Cover Sheet

DOE Award No.: DE-EE0006473

Type of Award: Community-Scale Clean Energy Projects in Indian Country

Applicant/Implementer: Forest County Potawatomi Community

Project Title: Installation of Solar Photovoltaic Systems

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Project Location: Tribal Facilities in Milwaukee and Forest Counties, WI.

Project Period: Start: June 1, 2014

End: March 31, 2016

Fuel use targeted in project: Solar Photovoltaic Systems

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Date: March, 2016

I. **Executive Summary**

The Forest County Potawatomi Community ("FCPC" or "Tribe") is a federally recognized Indian tribe with a membership of over 1400. The Tribe has a reservation in Forest County, Wisconsin, and also holds tribal trust and fee lands in Milwaukee, Oconto, and Fond du Lac Counties, Wisconsin.

The Tribe has developed the long-term goal of becoming energy independent using renewable resources. In order to meet this goal, the Tribe has taken a number of important steps

Forest County Potawatomi Community Land Base 2015

Figure 1 Tribal Land Base Map

including energy audits leading to efficiency measures,

installation of solar PV, the construction of a biodigester and the purchase of Renewable Energy Certificates to offset its current energy use. Finally, to address its vehicle-related emissions (as well as to lower energy consumption at Tribal government facilities) FCPC has established a four day work week for the majority of Tribal government employees. FCPC has also established an energy and carbon reduction strategy. As part of this strategy, FCPC has conducted several audits of its major facilities to establish a baseline year of 2007 for the FCPC's energy consumption and carbon footprint. The first energy audit was completed in 2000 and remains an important tool for FCPC to understand its energy consumption and future needs.

To further its energy independence goals, FCPC submitted an application to the Department of Energy ("DOE") and was awarded a Community-Scale Clean Energy Projects in Indian Country grant, under funding opportunity DE-FOA-0000852. The Tribe was awarded grant number DE-EE0006473 in 2014. The grant application proposed that FCPC, in collaboration with a selected contractor, would install approximately 737 kW of solar photovoltaic (PV) systems at a minimum of eight tribal facilities in Milwaukee County and Forest County, Wisconsin. The individual installations were intended to range in size from 11-500 kW and displace in excess of 15% of the total energy usage per building with each PV installation. The DOE grant supported approximately half of the \$2.8 million project cost. In forming FCPC, LLC, the Tribe was able to offset the remaining half of the project cost through the creation of tax credits that were provided to a non-tribal partner.

The Tribe, in collaboration with Pewaukee, Wisconsin based SunVest Solar Inc. (SunVest), installed approximately 922.95 kW of solar PV systems at fifteen tribal facilities in Milwaukee and Forest Counties. The individual installations ranged from 9.0 kW to 447.64 kW and will displace between 16.9% to in some cases in excess of 90% of each building's energy needs. The project focused on both government facilities and enterprises and utilized roof and ground mounts depending on site specific needs.

Key Objectives of the Project:

- (1) Install approximately 737kW of solar generation capacity at Tribally-owned buildings in Milwaukee and Forest Counties;
- (2) Increase the Tribe's renewable generation capacity with equipment that has low operations and maintenance requirements and costs;
- (3) Provide a good match between the renewable solar resource and the time of use of Tribal facilities; and
- (4) Be economically feasible by allowing for a payback of capital costs based on energy savings achieved over time.

Scope: The project was comprised of two phases and targeted tribal government and enterprise buildings that are significant energy users. The fifteen chosen buildings were viable based on engineering, structural standards, energy use and the overall benefit achieved from installation of solar PV. The project was carried out in less than the two year grant period. The first phase installations went online in January 2015 and the second phase was placed in service more recently, in November 2015. Thus, in Phase I there is approximately a year of production data while Phase II only has a couple of months.

Approach: The Tribe contracted with SunVest to provide technical assistance and oversight for the installations. SunVest was responsible for project design, engineering, analysis, and for providing the necessary PV components. An internal advisory group was created to oversee the project for the Tribe and to provide Executive Council with the project options and outcomes. The internal group met with SunVest regularly to discuss implementation of the project, analysis of options, potential concerns and finalization of each phase. In addition, FCPC worked with other outside parties and vendors including Wisconsin Public Services, WE Energies, installers, and inspectors. FCPC remained fully involved throughout the project and provided oversight of each installation at the sites and the project objectives as a whole.

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Project Overview

FCPC is a federally recognized Indian tribe with a government-to-government relationship with the United States. Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs, 80 Fed. Reg. 1942, 1944 (Jan. 14, 2015). FCPC is organized under the Indian Reorganization Act of 1934, 25 U.S.C. §§ 461-479, has a membership of more than 1400 people, and exercises governmental authority under a Constitution originally adopted on February 6, 1937.

Today, FCPC occupies the Forest County Potawatomi Reservation in northeastern Wisconsin, a landbase of over 12,000 acres. Historically, the Potawatomi occupied a large territory throughout the Great Lakes region that includes southern Michigan, northern Ohio, the northern half of Indiana and Illinois, and southern Wisconsin.

Until relatively recently, FCPC was one of the poorest tribes in the Midwest. However, due to its successful gaming operations it has improved its financial situation and is using its resources to benefit both its members and the general public through environmental and energy initiatives as well as other community efforts. Many of these efforts have been long delayed due to the extended period of abject poverty the Tribe faced.

The Tribe's long term energy goal of becoming energy independent using only renewable sources of green energy has encouraged a number of programs including annual audits, the purchase of renewable energy credits, extensive efficiency measures and the construction of a 2MW biodigester. The energy efficiency measures alone have allowed the Tribe to reduce its energy use per gross square foot by 13.6% and have reduced associated carbon emissions by 20.6%. These efficiencies have eliminated more than 13,700 tons of emitted carbon dioxide per year.

In 2010, and in partnership with DOE, the Tribe completed an upgrade of the lighting in the parking facility at Potawatomi Bingo Casino in Milwaukee, WI. The lighting upgrade reduced the facility's annual electricity use by approximately 73% and avoids approximately 1,912 tons in CO2 emissions per year. FCPC also partnered with DOE on its renovation of the historic Concordia College campus in central Milwaukee. The project resulted in an investment in over \$2.2 million in energy efficiency improvements. FCPC had also previously installed a solar PV system on the Tribe's Milwaukee Administration building. The project produces approximately 35,000 kW hours of clean electricity annually.

The Tribe has been able to develop the reservation with successful community facilities such as a Government/Executive Building, Health and Wellness Center, Museum, Recreation Center, Daycare and Preschool, among others. Additionally, the Tribe has developed programs and taken action in numerous environmental matters. For example, the Tribe helped lead an effort to evaluate potential impacts associated with a proposed Crandon Mine in Northern Wisconsin.

FCPC has also successfully obtained Class I status to protect its air resources and the associated air quality related values.

All of these, and many other, efforts have encouraged the Tribe to continue its environmental and energy efforts. The solar PV installations funded by this grant at 15 tribal properties help to continue FCPC's efforts to meet tribal members' and community goals as well as move towards self-sufficiency.

The 15 installations range in size from 9.0 kW and 447 kW and are a mix of both ground and roof mounts. Each installation offsets at least 16.9% of the host building's energy needs with some installations offsetting over 90%. As the project progressed, the Tribe and SunVest were able to meet the objectives more efficiently resulting in an increase from the originally projected 737 kW to over 900 kW installed PV systems.



Figure 2 Solid Waste Building

Project Objectives

Vision

FCPC has developed and is implementing a long-term energy goal and vision of being energy independent and using renewable, carbon-free or carbon-neutral energy. The Tribe's commitment to clean, carbon-free energy flows from its overall environmental ethic, which is reflected in the Tribe's Environmental Mission Statement, which has been formally adopted by the Tribe's Executive Council:

"The traditional values of the Forest County Potawatomi Community teach us to respect all living things, to take only what we need from Mother Earth, and to preserve the air, water, and soil for our children. Reflecting these values, we take leadership in creating a sustainable and healthy world. We resolve to reduce our own environmental impacts and to take steps to remedy the impacts of others. We encourage others to do the same. We also seek legislative and policy changes that protect the environment for all people, including generations to come."

The solar PV project represents important steps in both acknowledging the Tribe's environmental ethic and achieving the Tribe's long-term goals of energy independence and the utilization of clean, renewable energy sources. The project is intended to allow the Tribe to diversify its portfolio of renewable resources by developing significant solar PV energy facilities in addition to its existing 2 MW biodigester. Additionally, the project should encourage tribal and other renewable energy development by providing a model for community-scale solar energy projects that integrate public and private financing as well as unique partnerships. Finally, consistent with the Tribe's Environmental Mission Statement and its energy goals, the Project should reduce the Tribe's reliance on electricity generated by fossil fuels thereby lessening the negative environmental impacts and associated externalities from coal fired generation.



Figure 3 Assisted Care Building

Goals

The overall goals of the project, as identified in the application, are as follows:

- (1) Increase the Tribe's energy independence by increasing its capacity to generate clean, renewable power in an economically feasible manner. This goal is consistent with the Tribe's long term energy goal and vision to become energy independent using clean, carbon-free energy.
- (2) Reduce the Tribe's reliance on electricity generated by fossil fuels, especially coal, thereby lessening the negative environmental impacts associated with coal-fired generation. This goal is also consistent with the Tribe's long-term energy goal to become energy independent using clean, carbon-free energy, and its consistent with the Tribe's

- Environmental Mission Statement, which commits the Tribe to reducing its own environmental impact and taking steps to lessening the impacts of others.
- (3) Provide a model for other Tribes to deploy community-scale renewable energy projects. This goal is consistent with the Tribe's long-term energy vision and Environmental Mission Statement, which commits the Tribe to take leadership in creating a sustainable and healthy world. The project is particularly valuable as a demonstration that community-scale solar facilities are feasible for Tribes in northern climates. The project also provides a model for Tribes to integrate grants (e.g., Housing and Urban Development Block Grants, US Department of Agriculture Rural Energy for America Program grants etc.) with private financing to make renewable energy projects more cost-effective.
- (4) Allow the Tribe to diversify its portfolio of renewable resources by developing significant solar energy facilities in addition to its substantial biogas project. This goal is consistent with the Tribe's long-term energy goal and vision to become energy independent using clean, carbon-free energy, and is important to allow the Tribe to match the appropriate resource to each building, ensuring that the Tribe is not too dependent on any single renewable resource.

The specific project objectives, as identified in the application, are as follows:

- (1) Install approximately 875 kW of solar generation capacity at Tribally-owned buildings in Milwaukee and Forest Counties.
- (2) Increase the Tribe's renewable generation capacity with equipment that has low operations and maintenance requirements and costs.
- (3) Provide a good match between the renewable solar resource and the time of use of tribal facilities.
- (4) Be economically feasible by allowing for a payback of capital costs based on energy savings achieved over time.

Actual Accomplishment

The project was funded by a grant from DOE and the monetization of tax credits for a non-tribal partner. A limited liability company was formed between the Tribe and its partner so that the partner could take advantage of tax credits. FCPC worked with SunVest initially on a competitive request for proposals to identify suppliers and contractors for each project element. Additionally, the LLC coordinated Power Purchase Agreements with the Tribe so that the Tribe would receive all of the benefits of the renewable energy credits.

FCPC and SunVest developed the project in a two phase installation of solar PV systems. The project was broken into Phases to accommodate the construction season and fully analyze the suitability of various sites for solar. Additionally, the Tribe was interested in completing

installations that were most beneficial to its membership and would most effectively meet its energy goals of independence and the use of clean, renewable technologies.

Each Phase involved analysis of potential sites by the FCPC Energy Working Group; this analysis involved a review of quarterly carbon reports, energy bills, analysis of energy offsets per site, project costs, building suitability, cultural factors, an analysis of the location, square footage and the purpose of the building. In addition, a cultural and environmental review and approval as well as Executive Council approval were necessary for each project.

After the Tribe's initial approval of sites it was necessary to remove some projects from consideration and establish alternatives. The reasons for removing certain sites were varied but mostly related to a reevaluation of goals as well as the suitability of individual sites for solar PV systems. After the Phase I installations, the Tribe undertook a more thorough review of available sites and determined the best potential sites. In an email dated May 08, 2015, the Tribe provided DOE with the final Phase II sites and received approval to move forward.

The Phase I sites include:

- Potawatomi Bingo Casino, Milwaukee, WI (447.64kW);
- Natural Resources Building, Crandon, WI (22kW);
- Utilities Maintenance Building, Crandon, WI (23 kW);
- Recreation Building, Crandon, WI (62.25 kW);
- Solid Waste Building, Crandon, WI (19.5 kW);
- Assisted Care Building, Crandon, WI (86 kW); and,
- Emergency Management, Crandon, WI (23.56 kW).

The Phase II sites include:

- Rising Sun Daycare, Crandon, WI (24.8 kW);
- Gte-Ga-Nes Pre School, Crandon, WI (24.8 kW);
- Air Monitoring Station, Crandon, WI (12.5 kW);
- AODA, Crandon, WI (12.4 kW);
- Museum, Crandon, WI (49.6 kW);
- Ordinance, Crandon, WI (9kW);
- Stone Lake C-Store, Crandon, WI (80.6 kW); and,
- Property Management, Crandon, WI (24 kW).

These sites along with the likely energy consumption offset, system price, size and are listed in the table below.

	Projected Energy		
Site	Consumption Offset	System Price	Size
Potawatomi Bingo Casino	20.5%	\$1,231,010	447.64kW
Natural Resources Building	87.0%	\$ 66,000	22kW
Utilities Maintenance			
Building	63.0%	\$ 69,000	23 kW
Recreation Building	86.0%	\$ 186,750	62.25 kW
Solid Waste Building	100.0%	\$ 58,000	19.5 kW
Assisted Care Building	95.0%	\$ 259,500	86 kW
Emergency Management	26.0%	\$ 82,460	23.56 kW
Rising Sun Daycare	53.0%	\$ 47,430	24.8 kW
Gte-Ga-Nes Pre School	52.1%	\$ 73,400	24.8 kW
Air Monitoring Station	93.5%	\$ 43,400	12.5 kW
AODA	94.7%	\$ 46,500	12.4 kW
Museum	70.0%	\$ 173,600	49.6 kW
Ordinance	90.3%	\$ 37,200	9kW
Stone Lake C-Store	31.3%	\$ 282,100	80.6 kW
Property Management	97.2%	\$ 86,800	24 kW

One of the notable achievements through the grant period was FCPC's ability to increase the amount of installed solar from the original project application. The Phase I and Phase II projects together resulted in 922.95 kW installed solar. The average system price was \$3,034 kW as compared to the originally approved 737 kW at \$3,790/kW. The Phase II installations were able to include additional kW installed at more competitive pricing resulting in nearly 200 kW of additional installed solar above the original approval.

The active work of FCPC and SunVest in review and analysis ensured that FCPC met the goals established for this project. The Tribe installed more solar at a more competitive cost than originally anticipated, increased its energy efficiency and use of renewables, diversified its energy portfolio and provides a model for implementation of similar projects.

Description of Activities Performed

Approaches Used

FCPC used the approach it originally proposed in its grant application. In this approach, the Tribe provided all of the tribally owned buildings and sites for the project. The tribe and an investor formed a limited liability company ("LLC") to develop the project. The contractor and the Tribe worked together to conduct competitive requests for proposals to identify suppliers and

contractors for various components of the project with the Contractor overseeing implementation and providing technical support.

The LLC entered into power purchase agreements with the Tribe under which the Tribe would either (1) receive all of the energy produced by the project at a rate that is 80% of the 2013 utility rate for the relevant buildings serviced by the project; or (2) prepay the PPA via a discounted lump sum payment within the project's first year. After the recapture period for federal tax credits, the Tribe will obtain 100% ownership of the LLC and the solar installations.

The Tribe initially identified business and technical contacts for the award who provided links between tribal leadership, key tribal staff, DOE and the contractor and who helped ensure that the project moved forward efficiently and effectively. Although these individuals changed during grant implementation the Tribe was able to continue with this model and effectuate project implementation.

The project consisted of several activities and was ultimately broken into two phases. Planning for the project was initially done prior to the grant application being submitted. However, based on some lessons learned in Phase I and the suitability of sites for solar, additional planning activities occurred after the installation of the Phase I sites. In both cases, planning required a review of project specifications as necessitated by the grant, which required specific elements including an appropriate 15% offset of energy used by any building having a solar installation.

The Tribe was responsible for gathering all of the initial documentation and providing that documentation to DOE as substantiation for each individual project. FCPC also provided lease/access agreements so that the activities could be properly authorized by the Tribe. The Contractor helped with system design at each site upon discussing the needs of the project with the Tribe. The Contractor's technical expertise was important to project development. In addition, the Tribe worked within its own goals and environmental ethic to ensure that installations occurred in a manner that was environmentally and culturally sensitive. One key element considered by the Tribe was net metering. In order for the Tribe to receive the greatest possible benefit from the solar installations, the Tribe carefully sized each installation so that systems were careful not to overproduce. Unfavorable net metering would result in a poor return on purchase of the power under a power purchase agreement by the utilities. For that reason, sizing to match facility consumption was a key component of the review.

Following the planning for individual sites, the Tribe worked with the Contractor to make sourcing decisions and to identify subcontractors. While the installations were being constructed, the Tribe worked with the utilities to ensure that interconnection and commissioning would be performed timely.



Figure 4 Recreation Center

Installation (Transmission and Interconnection)

The project layout for each site was developed by the contractor and approved by the Energy Working Group and Executive Council. In each instance, the Tribe relied on the Contractor's engineered drawings and detailed specifications. Each site was approved by Executive Council based on the needs of the project, cultural and environmental reviews as well as the provision of a site permit. Following site approval, the Contractor ordered equipment, worked with subcontractors and installed the projects. Necessary inspections were performed by the relevant utilities and in each case an interconnection agreement was signed between the Utilities and Tribe. In Wisconsin, there are standardized interconnection agreements approved by the Wisconsin Public Service Commission. These agreements simplified the coordination between FCPC, SunVest and the utilities.



Figure 5 Land and Natural Resources

Reporting

FCPC filed quarterly progress and financial reports with DOE to inform DOE of activities funded under the grant, scheduling and grant period accomplishments. FCPC's Energy Working Group prepared the reports along with the accounting department. In addition to the reports filed with DOE, FCPC consistently reported to progress and grant activities to the FCPC Executive Council.

Verification

FCPC tracks the solar production for each installation on a monthly basis. The installations have gone on-line at various times with the Phase II installations being operational for only a few months. To date, FCPC's energy production and associated savings are represented in the table below.

Location	Solar System Size (kW)	Average Energy Rate (\$/kWh)	Total Energy Production (kWh)	Total Cost Savings (\$)
Air Monitoring	12.5	\$0.1150	814.97	\$ 93.72
AODA	12.4	\$0.1150	1,279.81	\$ 147.18
Assisted Care	86.5	\$0.0950	65,428.51	\$ 6,215.71
Family Resources	23.56	\$0.1230	22,761.28	\$ 2,799.64
Gte Ga Nes Preschool	24.8	\$0.1150	2,284.35	\$ 262.70
Milwaukee	447.64	\$0.0900	516,736.00	\$46,506.24
Museum	49.6	\$0.1000	4,531.72	\$ 453.17
Natural Resources	22.0	\$0.1280	21,640.14	\$ 2,769.94
Ordinance	9.0	\$0.1150	656.78	\$ 75.53
Property Management	24.8	\$0.1150	2,293.01	\$ 263.70
Rec Center	62.25	\$0.1240	64,715.94	\$ 8,024.00
Rising Sun Daycare	24.8	\$0.1150	2,173.87	\$ 250.00
Solid Waste	19.5	\$0.1270	21,973.55	\$ 2,790.64
Stone Lake C-Store	80.6	\$0.0470	7,822.72	\$ 367.67
Utilities	23.0	\$0.1260	25,892.34	\$ 3,262.43
	L	TOTAL	761,004.99	\$74,282.27

Project Challenges

There were a number of challenges associated with the project. These include appropriate site selection (building suitability and available space), availability of American made products, communication with Tribal members, construction season limitations, and security in a remote location. Each of these is discussed in turn below.

- Appropriate Site Selection. One of the challenges faced by FCPC was in determining the best sites for installations. While FCPC has performed energy efficiency measures at most of its properties it had not previously considered the viability of certain properties given their age, engineering and other physical characteristics. One common problem encountered was the difficulty in siting roof mounted systems on certain newer buildings. In most cases, roof mounts would have voided roof warranties. In addition, in certain circumstances, it was unclear whether the buildings could support the load of the solar panels and snow in winter months. In light of this difficulty, FCPC has considered creating a policy to ensure that new construction considers renewable energy options as part of the design process. In addition to site feasibility based on construction concerns, the Tribe has development plans for some properties. These plans resulted in siting difficulties at certain key properties such as the Executive Building in Crandon. Finally, finding appropriate locations so as not to run into shading or other production problems was carefully considered. In Phase II, the Tribe had a better understanding of the information needs and was better able to perform the required analyses.
- American Made Products. The availability of American made solar panels could have been a limiting factor. Although the grant encouraged use of American made products it was not a prerequisite. FCPC found that foreign made panels, Canadian Solar, were more readily available and at a much more competitive cost point. While the Canadian Solar were available at the start of Phase II, SunVest informed the tribe that American made products would take approximately 3 months to source.
- Communication with Tribal Members. Although the Energy Working Group worked actively with Executive Council, the Natural Resources, Construction and Legal Departments, the group did not provide sufficient information to Tribal members at all stages of the project. Executive Council was informed and approved all of the site selections and installations. However, the Working Group did not engage Tribal members early enough to explain the benefits of the installations or the decisionmaking behind certain installations. For example, following the installation at the Stone Lake C-Store some Tribal members were disappointed that some trees had to be taken down to facilitate the project. Similarly, the AODA director was not informed about the installation in a timely manner and the location of the installation had to be adjusted based on his concerns. The Energy Working Group drafted an article for the Tribal

- newspaper explaining the benefits and advantages of the installations but these efforts could have been earlier in the process to avoid certain negative perceptions.
- Construction Season. Crandon, WI is located in the Northern portion of Wisconsin and
 has a limited construction season. Following Phase I installations, because Phase II
 projects were not yet approved, there was a brief hiatus in construction. The hiatus
 allowed the Tribe to focus its efforts more efficiently but the delay was not anticipated by
 FCPC or the Contractor.
- Security in a Remote Location. Panels at one installation were damaged by vandalism shortly after installation and before interconnection. The damage was not significant and was covered by insurance but it raised concerns related to the security of the installations. Furthermore, it reinforced the need for dissemination of information to Tribal members early in the process.



Figure 6 Utilities Maintenance

Lessons Learned

The Tribe and Energy Working Group learned a number of important lessons through the administration of this grant and the installation of the solar PV systems. These include, communication with Tribal members and encouraging stakeholder participation, effective information and analysis of options, reevaluating goals and working effectively within the grant parameters, and building capacity.

Communication with Tribal Members and Encouraging Stakeholder Participation.
 Although the Working Group was in constant communication with Executive Council, it could have done a better job of disseminating information to individual tribal members.
 Although tribal members were aware of the project and the potential benefits of the project, the group could have provided greater understanding of how those benefits

- would improve the situation of the Tribe vis-à-vis the environment and its own economic agenda. Better communication with tribal members would have helped to garner support for the project earlier in the process.
- Effective Information and Analysis of Options. One of the most important components of the project was to utilize funds for installations that would provide a substantial net benefit to the Tribe. Benefits in the form of environmental attributes, energy cost savings and offset of traditional energy were important to the Tribe. This approach required analysis of several layers of information including the net metering at each location, the cost of kWh, energy usage and related factors. It was important for the Tribe to have access to current and historic information as well as being able to appropriately analyze it.
- Reevaluating Goals and Working Effectively within Grant Parameters. As the project developed FCPC had a better understanding of how to create efficiencies and receive the most benefit out of each individual installation. The end results of the project included facilities not previously considered and the most beneficial uses of the grant funds. It was important for FCPC to be able to separate the projects into two phases and create a scope that provided the most benefit.
- Building Capacity. The process FCPC undertook to analyze sites, consider the benefits of potential solar PV installations, and understand the needs for the Tribe as a whole and individual tribally owned sites has helped FCPC better realize the parameters for renewable energy installations as a whole. By analyzing sites on a site by site basis and considering the energy needs the Tribe will be able to better consider future projects of varying technologies. The grant period helped the Tribe better understand renewable energy alternatives and decisionmaking protocols for future projects.



Figure 7 Potawatomi Bingo Casino, Event Center



Figure 8 Potawatomi Bingo Casino, Woodland Dreams roof

Project Development

Products Developed

- Publications
 - o Forest County Potawatomi Community Press Release
 - Forest County Potawatomi Expanding use of Clean Power on Reservation: Tribe installs 1.0 megawatts of solar power at facilities in northern Wisconsin; December 16, 2015.
 - o Florence Mining News: The Forest Republican
 - Forest County Potawatomi installs solar power at facilities in northern Wisconsin; December 24, 2015.
- Web site or other internet sites that reflect results
 - o https://www.fcpotawatomi.com/news/forest-county-potawatomi-beyond-the-name/
 - o www.paysbig.com
 - o WAEO WJFW News Stories
 - Solar panel arrays fit tribal beliefs, save on power for Forest County Potawatomi; Ben Meyer, Exe. Producer; December 16, 2015
 - http://www.wjfw.com/stories.html?sku=20151216172510

Conclusion

The solar installations at the FCPC Reservation and Milwaukee casino will provide significant benefits to the tribe. These benefits include both short and long-term economic and environmental benefits while also helping the Tribe take important steps towards its goal of energy independence through renewable, clean resources.

The installations have the added benefit of lessening the impacts from CO2. In creating nearly 1MW of solar energy, the Tribe helps to offset nearly 1.1 tons of CO2. The move toward solar and other renewables limits the negative environmental impacts of traditional coal power and provides a viable alternative to fulfilling energy needs. Perhaps most importantly, the Tribe's use of solar, a green renewable source of energy, reinforces the Tribe's commitment to the environment, its members and the community as a whole.