

Department of Energy Program Review Presentation



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Muckleshoot Indian Tribe
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Aaron Arterberry - Background

- Muckleshoot Enrolled Tribal Member
- Electrical apprenticeship - Commercial 01 License
 - Pursued Electrical Apprenticeship as part of a recommendation from people close to me and understood this trade has plenty of work availability and innovation in the field - Solar PV Technology
- Potential to work on and install solar systems proposed in the MIT-ED Project
- Working with Muckleshoot Indian Tribe - Building Maintenance for the past 3 years - We oversee operations of a total of 92 facilities
- Supervisors have combined experience of 60 years in Commercial and Residential Electrical industries and have worked on various projects from Stadium and Ballpark Lighting, Splashpads for youth, to residential lighting projects.
- My supervisors are are mentors and advisors over my efforts to accomplishing the obtainment of Commercial 01 License

Muckleshoot Indian Tribe (MIT)

- The Muckleshoot Indian Tribe is a federally recognized tribe whose membership is composed of descendants of the Duwamish and Upper Puyallup people who inhabited Central Puget Sound for thousands of years before non-Indian settlement
- MIT has 3,148 enrolled tribal members with a total population of 4,545 (+/-680)
- MIT was ratified via government to government agreements with the United States through the Treaty of Point Elliot and Treaty of Medicine Creek

MIT-ED Project Overview

- The goal of the MIT-ED project is to promote energy development on Muckleshoot Tribal Land
- Objectives to be accomplished include: Energy Management Training to 6 Tribal members and acquiring a cost savings of \$12,519 per year
- Estimated production (kWh):
 - Annual - 133,370 kWh - CO₂ avoided Annual: 84,499 lbs.
 - Lifetime - 3,539,547 kWh - CO₂ avoided Lifetime: 2,242,560 lbs.
- MIT is partnering with GRID Alternatives who is the largest nonprofit solar installer in the nation to provide trainings and installation services for the MIT-ED Project.

MIT-ED Project

Objectives

The project is the Tribe's initial step towards achieving the identified 'Long Term Energy Goal' of securing Tribal sovereignty by enhancing and strengthening the Tribes energy and economic infrastructure.

The MIT-ED Project will accomplish the following objectives:

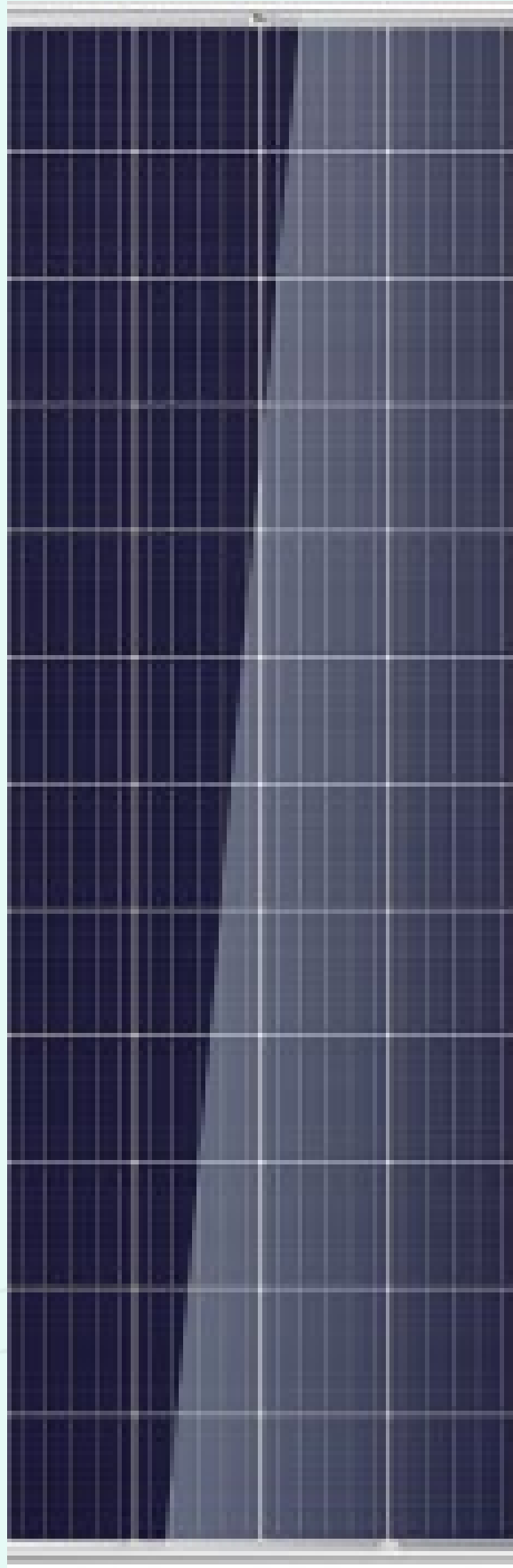
- Objective #1: The MIT-ED Project will create a cost savings of \$12,519 per year
- Objective #2: The MIT-ED Project will provide 'Energy Management Training' to a minimum of 6 Tribal members



Project Participants

The Muckleshoot Tribe will provide hands-on training and career development. Four Muckleshoot employees and two Muckleshoot Adult Work Training participates to install, operate and maintain solar panels.

Solar Technology - MIT ED Project



72 CELL
MULTICRYSTALLINE MODULE

320-335W
POWER OUTPUT RANGE

17.3%
MAXIMUM EFFICIENCY

0~+5W
POSITIVE POWER TOLERANCE

**SolarEdge Commercial Three Phase
Inverters for the 277/480V Grid**
for North America
SE66.6K-SE100K



SolarEdge Single Phase Inverters
For North America
SE3000A-US / SE3800A-US / SE5000A-US / SE6000A-US /
SE7600A-US / SE10000A-US / SE11400A-US



Site # 1: Water Treatment Facility

The Water Treatment Facility's purpose is to ensure a sufficient supply of water to meet the needs of the Muckleshoot Indian Tribe Community. The Muckleshoot Water Treatment services 352 residential households.



Site #2: MIT Carving Shed

The Carving Shed leads cultural revitalization efforts in root elements of Muckleshoot Culture, expanding the culture by traditional carvings of canoes, teaching upcoming artists the traditional ways of carvings.



Site #3: Youth Drop in Center

The Youth Drop in Center is a 10,000 square foot building that facilitates youth meeting their social, educational and cultural goals. The Drop in Center reinforces youth capability for success and support from the staff. This is also a safe place for youth to go to after school until 8pm.



The Muckleshoot Indian Tribe gives special thanks to our Project Partners
including:

- GRID Alternative
- MIT Building Maintenance
- MIT Tribal Council
- MIT Adult Work Training Program
- MIT Housing
- Department of Energy

Our Hands Are up to each one of you - Respect