

EmPOWERing NM, Community Conversation

6.21.23 Gallup, NM

El Moro Event Center

Overview

EPSCoR New Mexico spent 5-years building a SMART Grid Center to research, mentor and train the next generation of engineers to modernize the grid using microgrid technologies. As part of that effort, they want to build a deeper understanding of the level of interest in communities across New Mexico in new technologies and what implications it would mean for rural communities, low-income and communities of color. EPSCoR partnered with Noble Renewables Group LLC, and Community Connects Consulting LLC to design and facilitate community conversations across New Mexico (Farmington, Las Vegas, Silver City, Gallup, Carlsbad and Tribes and Pueblos) to learn with and from community about how the concept of micro-grids fit with community beliefs, values, and readiness. This series of conversations comes at a time when the state and federal policy landscape and energy landscape are rapidly changing in recognition of climate change and impacts, an aging energy infrastructure, and the need to consider how to engage frontline communities in the critical questions and problem solving about their current energy situation, access, affordability and the future. As the need for policy and system changes elevates now is the time to engage those being effected most in a meaningful way.

The Structure of Conversations

Participants gather in solidarity to talk and converse about energy equity. The root of which is only about a decade old but can be traced to environmental justice that has been going on for decades related to social justice. Today it's recognized as "Climate justice is racial justice" and "Indigenous justice is environmental justice".

Historically, the energy system has consistently (through not exclusively) been a source of inequities. The present inequities that accrued over many decades will grow and persist without actions to actually reverse inequities. The energy savings from energy efficiency, solar, and vehicles, for instance, continue to provide financial returns and generate wealth for those households, disproportionately white and higher income, that were able to take advantage of special government and utility incentives that were mostly not accessible to people of color and lower incomes. Reversing energy inequities is possible at anytime, provided there is a willingness to shift the underlying structures.

The goal of the community conversations are to prepare vulnerable communities for a statewide town hall meeting on August 8th and 9th which stakeholders from across New Mexico will build an analysis, consensus and make recommendations about the systems and policy change strategies needed that will best position New Mexico communities for a

healthier more just energy present and future. One potential policy area might highlight that our state does not have an energy roadmap to address equity to map out inequities and how to advance equity by utilizing metrics as we move toward 100% renewables.

At the Gallup meeting two facilitators, Theresa Cardenas and Lilly Irvin-Vitela, helped community participants, mostly from the Navajo Nation, understand their own unique definition of equity. A clear understanding of equity is intended to create a shared understanding and language, to guide the development of the conversation toward equity targets, goals and best practices. Once we have guiding principles it helps assess questions about equity inequities, setting targets and measurements and therefore, better prepared to make recommendations such as directing the necessary resources to access clean energy.

When we converse about equity we begin with three pillars.

1. Recognizing – Who is vulnerable, who is privileged, and how?
2. Asking – Who is at the table and what voice and power do they have in influencing planning, decision making, and implementation? Who bears the brunt of the burdens, and who benefits, and how?
3. Restorative – How can we rectify past injustices caused by the energy system and prevent future harms?

Gallup, New Mexico

Gallup, New Mexico is a rural community located in McKinley County, neighboring the Navajo Nation. According to the New Mexico Climate Risk Map: Local Data Summary for Gallup (EMNRDClimateAction@state.nm.us), this community is at a high risk for the XXXX climate change related hazards such as air quality, drought, heat, flooding, and wildfire. One area of concern is energy and water access, critical for mitigating the effects of extreme heat.

McKinley County energy burden is 2.00 - 8.00 percent of income spent on energy costs. A few other note worthy climate risks; 1/3 of Navajo's are without running water and electricity, 30% have disabilities, 31% have asthma, 16% have diabetes and 26% experience food insecurity. 89% of the population is Native American.

Prior to the community conversation, participants all Native American watched a 15-minute video moderated by Dr. Selena Connealy, EPSCoR Associate Director, about micro-grids and technology advances and what it might mean for the energy future of their communities.

Discussion Responses

What is promising for your community? What did you know or learn about micro grids today that sounds promising?

- Community solar opportunities.

- Solar gardens or also called solar corrals. Family units or hogans are grouped together. It's a perfect application for a micro-grid.
- Solar installations are very remote. Hoping to develop a reliable work force.
- Opportunities to develop a trained workforce.
 - You need to have specialized skills.
 - Would like for a way where apprenticeships projects can be implemented on a regional basis with chapters, community members to have the ability to be on board with these types of projects. There are young people that are home because they are helping the family in some way and they remain within the common because they are comfortable being there. They need the basic skills that can turn into professional skills.
 - Would like to see apprenticeship programs and projects on a regular basis. Chapters are on board with these kind of programs.
 - Traditional families who live in close proximity to one another need to have these programs to develop specialized skill sets.
 - In response to the lack of transportation, there is a need for vans to take workers to renewable energy locations for training and jobs.
- Opportunities for rural elders to have access to cold storage for medications vs running into Gallup for ice. It's going to be economical and a big opportunity to save on transportation, time and access to medications as needed.
- Use in solid waste collection processes.
- The importance in having renewable energy for cold storage used storing medications and food is critical.
- Many Navajo's have grown up in hogans lacking electricity and water. RE can help modernize the traditional way of shelter.
- There is much controversy around Chaco Canyon land issues. The big dispute is around the economic gain from extraction. How do we get to see the families to see other opportunities like solar? Are there other options being presented that are not black and white? The Navajo Nation is reliant on the extractive industry. There is much hope in renewables as another way of economic prosperity. If we have groups present what a micro-grid is, what it can do for the communities in that area their might be options to utilize the land and hope for the future.
- Use this an opportunity to educate, plan for the future and increase other streams of funding.
- There is hope in creating cluster housing using micro-grids to demonstrate the concept like a pilot so that other chapters can learn and create opportunity.
- There is an interest in a youth training component. Often there are youth organizations who can highlight and act on training.
- There was a highlighted interest in incorporating renewables like solar into their transitions to help educate the youth and elders. Especially for the Zuni and Navajo who respect the sun's energy. Old school extraction destroys mother earth.
- There was an interest in promoting new technology as a cost savings to propane. At chapter meetings members are stressing the high cost of everything.
- Those in the fossil fuel industry admit that we are transitioning to renewables. They see the tea leaves. Talking about the cost benefits to reduce energy costs that's hopeful.
- Can you imagine micro-grids around Chaco where farmers markets can be developed to provide food and other goods to tourists.

- Grazing is one wealth they have both traditionally and economically that carries on to the next generation. There was some excitement in having a place to start like maybe looking at solar grazing as an example. Livestock would love the shade under the solar panels.

What principles or values do we want to see at work in the energy system?

- Integrate traditional knowledge with new technologies.
- Having opportunities to reduce energy costs.
- Affordability by building in incentives.
- Include community voices. Doing outreach, group sessions in a native language.
- Creating organizers that can lead and be ambassadors by Identify indigenous speakers.
- Identify people in the communities that have knowledge in a medicinal way like medicine people sharing knowledge.
- Reaching out to the schools to create partnerships. They have funding for apprentices.
- Might be a senior project for students and maybe an internships.
- For the younger kids with EXPLORA and through the libraries using visual information that is easy to understand for all generations.
- Hold educational institutions accountable to help others to excel even if they are not at the top of the grade point average scale.
- Thinking at the chapter level isn't wise. We need to think Hogan to Hogon and not Chapter to Chapter or government to government. For example, as a food grower when I first started growing it was the non profits and the relatives that were growing food that were introducing it to us. I see this happening with micro-grids. It's not going to be the presentations, heavy texts, it's going to be people who are doing it from the ground up and from the visuals and the hands on experience that will make it happen. Not only is education tied into our traditions, but also just to have other relatives doing it. It's going to be family by family that will need the hands on visual learning component. Mobil learning is needed.

Please describe the energy injustice and inequities we face in this region.

- Overall, how renewable energy is coming from how it's made and how it gets to us. There is a lack of clear transparency with the knowledgeable ones. Sometimes we are not aware of what community needs to know and sometimes don't know how to cover the information. Appointing a communications person from the area would help. Make more community investments in local voices would be beneficial. This helps build trust therefore we get more back.
- Solar company outreach is about just checking the boxes and not giving us any technical assistance. They don't do any leg work to be in the community.
- Solar companies use outreach for their own needs. It's considered extractive and therefore leaving communities behind and without the necessary support to help solve problems. Big industry wide efforts are pulling from us at bits and pieces without giving communities anything back.
- During the pandemic we worked with a non profit to get hydro-panels to homes. After the install we found another use. The company give us no support to move the panels.
- Not enough community networking to create a safety net. To solve this problem Volunteers are available with support to organize.
- Not enough maintenance support to maintain hydro panels or solar installations. If the skill isn't available it creates an inequity.

Are you aware and do you have access to data to help us quantify these inequities?

- Regional partners have been collecting data for a health impact assessment. Unfortunately energy is not one of the choices. Hoping to add another line to include in the assessment.
- I think there is zero data available to us. You have many energy companies that have data but much is not specific to our communities.
- Data isn't broken down into indigenous communities. It's like we don't exist. A good example, the energy companies design data tied to counties, districts, rural vs urban.
- What about land status that affect our families? How many solar panels have been installed would be helpful? We need data on what communities have access to a grid.
- There was an effort through Arizona State University to map out the grid and dump sites. All that data was given over to Window Rock but it isn't available to us. It was hard to find. A central location is needed that can have all the maps for this area within NM with all land status.
- Most of the health data comes from the American Community Surveys and Census Data, also the NM Data Collaborative. We also work with the National Collaborative Health Equity initiative which looks at data and few other sources about inequities and how we can focus on how to frame it in an opportunity way rather than focusing on how much poverty, focus on how many are out of poverty so we can move along those data sets easily.
- When a community doesn't know how data is being used or it becomes proprietary it's an inequity. Having an inherent contract with community and knowing that the data belongs to them helps us feel at ease and gives us buy in to the data.
- If we don't know how others collect data and chop it up for their own use it's an inequity. Data belongs to us. Having that sovereignty is important.
- Having an inherent buy in from communities on what is collected, the meaning and where to find it is important.

What are the structural issues in the energy system that contribute to injustice/inequity/harm (financial, regulatory, policy)?

Related to affordability and financial structures, the following inequities were identified.

- Navajo Nation owns and generates its own power company but energy leaves to benefit Arizona's grid rather than its own people.
- There has been some organizing around wanting local choice energy. How to have ownership in local energy production has been a challenge for communities.
- Co-op members do not have independence in how energy is made and how it is distributed.
- With Continental Divide, a co-op, there is ownership opportunity but getting to meetings and hearings held in Grants is difficult because the condition of roads and bridges are a hinderance to attending meetings and organizing efforts.
- The co-op has gotten so big that it's forgotten its community members voices.
- Energy advocates are tired fighting big oil, gas and electric generation companies. It's an endless battle with no choice, no ownership, or independence.
- Size of the Navajo Nation is unable to reach people that get left behind.

- Going on for decades, inequities have caused 1/3 of the population to be without running water and electricity.

Related to regulatory and policy structures, the following inequities were identified.

- Land status and the building process is an issue for people who want to live on trust lands. There are multiple layers of regulations, rules and Federal red tape before we can have sustainable housing. The process is long and tiresome.
 - They are required to apply for a residential lease. You have two years to build on the land and if you don't build, it can be revoked.
 - Utilities will not provide electricity if you don't have a solid foundation to build on.
 - If you want water you need to work with the Indian Health Service to provide a permit. You have to have a bathroom designed before they will approve your application.
 - There are locations on the reservation with clusters of homes. Those are the potential locations for micro-grids.
 - It takes a lot of patience to go through the building process and it's expensive. You need a legal survey and an archeology report that could run \$800 to \$1200. Then you need to go through Fish and Wildlife application if you are in a bio resource area, based on a 2008 Federal law. People need to know where these sensitive areas are and don't so they end up being denied.

Other comments:

- It would be beneficial for communities who want to pursue micro-grids incorporating it with broadband. It is an important equity part of the conversation. The solar gardens are big opportunities too. Live stock feed such as hay bales have opportunity for year long stock feed availability using solar gardens. Building economy around fresh foods and live stock feed is important.
- Small scale farming, animal raising is a focus right now. Hydro-panels can be applied to this opportunity.

Power Mapping - Who are making decisions that impact us?

- Who are the energy makers?
 - City of Gallup, Continental Divide/Tri-Star Energy and Navajo Tribal Utility Authority.
- How can we look at equity a little bit better on the overall issue?
 - It should be in collaboration with entities because you can't solve inequities alone because they interplay with each other. For example, you can't have a sustainable house unless you have electricity and a healthy economic sector that can support that. No one entity can solve these inequities.
 - From a public health perspective and from an organizers perspective we are always trying to find solutions to everything without having to gather up all of the collaborating efforts which is harder for it to be scaled up but at the community level it's easier because there is community buy-in. At a larger scale you lose that independence and ownership.
- Where do you see your power at?
 - Getting the support and information at the community level that affects policy and elected officials.

- Identifying what energy companies are doing and getting information out to communities in a timely manner. Example; Continental Divide is looking using existing power lines as another route to put broad band to current customers.
- Asking the question; are motives grounded in social justice such as providing government incentives to developers without transparency in who's benefiting and how they are benefiting?