

Free Technology Training for Licensed Trades

Goal: Strengthen the contractor value proposition

Action: Provide free training on building decarbonization technologies for licensed tradespeople (continuing education credits)

Description:

- Need more contractors educated on residential heat pumps
 - Efficacy of heat pump technology
 - How to talk to consumers about rebates and incentives
- Need more trained energy auditors - severe statewide shortage
 - Crucial first step to understanding a home's energy use, which measures are most impactful, best place to spend money
 - Home energy audit is a requirement for HER and HEAR rebate eligibility ("home modeling")
- Santa Fe Community College offerings
 - Heat pump training program for contractors (curriculum established, fee-waived, continuing education credits provided)
 - Only certified energy auditor program in the state

Proposed Next Steps

1. Secure a stable funding source(s) that will provide all aspects of heat pump training, to include:
 - Tuition
 - Administrative cost to provide training
 - Testing and certification fees
 - Necessary equipment to complete the training
 - Per diem for students to supplement the lost day of work
 - Marketing program to promote to potential contractors
2. Support the Santa Fe Community College in training outreach and expanding partnerships to community colleges in other parts of the state.
 - Mobile classroom so can provide training outside of Santa Fe, with the help of local partners
 - Resources to build connections to other community colleges
 - Per diem stipend to contractors attending 1-day heat pump training to supplement the lost day of work
3. Deploy the Energy Conservation and Management energy coaches to train contractors on rebates and incentives

Tariff On-Bill Financing

Goal: Increase the value customers receive from adopting building decarbonization measures.

Action: Develop an on-bill financing mechanism to reduce upfront equipment costs for decarbonization measures.

Description:

- Support on-bill programs currently offered by Western Farmers and new programs being deployed by Tri-State in the first quarter of 2025.
- Bring together interested groups to learn from each other to expand successful programs.
- Find funding for expanding programs: IRA grants, NMCIC, tax free NM Green Bonds, capital markets
- Educate ratepayers and contractors.

Questions and Issues:

- How to measure and assess program success is an open question.
- Note that definitions matter:
 - On-bill financing (OBF). The utility is the lender in an OBF program. Ratepayer funds collected for energy efficiency programs are the most common funding source, but utility shareholder funds can also be used. In some contexts, on-bill financing has become an umbrella term for any financing program that includes charges on a utility bill, including on-bill repayment and tariffed on-bill.
 - On-bill repayment (OBR). In OBR, the capital provider is a third party, and the utility operates as a repayment conduit for that third-party capital provider. A utility may opt to use its own funds to offer administrative support or credit enhancements.
 - Tariffed on-bill (TOB). In a TOB program, efficiency upgrades are financed not through a loan, but rather through a utility offer that pays for upgrades under the terms of a new, additional tariff. This tariff includes a cost recovery charge on the bill that is less than the estimated savings. The on-bill charge is associated with the meter at the address of the property or facility where upgrades are installed, and the cost recovery charge is treated as equal to other utility charges on the bill.

Proposed Next Steps:

1. Support Tri-State's roll out of their on-bill program in NM, which is scheduled to begin in the first quarter of 2025.
 - Encourage NM PRC approval (of waiver) when coop members file their applications for their on-bill programs.
 - Support efforts to train contractors and develop more energy auditors.
2. Establish a regular information-sharing venue
 - Include Tri-State, Western Farmers, IOUs, Co-ops, munis, tribal utilities, etc. to share best practices for on-bill financing, repayment and or tariff programs.
 - This venue would also serve to understand any concerns/issues/barriers envisioned by the IOUs.
3. Secure funding to expand programs.
 - NM CIC, NM Coalition for Sustainable Cities, and NMREIA explore opportunities to include residential solar in on-bill financing programs.

Grid Modernization and Distribution System Planning Support

Goal: Prepare New Mexico's electric grid and housing stock for future electrification.

Action: Support grid modernization and distribution system upgrades.

Description:

Improve the efficiency and speed of grid modernization and distribution system improvements to support building decarbonization measures.

Questions and Issues:

Stakeholders offered two options to achieve this improvement. During our meeting on Nov. 12, we will be asking stakeholders to offer thoughts regarding their preferred option.

1. Establish a centralized authority, such as a state-appointed czar or special committee, tasked with overseeing the implementation of distribution system upgrades and grid modernization. This authority would streamline processes, provide guidance on navigating funding programs and state approval processes, and coordinate efforts among all stakeholders, including low-income organizations, Tribal communities, businesses, utilities, and local governments. Clarification regarding the specific authorities of this committee is an open question.
2. Work with state entities to strengthen grid mod programs:
 - Request funding for GRID MOD program, and
 - Engage with NM PRC in upcoming grid mod rulemaking.

An alternative to Option 1 is to create or designate an entity with the explicit role of handling/coordinating federal and state funding for grid modernization (and distribution system upgrade) projects.

Proposed Next Steps for the Two Options:

1. Establish new grid mod and distribution upgrade authority at the state level:
 - Request that the Governor initiate and establish the group.
 - Governor's Office: Initiates and establishes the group, appointing a representative to provide authority and direction.
 - Leadership Group (Chaired by NAIOP or REIA): The leadership group would be led by the private sector but include other key stakeholders—such as representatives from Tribal governments, NMFA, utilities, and local governments—who have the capacity and interest to actively participate. This group would drive the initiative, set priorities, and develop recommendations for action.
 - Supportive Group (CID, EMNRD, NMPRC, and other stakeholders): These state entities and stakeholders would play a supportive role, being informed of the progress and outcomes of the leadership group's efforts. They would provide expertise and resources as needed but would not be required to engage unless they choose to contribute further or provide specific support.
2. Strengthen existing state entities programs:
 - Designate specific stakeholder organizations to engage in the upcoming PRC Grid Mod/Integrated Distribution Planning rulemaking.
 - Request state legislature support to fund the GRID MOD GRANT PROGRAM.

Related Activities Underway:

- NM EMNRD's Grid Modernization Grant program was established as a result of 2020 HB233 and the associated roadmap (https://www.emnrd.nm.gov/ecmd/wp-content/uploads/sites/3/GridModernizationRoadmap_FINAL_FOR_PUBLICATION-1.pdf). ENMRD has awarded grants to 4 projects in the past 3 years with total funding of \$811k. Only public entities are eligible to apply. NM Legislature did not appropriate any funding for the program so EMNRD has applied a portion of its federally provided state energy funding for the grants. (Has many programs to fund from the State Energy Program.) EMNRD anticipates receiving more applications than can be funded starting in FY2024-2025.
- The Preventing Outages While Enhancing Resilience (POWER) Program is expected to be launched in the next several months. This is a federally funded program through section 40101(d) of the Infrastructure Investment and Jobs Act (IIJA), commonly known as the Bipartisan Infrastructure Law (BIL). Over the next 5 years ECMD expects to receive \$32 Million in formula funding administered by the U.S. Department of Energy. Currently, the plan is to use 40% of the funding for IOUs and 60% for Coops. New Mexico electric utilities, other grid infrastructure operators and fuel suppliers are eligible to apply for grants through this program.
- Activities underway by the NM PRC include the following:
 1. PNM recently conducted hosting capacity analysis of about 30 feeders, most of which were previously categorized as "saturated" but upon recent analysis, were able to accommodate new PV installs (residential).
 2. Initiation of a new study, using the LODGE (locational optimization for distributed generation expansion) model from NREL, to identify good locations in advance.
 3. Soon to be unveiled is a Grid Mod/Integrated Distribution Planning proposed rulemaking.
 4. New rulemaking for economic development (24-00257-UT) which includes electrification as one of the considerations for economic development.
- NMSU continues to advance methodologies for hosting capacity analyses. An initial study was done for PNM before PNM conducted another more detailed study by a PE firm. NMSU is currently researching hosting capacity issues related to distributed storage resources. Financial resources for students to work on this topic would be appreciated.
- IOUs Grid Mod plans and associated documents are available via the NM PRC docket system: EPE (Oct. 2021, 21-00269-UT); PNM (Oct. 2022, 22-00058-UT); and SPS (Jan. 2024, 22-00178-UT).
- "POWER UP New Mexico" draft legislation includes a number of provisions regarding distribution system planning and allocation of costs for upgrades.

Clean Heat Standard

Goal: Establish state policies that better incentivize greenhouse gas reductions in the residential and small commercial building sectors.

Action: Develop a clean heat standard that focuses on natural gas utility emissions reductions

Description:

- Set targets for greenhouse gas emissions reductions from gas utility systems: reduce X% by 2030 and Y% by 2035 relative to 2015 or 2025 (as example baseline years)
 - Additional stakeholder discussion needed to determine X and Y
 - Put New Mexico on the path to achieve net-zero emissions by 2050
- Utilities determine how to achieve emissions reductions. Eligible measures can include efficiency, leak reduction, use of lower-emissions fuels, beneficial electrification (paired with weatherization)

Questions/Issues

- Oil & gas provides a significant tax base for New Mexico - this would be stripping the backbone out of our state.
- Need to have a plan for feeder businesses, plumbers and pipefitters before advocating to decommission gas assets?

Proposed Next Steps

1. Requires a gas planning initiative that includes the gas utility
2. Issues for that initiative to explore:
 - Information gathering
 - i. Gas utility 20year outlook - load forecast with scenarios and sensitivities
 1. Specific sub-system forecasts if warranted based on the gas distribution design (i.e., the gas distribution is not a single, integrated territory-wide system but actual five separate system served by the utility)
 - ii. Non-pipeline alternative analysis – comparative evaluation of investment alternatives to meet the system need; consider how to determine the least cost and most beneficial project to meet the system needs
 1. If existing pipeline capacity is insufficient to meet expected growth then is replacing and upsizing the pipeline capacity the lowest reasonable cost pursuit? Would investments in energy efficiency or beneficial electrification locally avoid the capacity constraints at a lower cost?
 2. Limit to system needs that cost in excess of a specific dollar value rather than all investments.
 - iii. Capital expenditure plan and forecast for at least the next five years by investment category – safety, reliability, growth, expansion, mandatory relocation, etc.
 1. Geographical or system breakdown - mapping where the investment is needed

2. Connect capital expenditures to resource needs identified through the load forecast (20yr outlook) and the evaluation process (non-pipeline alternative analysis)
- iv. Other considerations
1. Emissions analysis – identify gas utility baseline emissions and determine appropriate reduction targets
 2. Workforce transition plan
 3. Replacement of lost tax revenues

Beneficial Electrification Rate Design

Goal: Establish state policies that better incentivize greenhouse gas reductions in the residential and small commercial building sectors.

Action: Encourage and support the NM PRC in the exploration of beneficial electrification (BE) rate designs.

Description:

- Beneficial electrification (BE) rate design for New Mexico is worthy of exploration.
- Agreement regarding the goals and intended outcomes are an important first step.
- Discussion about the principles that would govern BE rate design is also critical. (See endnote).

Question:

Is there an agreed upon definition of Beneficial Electrification? Two options are shown below:

DEFINITION A (from the Beneficial Electrification League) - Beneficial Electrification includes the application of electricity to end-uses where doing so satisfies at least one of the following conditions, without adversely affecting the others:

- Saves consumers money over time;
- Benefits the environment and reduces greenhouse gas emissions;
- Improves product quality or consumer quality of life;
- Fosters a more robust and resilient grid.

DEFINITION B (currently included in the draft POWER UP NM legislation) - Beneficial Electrification means converting the energy source of a customer's end use from a nonelectric fuel source to a high-efficiency electric source, or avoiding the use of nonelectric fuel sources in new construction or industrial applications.

Proposed Next Steps:

1. Urge the NM PRC to host informational workshops and or an exploratory docket to discuss beneficial electrification. Topics could include:
 - Intended outcomes and goals for NM
 - Principles to govern the effort
 - Anticipated impacts
 - Candidate programs or pilot programs
2. Identify stakeholder volunteer organizations who are willing to help organize such workshops.
3. Stakeholders who desire engagement on this topic may connect with the "POWER UP New Mexico" discussion group. (Legislative sponsors Meredith Dixon and Dayan Hochman-Vigil).

END NOTE: Discussion about the principles that would govern BE rate design is important. The following is a starting point for future conversations.

- A participating customers' total operating costs should not increase as a result of electrification.
 - This does not necessarily mean a customer's electric bill will not increase, but rather that any increase will be at least matched by a decrease in the customer's costs for the previous fuel
 - Rate design should ensure customers are no worse off in terms of annual operating costs. Upfront equipment costs should be addressed through other means.
- Not all end uses require a BE rate in order to achieve operating cost savings for customers.
- BE rates should reflect the full annual cost to serve the customer and should not create (or imply) inter- or intra-class subsidies.
- Consider a decoupling mechanism to reduce the risk of windfall revenues and to ensure that increased sales place downward pressure on customer rates overall.
- Consider whether entirely new rates (or rate classes) are required vs. whether existing rates (or classes) can be used, potentially with modifications.
- A customer on an existing electric heating rate who heats with electric resistance should not lose access to the electric heating rate, nor be required to install a new heat pump system in order to remain on the rate.
- BE rates should not require the installation of additional equipment not needed for the new appliance, like dedicated metering.
- BE rates should not assume or require that customers will participate in utility demand response programs, but utilities should offer voluntary demand response programs.
- Utilities need flexibility in determining the best rates for customers, given the differences in customer bases, needs, and interests across service territories.

Point of Sale Incentives

Goal: Increase the value customers receive from adopting building decarbonization measures, through an easy to use process.

Action: Prioritize cash incentives at point-of-sale.

Description:

- Incentive programs used by utilities, retailers, distributors, and governments to accelerate energy efficiency measures through instant discounts at retail point of purchase
- New Mexico's Energy Conservation and Management Division (ECAM) launched in September 2024 a point of sale rebate (coupon) for low income customers to purchase and self-install home insulation. The coupon is funded through the federal Home Energy Efficiency and Appliance Rebate program and publicized on ECAM's new [clean energy website](#).

Questions/Issues

- Need to assess initial website launch - was the experience user-friendly? Will the insulation be installed properly?
- Need to find synergies among related programs (Mortgage Finance Authority's weatherization program, ECAM clean energy website)
- How to sync up with whole home energy audits?
- How to support ECAM so they have enough staff and can fully roll out the program?
- How to apply rebates to installation services in addition to appliances?
- How is low income status verified?

Proposed Next Steps

1. Develop a **midstream rebate submittal program** to expand point-of-sale rebates to other energy efficient appliances (heat pumps, hot water heat pumps, smart thermostats)
 - a. Mechanism for homeowners to sign federal rebates over to their contractor
 - b. Contractor deducts the rebate amount from the purchase price at installation thereby reducing the total cost and paperwork burden for the homeowner and making service jobs more attractively priced for the contractor.
 - c. Central entity (state energy office) acts as the clearinghouse, registering approved contractors and issuing federal rebates to contractors for reimbursement
2. Increase the visibility of ECAM's [clean energy website](#) – require investor-owned utilities to publicize the website in utility bill inserts
3. Add staff to ECAM to effectively resource rebate submittal programs and website development