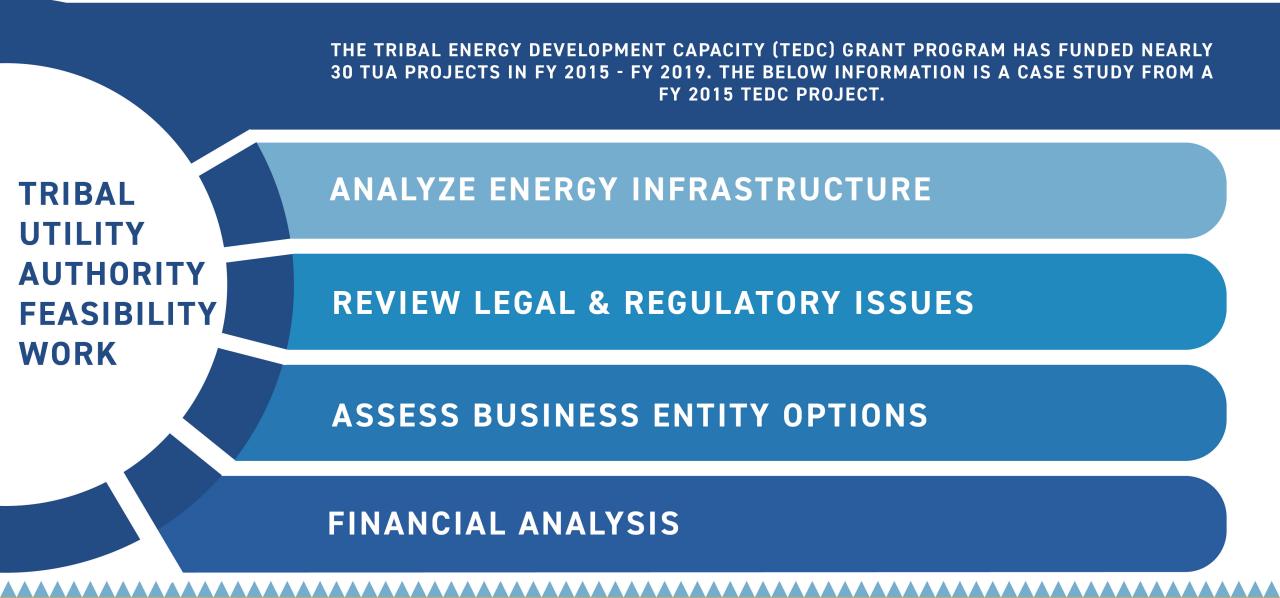
Why Focus On Utility Development?

Tribes spend on average \$2-\$3 million per year on electric power.

BUSINESS SERVICES

- This can range from a low of a couple hundred thousand up to \$20+ million for large casino/resort tribes.
- Extrapolated to all Federally recognized tribes this is a \$1-\$2 billion dollar annual market.
- The Utility market on Tribal lands is largely owned, operated, and controlled by third party incumbent utilities who may or may not have the tribe's best interests in mind.
- Tribes need to, and are, taking a more active role in managing these assets.







ANALYZE ENERGY INFRASTRUCTURE

TRIBAL UTILITY AUTHORITY FEASIBILITY WORK

Existing Infrastructure

Electrical

A sub-station is located on Tribal lands - Offers access to wholesale market.

Total distribution lines: 23.96 miles





A gas pipeline with a pressure reduction station sits within the Pueblo (but does not appear to lie on Pueblo lands)

There is local gas and electric infrastructure that could provide ready access to wholesale markets



ANALYZE ENERGY INFRASTRUCTURE

TRIBAL UTILITY AUTHORITY FEASIBILITY WORK

Current Consumption Electric

Largest consumer of electricity is estimated to be the residents of the Pueblo - 84% of load.

Tribal office building also a large load, followed by water wells

TG spend is estimated at \$58k/year



Estimated total electrical load: ~2,234 MWh/year

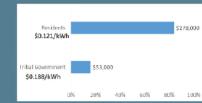


ANALYZE ENERGY INFRASTRUCTURE

TRIBAL UTILITY AUTHORITY FEASIBILITY WORK

Cost-of-service

Total Spend



Average blended rates (including fixed charges) on Pueblo lands: **\$0.132/kWh**

Total Spend: \$331,000/year

The "rate to beat" is \$0.132/kWh Annually, the tribe pays \$331,000 of which \$132k is for 'non-energy'

JMEC system costs

Blended Rates 60% of cost covers power General and Admin, Capital Recovery, and Distribution Costs each make up 10-15%

a) so on image of the gy
 \$53k on JMEC General and Administration
 \$41k on JMEC Capital Recovery
 \$55k on distribution operations and maintenance
 \$5k on other JMEC expenses

Equivalent Annual Spend on Pueblo of Zia lands



POZ TUA	JMEC
10.5	7.9
93,239	96,692
	10.5

Generation vs. Distribution Payments

Blended Rates Rates broken 60/40 into energy charges and operation of the distribution utility Estimated spend: \$199k on energy \$132k on distribution

REVIEW LEGAL & REGULATORY ISSUES

TRIBAL UTILITY AUTHORITY FEASIBILITY WORK

Expired JMEC ROWs



Other tribes in JMEC service area have settled expired ROWs for \$millions

Other ROWs

TriState Right-of-ways

Tristate has a 69kV transmission line running across the Pueblo and owns the sub-station. These are also understood to be in trespass.

Gas Pipelines

Right-of-ways

The natural gas facility is located on private property, however, the pipeline runs across the Pueblo. We believe that this right-of-way is current.





Zia has significant leverage over JMEC as a consequence of the expired ROWs



REVIEW LEGAL & REGULATORY ISSUES

TRIBAL UTILITY AUTHORITY FEASIBILITY WORK

State and Tribal Laws

Tribal Law: Utility Ordinance

Utility Ordinance is drafted for Water, Waste Water, and Solid Waste The Tribe can expand this to include electricity.

Ordinance creates an organization with some separation from the Tribe: See Organizational Assessment



Other Legal Issues

Based on 'Rate Rider 19', JMEC can pass part of the ROW costs back to customers located within Tribal territory. This 'blunts' the leverage available through this trespass but it still exists.

Based on the asset map of JMEC Facilities on Pueblo of Zia's lands, 48.7% of the cost of any ROW settlement would be passed on to Zia members.

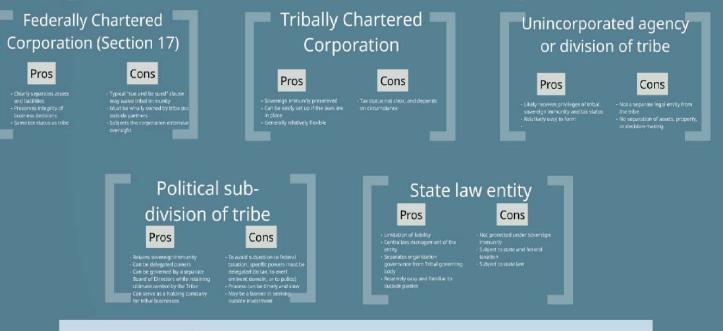
Baker Tilly has not identified any legal/regulatory "fatal flaws", but legal counsel is needed



ASSESS BUSINESS ENTITY OPTIONS

TRIBAL UTILITY AUTHORITY FEASIBILITY WORK

Organizational options



A number of organizational options exist

ASSESS BUSINESS ENTITY OPTIONS

TRIBAL UTILITY AUTHORITY FEASIBILITY WORK

Possible Changes

- 1. Provisions for Policy Governance
- 2. Training of Commissioners
- 3. Outside Commissioner(s) expertise
- 4. Outsource Management
- 5. Sheltering the Tribe
- 6. Cost of Service Studies as basis for rate setting



SECTION 3.04 TREAL UTILITY COMMISSION POWERS AND

RESPONSIBILITIES: The Fribal Utility Commission shall manage govern the public utilities of the Table, and authorize the obtain and distances possibilities and distances and fundates

sized for planning, construction, operation, maintenance, training, and expansion of the triou

ASSESS BUSINESS ENTITY OPTIONS

TRIBAL UTILITY AUTHORITY FEASIBILITY WORK

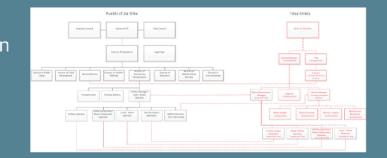
Preferred Org. Options

Preferred organization option is a subordinate unit of government, the "Tribal Utility Commission", with Divisions reporting to the commission (water, waste water, solid waste, and electricity)

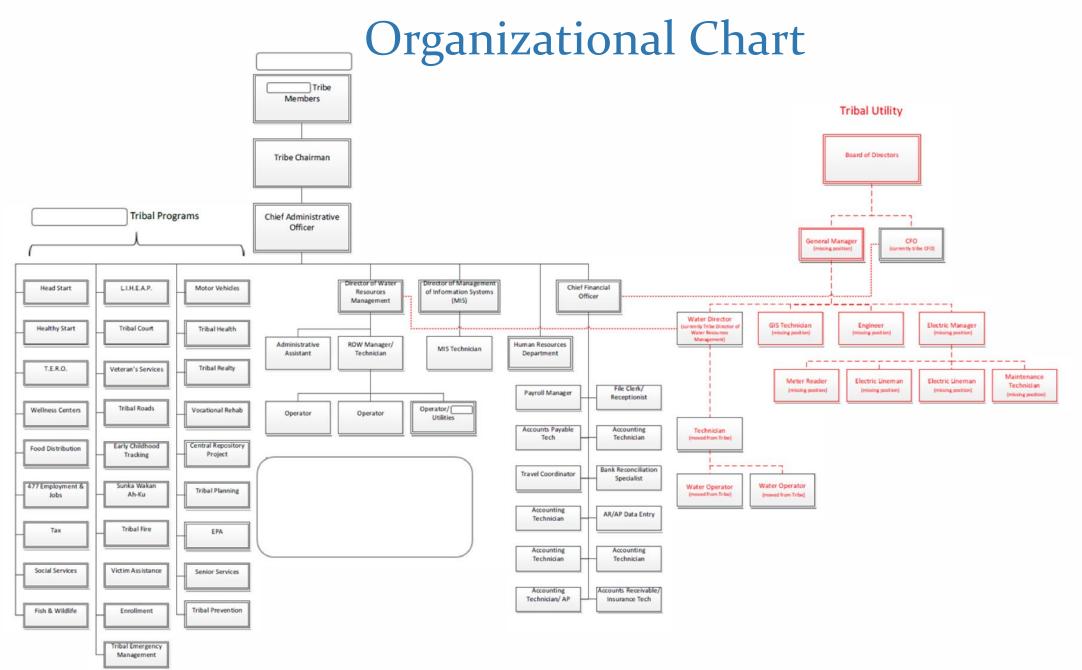
Management and Governance should be delineated Training of commissioners is important

Org. Chart

- Key position: GM!
- The same positions exist in water, waste water, and electric utilities
- Big opportunities for efficiency!



Many positions exist today, or can be filled by contract. Exceptions: GM and Meter Reader



FINANCIAL ANALYSIS

Comp

TRIBAL UTILITY AUTHORITY FEASIBILITY WORK

	Trik	oal Utility Alternative	Estimated Upfront Cost	Potential Annual Savings	Benefits	Potential Issues & Risks
re plex	1	Full Tribal Utility	\$5-10 Million	0%* *Unlikely to achieve short term savings	 Reinvest utility revenues Full control over power supply and cost Ability to add jobs 	 Tribe solely responsible for service reliability High up-front cost
	2	Outsourced Tribal Utility	\$2-8 Million	9%	 Reinvest utility revenues Full control over power supply and cost Possibility to add jobs in future 	 Need to coordinate with third parties to ensure service reliability
	3	Control Power Supply Only	\$0-800 Thousand	4%	 Full control over power supply and cost No change in provider 	 Need to establish regulatory framework Need to negotiate with Trico to allow power purchase
is blex	4	Control Service Territory Only (Not a Tribal Utility)	\$0-800 Thousand	15%	 Ability to select electric service provider Residential rates most likely to go down 	 No benefits of tribal utility Likely to pay charges related to infrastructure Fully reliant upon new provider No control over future cost or power supply
	-	Status Quo (Not a Tribal Utility)	\$0	0%	• No change to Trico service	 Reliant upon Trico No control over cost or power supply

For more information on EMDP and TEDC Both grant FOAs can be found on Grants.gov



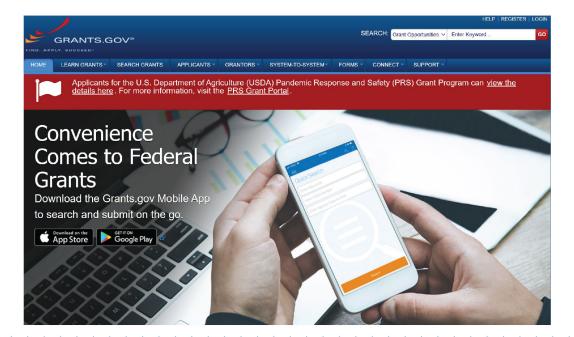
FIND. APPLY. SUCCEED.84

Technical Assistance:

- » Microgrid
- » Solar
- » Wind
- » Biomass



Grants.gov



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www.bia.gov/DEMD





