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How Citizen Potawatomi Nation utilizes energy efficiency and renewable energy to address its high energy burden

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ABSTRACT

Tribal lands comprise 2% of the United States but contain 5% of the potential renewable resources totaling over 14 billion MWh of energy generation potential. A vast majority of this potential has been undeveloped. Challenges such as difficulty accessing capital, securing interconnection and power purchase agreements, and persistent poverty have hindered energy development. The Citizen Potawatomi Nation is recognized for utilizing energy efficiency and renewable energy to address its high energy burden.

1. Introduction

1.1. Background

Tribal lands comprise 2% of the land base but contain 5% of the potential U.S. renewable resources, totaling over 14 billion MWh of energy generation potential in Indian Country.² However, the vast majority of this potential has been left undeveloped. Challenges such as difficulty accessing capital, and securing interconnection and power purchase agreements,³ along with persistent poverty have hindered energy development throughout much of tribal lands or Indian Country. However, there are emerging examples and case studies that highlight tribal energy project successes. This case study highlights the Citizen Potawatomi Nation for its efforts in utilizing energy efficiency and renewable energy to address the high energy burden throughout the nation.

There are 567 federally recognized tribes in the U.S.⁴ In the 1950s, Congress enacted the Termination Policy with the goal of releasing tribes from federal supervision and terminating the federal government-Indian relationship. Federal recognition of some tribes was withdrawn. In 1971, the Alaska Native Claims Settlement Act established 13 for-profit corporations to manage land and water settlement claims. In 1975, the Indian Self-Determination and Education Assistance Act

allowed tribes to assume some activities carried out by the Bureau of Indian Affairs (BIA) or other federal agencies. The Supreme Court has repeatedly upheld the unique relationship that tribal governments have as domestic dependent nations, under which the federal government has a trust obligation to protect tribal lands and resources. The federal government has enacted numerous statutes and issued executive orders detailing the trust relationship with Indian tribes. Tribes have their own democratically elected governments with civil courts, jurisdiction over minor crimes, and are empowered to manage local affairs with tribal agencies.

States with Largest Total Number of Indians are California (723,225), Oklahoma (482,760), Arizona (353,386), Texas (315,264), New York (221,058), New Mexico (219,512), Washington (198,998), North Carolina (184,082), Florida (162,562), Michigan (139,095), and Alaska (138,312).

1.2. Tribal energy challenges

As previously described, the energy challenges of Indian Country are as diverse as its composition. Affordability, electrification in remote areas, and resource development are some key challenges that are common.

¹ Sandia National Laboratories is a U.S. multi-mission laboratory managed and operated by National Technology and Engineering Solutions of Sandia, LLC., a wholly owned subsidiary of Honeywell International, Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525. This paper describes objective technical results and analysis. Any subjective views or opinions that might be expressed in the paper do not necessarily represent the views of the U.S. Department of Energy or the United States Government.

² Doris, E., Lopez, A., Beckley, D., Geospatial Analysis of Renewable Energy Technical Potential on Tribal Lands, NREL, 2013, DOE/IE-0013.

³ Jones, T., Necefer, L., Identifying Barriers and Pathways for Success for Renewable Energy Development on American Indian Lands, SANDIA REPORT, SAND2016-311J Unlimited Release November 2016

⁴ Website <https://www.federalregister.gov/documents/2018/01/30/2018-01907/indian-entities-recognized-and-eligible-to-receive-services-from-the-united-states-bureau-of-indian-affairs>.

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1.2.1. Checkerboarding and fractionated land

Historic policies, including the Allotment Act of 1887 (also known as the Dawes Act), have led to challenges of “checkerboarding” of property ownership throughout Indian Country. “Checkerboarding.” creates small, mixed parcels of land that fall under various tribal, federal, or state jurisdictions, have different tax and land use policies, and often unclear title issues.

Additionally, land allotted to individual Indian families under the Dawes act has often been divided among all descendants. This creates land with fractionated ownership, or single parcels of land with multiple owners. One extreme example can be found in an 80-acre parcel of land on the Lac Court Oreilles Reservation that has 2285 owners.⁵

Unclear and checkerboarded property rights make it difficult to develop tribal lands, and pose challenges for energy development, construction of roads, transmission lines, and other infrastructure.

1.2.2. Persistent poverty

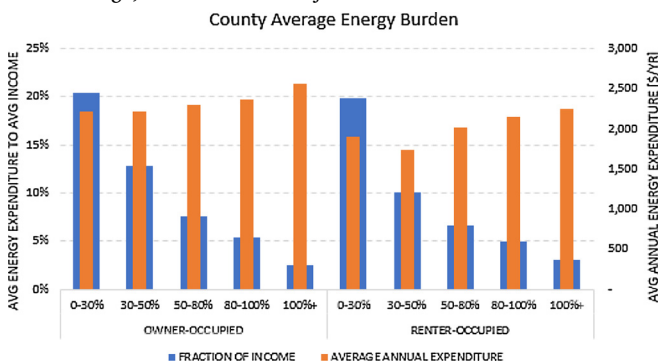
Indian Country is also generally characterized by persistent poverty. While there are exceptions, poverty rates on reservations are more than twice than the national rate with over 25% of Native Americans and Alaska Natives living in poverty.⁶ This persistent poverty strains tribal governments and creates many competing priorities for funding streams. This, in turn, further hampers development projects as much needed resources are funneled into housing, emergency, and economic relief programs.

1.3. Citizen Potawatomi Nation economic background

Citizen Potawatomi Nation (CPN) is the ninth-largest Indian tribe in the U.S. with over 33,000 members. The tribe was forcibly removed from its traditional homeland in the Great Lakes region in the early 1800s, and today is headquartered in Shawnee, Okla., about 35 miles east of Oklahoma City. As a result of the migration, its members are located in every state of the country and five foreign countries. Approximately 13,000 CPN live in Oklahoma with the remaining members residing outside of the state⁷

The majority of CPN members live in Shawnee, a city with a population of under 12,000 households where over 23% of the population lives below the federal poverty level. Renters and owners in the lowest income bracket in the country (0–30% of area median income) face an energy burden of over 20%.

Household income distribution for Shawnee, Okla., compared to the national average, 2013 Inflation Adjusted Dollars



Open Source: DOE’s EERE State and Local Energy Data tool,

⁵ Indian Land Tenure Foundation, “Issues,” <https://iltf.org/land-issues/issues/>. Accessed May 27, 2018

⁶ U.S. Census Bureau. We the People: American Indians and Alaska Natives in the United States. 2007. Aug. 16, 2007. Available at:<http://www.census.gov/population/www/socdemo/race/censr-28.pdf>

⁷ Interview with David Thomasson, Citizen Potawatomi Nation

Accessed on Oct. 5, 2017, available at: <https://apps1.eere.energy.gov/sled/>

CPN’s current chairman, John “Rocky” Barrett, was first elected 35 years ago after a private career in oil drilling and water well drilling. When he took over as head of the tribe, CPN’s government was housed in a Bureau of Indian Affairs trailer with only a few hundred dollars in the tribal bank account. Beginning in 1975, CPN began to take over the management of its own affairs and has since grown to become a major economic force in the region.

In 2007, the tribe drafted and adopted a new constitution. Until that time, it had a five-person government body, but in 2008, it voted in 16 legislators. Eight of the legislators live in Oklahoma and eight live outside of the state (two in California, one in Washington State, one in Arizona, one in Kansas, one in Texas, one in Missouri, and one in Washington, DC). This constitutional change was intended to bring the government to the people. Prior to the change, government meetings were held regionally. Under the new government, legislators have local meetings with their own constituents. This constitutional change increased membership participation nationally and allowed the tribe to better support its members’ needs. For example, the tribe offers scholarships to college age students and closing costs to any member who buys a home anywhere in the country. The nation has been recognized for its leadership by the Harvard Project on American Indian Economic Development, housed in the Harvard Kennedy School.

Chairman Barrett’s access to drilling equipment from his family’s private oil business, combined with the nation’s access to geothermal resources, set the stage for a future of energy independence and the capital saved in energy expenses was reinvested into tribal enterprises. The tribe started investing in geothermal resources in 2003–2004. It did not have exorbitant capital costs because of Chairman Barrett’s assets and was able to drill and power its tribal enterprises. Today, CPN owns three grocery stores, a golf course, a bowling center, health clinics, a community development corporation (CDC), and a grand casino and hotel. All of its enterprises are powered by natural geothermal resources, thereby relieving the tribe of high fuel costs. The tribes are currently exploring the possibility of creating their own tribal utility authority as they expand to further take control over energy expenditures. CPN owns a national bank that was federally chartered in 1989, the First National Bank and Trust of Shawnee Oklahoma, which has grown from \$16 million in holding to over \$230 million today. Through the bank and the CDC, the tribe is able to make loans to Native American businesses that are payroll-deductible in order to build credit. They also offer training on credit and finance education to members. With 42 facilities in total, there are a number of employment opportunities for members, so their unemployment rate is relatively low.

2. HUD-NAHASDA and CPN senior housing program

2.1. Description and history of program

CPN, like many tribal groups, greatly respects elders and has developed multiple programs to assist them in returning to tribal lands for retirement. Through the tribe’s collaboration with the U.S. Department of Housing and Urban Development (HUD), it has found an affordable means for elders to move back to Oklahoma; Chairman Barrett and Vice Chairman Linda Capps have traveled all over the country encouraging older CPN members to retire in Oklahoma. The goal of the program is to make the entire cost of housing – including energy for heating and cooling – affordable to fixed-income elders.

The 2014 HUD report *Continuity and Change: Demographic, Socioeconomic, and Housing Conditions of American Indians and Alaska Natives* noted that in 2011 approximately 9.3% of the American Indian and Alaska Native population was over 62 years old. This is significantly lower than the national average of 16% among non-Natives (Pettit et al., 2014). In both populations, the percentage of the elderly population is growing. In 2017, the U.S. Census Bureau reported that

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