2025 EVALUATION OF ENERGY EFFICIENCY AND LOAD MANAGEMENT PROGRAMS

PUBLIC SERVICE COMPANY OF NEW MEXICO

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ABBREVIATIONS

AC	AIR CONDITIONER
AHRI	AIR-CONDITIONING, HEATING, AND REFRIGERATION INSTITUTE
APS	ADVANCED POWER STRIP
APS	ARIZONA PUBLIC SERVICE
BTU	BRITISH THERMAL UNIT
BYOT	BRING YOUR OWN THERMOSTAT
CBL	CUSTOMER BASELINE LOAD
CDD	COOLING DEGREE DAYS
CF	COINCIDENCE FACTOR
CIAC	CUSTOMER INCENTIVE AND ASSISTANCE CHARGE
DCU	DIRECT CONTROL UNIT
DHW	DOMESTIC HOT WATER
DLC	DESIGNLIGHTS CONSORTIUM
DOE	DEPARTMENT OF ENERGY
EAF	ENGINEERING ADJUSTMENT FACTOR
EER	ENERGY EFFICIENCY RATIO
EFLH	EQUIVALENT FULL LOAD HOURS
EM&V	EVALUATION, MEASUREMENT, AND VERIFICATION
EPE	EL PASO ELECTRIC

EUEA	EFFICIENT USE OF ENERGY ACT
GHG	GREENHOUSE GAS
HDD	HEATING DEGREE DAYS
HEC	HOME ENERGY CHECKUP
HER	HOME ENERGY REPORT
HOU	HOURS OF USE
HPWH	HEAT PUMP WATER HEATER
HSPF	HEATING SEASONAL PERFORMANCE FACTOR
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
IL TRM	ILLINOIS TECHNICAL REFERENCE MANUAL
ISR	IN-SERVICE RATE
KW	KILOWATT
KWH	KILOWATT-HOUR
LI	LOW-INCOME
LPD	LIGHTING POWER DENSITY
M&V	MEASUREMENT AND VERIFICATION
MDUS	MULTI-DWELLING UNITS
MF	MULTIFAMILY
NM TRM	NEW MEXICO TECHNICAL REFERENCE MANUAL

NTG	NET-TO-GROSS
O&M	OPERATIONS AND MAINTENANCE
PNM	PUBLIC SERVICE COMPANY OF NEW MEXICO
PY	PROGRAM YEAR
RCX	RETROCOMMISSIONING
RR	REALIZATION RATE
RRPS	RIO RANCHO PUBLIC SCHOOLS
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SEER2	UPDATED SEASONAL ENERGY EFFICIENCY RATIO
SEM	STRATEGIC ENERGY MANAGEMENT
SPS	SOUTHWESTERN PUBLIC SERVICE
TRM	TECHNICAL REFERENCE MANUAL
UCT	UTILITY COST TEST
WHFD	WASTE HEAT DEMAND FACTOR
WHFE	WASTE HEAT ENERGY FACTOR

Executive Summary

Gross and Net Impact Evaluation Research Objectives

- Measure total energy savings (kWh) and demand reduction (kW)
- Assess the effectiveness of data track and ex-ante savings
- Estimate net-to-gross ratios and realized savings
- Assess active contractor application and project documentation

Impact Evaluation Findings and Recommendations

Implementation Key Findings	Recommendations
Some Commercial Comprehensive projects referred to **older references** which include out of date, assumptions, deemed savings, and code baseline requirements	**Update the PNM workpapers and workbook** to align with the current version of the NM TRM
New Construction projects were found to apply **old versions of code**, where installed AC equipment **did not meet efficiency requirements**	Ensure code baselines are applied based on the **project initiation date or permit data**. Baselines should be **site-specific**, and not applied on a program level
Peak kW reduction was found to be off by a **factor of 10** for one site. A coincidence factor was applied to the deemed peak demand reduction for another site, **double counting impacts**	Ensure deemed peak demand savings are **coded appropriately** in the PNM workpapers and workbooks. **Coincidence factor should not be applied to deemed results**
Peak demand savings for air conditioning measures utilized the SEER or IEER rated efficiencies **as opposed to the EER**. For some sites SEER, EER, and HSPF were reported when SEER2, EER2, and HSPF2 should have been applied **based on federal requirements**	Ensure the **appropriate efficiency values** are used to determine annual energy and peak demand reduction impacts, while **adhering to federal regulations and code**
Calculations for heat pump measures are **not transparent**, where savings are split between an arbitrary qualifying efficiency and code, and the qualifying efficiency and installed efficiency	Savings calculations for heat pump measures should **follow the NM TRM**, which is based on the difference between code and the installed efficiency, **increasing transparency and consistency**

Implementation Key Findings	Recommendations
Reported savings for a horticultural lighting project were found to use inputs **solely for the propagation area**, when lighting was installed to multiple areas →	For horticultural lighting projects, ensure savings are determined **individually for each stage of growth**, which all utilize different operating parameters
Baseline fixture wattages reported for Quick Saver projects were found to be **misaligned compared to the PNM workpapers**, and fixture descriptions did not include ballast factor making it difficult to recreate ex-ante savings estimates →	**Explicitly describe baseline equipment to increase transparency**. This should include the fixture or bulb type, bulb quantity, ballast type, ballast factor, and wattage used to determine savings. Refer to the updated PNM workpaper to source baseline wattage.
For Residential Products The ex-ante methodology for most measures were sourced from references **outside of New Mexico, or older version of the NM TRM** →	**Align program methodology** for all measures with the current version of the NM TRM. If a measure is not supported in the NM TRM, refer to technical references in the following order: NM, TX, IL, other references.
Commercial SEM projects **did not report peak demand reductions** for any sites →	**Calculate peak demand reductions** using provided hourly consumption data to determine **site-specific load shapes**, which can be applied to daily predicted usage determined from the regression models. If consumption is provided in larger intervals, develop load shapes using EPRI or NREL data based on the facility type.
The price elasticity model applied to the Residential Products sales indicate **increased rebates are not driving increased sales** for some measures, notably **water coolers and cinch door seals (top)** →	**Shift marketing efforts and rebates** towards measures that will benefit from increased program intervention to drive additional sales
Participants of the Easy Savings Kits program reported high free ridership (0.57) particularly **driven by the lighting measures** →	Consider **removing the lighting measures** from the kit to potentially improve program-driven impacts

Cost Effectiveness Evaluation Findings and Recommendation

A total of **812,105.5 MWh** in ex-post net lifetime savings, a **portfolio EUL of 9.4 years**, and an overall portfolio **cost effectiveness of 1.38.**

Process Evaluation Research Objectives

Identify insights into the effectiveness of marketing and outreach efforts to provide decision makers with information about improving energy efficiency

Assess barriers for and characteristics of participation.

Assess how to enhance program delivery to maximize participation to achieve program goals.

Develop near-term and long-term strategies to improve program delivery.

Process Evaluation Findings

1. The Residential Comprehensive and Easy Savings Kits programs **deliver a high level of program satisfaction**, particularly with equipment performance and contractor interactions
2. **Contractors are the primary drivers** of the customer experience
3. Inconsistent communication and understanding of **program requirements, eligibility, and rebate processes** were observed
4. Customer-facing resources lack clarity and accessibility, with participants reporting **difficulty navigating materials**
5. Easy Savings Kits participants reported **not being aware of the program** prior to receiving the kit
6. **Certain kit items were already owned**, leading to unused products

Process Evaluation Recommendations

1. Enhance and standardize **program communication across all touchpoints**
2. **Strengthen contractor alignment and training** to ensure consistent messaging and accurate representation of program benefits and incentives
3. **Improve customer facing materials** by simplifying navigation and clearly presenting program benefits and trade-offs
4. Increase **program visibility and utility presence** throughout the customer journey
5. **Expand outreach efforts** beyond existing utility communication
6. Explore opportunities to **improve alignment between kits items and household needs**

E.1 EVALUATION OVERVIEW

This report presents the independent evaluation results for the Public Service Company of New Mexico (PNM) energy efficiency programs for program year (PY)2025. To accomplish this, PNM contracted with EcoMetric Consulting, Evergreen Economics, and Demand Side Analytics (herein referred to as the "Evaluation Team"). The team roles are as follows:

- EcoMetric was the primary contractor and managed all evaluation tasks and deliverables
- EcoMetric provided engineering capabilities and led the review of PNM's savings estimates
- Evergreen Economics conducted the net-to-gross review of the Residential Products program
- Demand Side Analytics conducted an impact evaluation of the load management programs

The table below outlines an overview of the evaluation in PY2025.

Table 1: PY2025 Program Evaluation Summary

Sector	Program	Impact	Process	NTG Research
Residential	Residential Comprehensive			
	Residential Lighting	✓		✓
	Retail Products	✓		✓
	PNM HomeWorks			
	New Home Construction			
	Easy Savings Kits			✓
	Energy Smart (LI)			
	Home Energy Reports			
	Power Saver	✓		
	Peak Saver	✓		
Commercial	Commercial Comprehensive	✓		
	Commercial SEM	✓		

For each of the evaluated programs, the Evaluation team estimates realized gross and net impacts (kWh and kW) and calculated program cost effectiveness using the UCT. Program-specific net-to-gross research was conducted for the Residential Products and Easy Savings Kits programs to determine a prospective ratio applicable to PY2026 program savings.

E.2 SAVINGS RESULTS

The Evaluation team compared the verified savings (ex-post) to the PNM program claimed savings (ex-ante) to determine the realization rate (RR) which we portray as the Engineering Adjustment Factor calculated as the ratio between verified and estimated savings. Each realization rate is a percentage showing how accurately the program estimated the savings. Projects or measures with a realization rate above 100% indicate that the customer is achieving more savings than initially predicted by PNM. Conversely, those projects with a realization rate of less than 100% show that customers did not realize the estimated savings amounts. The kilowatt-hour savings results of the PY2025 impact evaluation are shown in Table 2 below, with the programs evaluated in 2025 bolded.

Similarly, the Evaluation team compared the verified kilowatt (kW) savings to PNM's claimed kW savings to determine the realization rate (RR), represented by the Engineering Adjustment Factor, for the kilowatt savings. A RR above 100% indicates greater-than-expected savings, while a RR below 100% suggests lower-than-expected savings.

Table 3 below presents the PY2025 impact evaluation kW savings results, with evaluated programs in PY2025 bolded.

The impact evaluation, which included engineering desk reviews for a sample of Commercial Comprehensive and Commercial SEM projects, and a review of deemed savings values for Residential Products resulted in engineering adjustment factors that varied from 1.000 for realized gross savings. Adjustments to savings based on the Commercial Comprehensive, Commercial SEM, and Residential Products reviews resulted in less than an 8% change at the program or portfolio level.

Table 2: PY2025 Savings Summary – kWh

Program	Sub-Program	# of Projects	Expected Gross kWh Savings	Engineering Adjustment Factor	Realized Gross kWh Savings	NTG Ratio	Realized Net kWh Savings
Commercial Comprehensive	**Retrofit Rebate**	173	25,660,681	0.7867	20,187,741	0.7563	15,267,989
	New Construction	44	7,675,816	0.9222	7,078,485	0.7563	5,353,458
	Quick Saver	205	8,006,599	1.0093	8,080,742	1.0000	8,080,742
	Multifamily	83	5,621,964	1.0154	5,708,302	0.7563	4,317,189
	Building Tune-Up	-	-	N/A	-	0.7563	-
	Midstream	-	-	N/A	-	0.7563	-
Residential Comprehensive	Home Energy Checkup LI	733	2,330,829	1.0000	2,330,829	1.0000	2,330,829
	Home Energy Checkup	1,295	3,251,719	1.0000	3,251,719	0.9863	3,207,170
	Refrigerator Recycling	5,010	4,275,460	1.0000	4,275,460	0.6300	2,693,540
	Cooling	1,690	3,246,877	1.0000	3,246,877	0.6648	2,158,524
Retail Products		353,839	29,670,883	0.9036	26,811,360	0.5100	13,673,794
Residential Lighting		17,356	459,386	1.0000	459,386	0.5100	234,287
Residential Lighting LI		51,486	1,374,944	N/A	1,374,944	1.0000	1,374,944
HomeWorks		15,342	3,950,426	1.0000	3,950,426	1.0000	3,950,426
Energy Smart (MFA)		138	400,107	1.0000	400,107	1.0000	400,107
Easy Savings		7,902	4,683,470	1.0000	4,683,470	0.5985	2,803,057
Easy Savings LI		4,686	3,173,205	1.0000	3,173,205	1.0000	3,173,205
New Home Construction		1,222	1,823,846	1.0000	1,823,846	0.7130	1,300,402
Residential Behavioral HER		174,572	8,456,502	0.9600	8,118,242	1.0000	8,118,242
Commercial Behavioral SEM		15	8,380,824	0.9930	8,321,887	1.0000	8,321,887
Peak Saver		220	-	N/A	25,041	1.0000	25,041
Power Saver		64,912	-	N/A	-	1.0000	-
Total		**700,924**	**122,443,539**	**0.9253**	**113,302,071**	**0.7660**	**86,784,834**

Table 3: PY2025 Savings Summary – kW

Program	Sub-Program	# of Projects	Expected Gross kW Savings	Engineering Adjustment Factor	Realized Gross kW Savings	NTG Ratio	Realized Net kW Savings
Commercial Comprehensive	**Retrofit Rebate**	173	3,510.3	0.8758	3,074.3	0.7563	2,325.1
	New Construction	44	1,300.0	0.8993	1,169.1	0.7563	884.2
	Quick Saver	205	1,247.0	1.0183	1,269.8	1.0000	1,269.8
	Multifamily	83	724.7	1.0302	746.6	0.7563	564.7
	Building Tune-Up	-	-	N/A	-	0.7563	-
	Midstream	-	-	N/A	-	0.7563	-
Residential Comprehensive	Home Energy Checkup LI	733	841.6	1.0000	841.6	1.0000	841.6
	Home Energy Checkup	1,295	3,664.5	1.0000	3,664.5	0.9863	3,614.3
	Refrigerator Recycling	5,010	523.2	1.0000	523.2	0.6300	329.6
	Cooling	1,690	226.2	1.0000	226.2	0.6648	150.4
Retail Products		353,839	2,964.3	1.0321	3,059.5	0.5100	1,560.4
Residential Lighting		17,356	-	N/A	-	0.5100	-
Residential Lighting LI		51,486	-	N/A	-	1.0000	-
HomeWorks		15,342	208.9	1.0000	208.9	1.0000	208.9
Energy Smart (MFA)		138	44.0	1.0000	44.0	1.0000	44.0
Easy Savings		7,902	2,258.4	1.0000	2,258.4	0.5985	1,351.7
Easy Savings LI		4,686	1,730.0	1.0000	1,730.0	1.0000	1,730.0
New Home Construction		1,222	333.0	1.0000	333.0	0.7130	237.4
Residential Behavioral HER		174,572	1,542.1	0.9600	1,480	1.0000	1,480.4
Commercial Behavioral SEM		15	-	N/A	1,366.1	1.0000	1,366.1
Peak Saver		220	23,550.0	0.5994	14,116.0	1.0000	14,116.0
Power Saver		64,912	53,170.0	N/A	42,900.3	1.0000	42,900.3
Total		**700,924**	**97,838.2**	**0.8076**	**79,012.0**	**0.9489**	**74,974.8**

1 INTRODUCTION

PNM programs and evaluation requirements were first established in 2005 by the New Mexico legislature's passage of the 2005 Efficient Use of Energy Act (EUEA). 1 The EUEA requires public utilities in New Mexico, in collaboration with other parties, to develop cost-effective programs that reduce energy demand and consumption. Utilities are required to submit their proposed portfolio of programs to the New Mexico Public Regulation Commission (NMPRC) for approval. As part of its approval process, the NMPRC must find that the program portfolio is cost-effective based on the Utility Cost Test (UCT).

An additional requirement of the EUEA is that each program must be evaluated at least once every three years. As part of the evaluation requirement, PNM must submit to the NMPRC a comprehensive evaluation report prepared by an independent program evaluator. As part of the reporting process, the evaluator must measure and verify energy and demand savings, determine program cost effectiveness, assess how well the programs are being implemented, and provide recommendations for program improvements as needed.

The following report outlines PNM’s Program Year (PY) 2025 evaluation results and findings.

1.1 Gross Impact Results

The impact evaluation primarily involves engineering desk reviews of a stratified sample of projects, designed to encompass diverse measure types and energy savings levels. The evaluation team verified gross realized impacts through engineering desk reviews. The team primarily reviewed PNM’s Excel-based calculators to estimate savings for lighting, refrigeration, HVAC, and many other types of projects. The factors and assumptions used in these calculators were reviewed by the evaluation team and compared to the source material methodologies provided. Project files were cross-referenced against sources, such as the New Mexico Technical Reference Manual (NM TRM), to validate their reasonableness and ensure reliable estimates of realized energy and demand savings.

Evaluation efforts prioritize evaluation of savings calculation methodologies to ensure accuracy and consistency. PNM Workpapers, the NM TRM, or documented custom savings are prioritized over other resources if calculations are sufficiently sourced or applied. When applicable, evaluators rely on established TRMs in the following order: NM TRM, Texas TRM, and the Illinois TRM with appropriate weather adjustments. In instances where these resources are insufficient, other TRMs or credible sources are used to validate savings.

1.1.1 Realization Rate

Program and subprogram realization rates are shown in Table 4 for programs that received a gross impact assessment. Program summaries are bolded. The subprogram results, rows which are not bolded, are provided to give PNM and implementors insight to subprogram performance to understand underlying discrepancies leading to program realization rates.

Table 4: PY2025 Savings Summary – kWh

Program / Sub-Program	Reported kWh	Verified kWh	Reported kW	Verified kW	Realization Rate (kWh)	Realization Rate (kW)
Commercial Comprehensive	**46,965,060**	**41,055,271**	**6,782**	**6,260**	**0.8742**	**0.9230**
Retrofit	25,660,681	20,187,741	3,510	3,074	0.7867	0.8758
New Construction	7,675,816	7,078,485	1,300	1,169	0.9222	0.8993
Quick Saver	8,006,599	8,080,742	1,247	1,270	1.0093	1.0183
Multifamily	5,621,964	5,708,302	725	747	1.0154	1.0302
Midstream	-	-	-	-	N/A	N/A
Building Tune-Up	-	-	-	-	N/A	N/A
Retail Products	**31,505,213**	**28,645,690**	**2,964**	**3,060**	**0.9092**	**1.0321**
Residential Products	29,670,883	26,811,360	2,964	3,060	0.9036	1.0321
Residential Lighting	459,386	459,386	-	-	1.0000	N/A
Residential Lighting LI	1,374,944	1,374,944	-	-	N/A	N/A
Commercial SEM	**8,380,824**	**8,321,887**	**-**	**1,366**	**0.9930**	**N/A**
Peak Saver	**-**	**25,041**	**23,550**	**14,116**	**N/A**	**N/A**
Power Saver	**-**	**-**	**53,170**	**42,900**	**N/A**	**N/A**
Residential Behavioral HER	**8,456,502**	**8,118,242**	**1,542**	**1,480**	**0.9600**	**0.9600**
Total	**95,307,600**	**86,166,132**	**88,008**	**69,182**	**0.9041**	**0.7861**

The Commercial Comprehensive program demonstrated the largest deviations from reported and verified kWh savings. Additional information is provided in Section 3. Other programs are within normal ranges of recent evaluations with notable changes also provided in Sections 3 through 8.

1.2 Net Impact Results

The impact evaluation moved to applying new net-to-gross (NTG) ratios prospectively in future years, rather than retrospectively as had been done in prior years. Therefore, the evaluation team will apply the PY2024 calculated NTG ratios to the PY2025 realized evaluated savings. The NTG ratios calculated in PY2025 will then be applied to the PY2026 results.

Table 5 summarizes the updates to the NTG ratios for PY2025. The NTGR that were updated as part of PY2025 evaluation efforts are bolded.

Table 5: Net-to-Gross Ratio Updates for PY2025

Program	Sub-Program	PY2025 NTG Ratio	PY2026 NTG Ratio
Commercial Comprehensive	Retrofit Rebate	0.7563	0.7563
	New Construction	0.7563	0.7563
	Quick Saver	1.0000	1.0000
	Multifamily	0.7563	0.7563
	Building Tune-Up	0.7563	0.7563
	Midstream	0.7563	0.7563
Residential Comprehensive	Home Energy Checkup - LI	1.0000	1.0000
	Home Energy Checkup	0.9863	0.9863
	Refrigerator Recycling	0.6300	0.6300
	Cooling	0.6648	0.6648
Residential Products		**0.5100**	**0.6400**
Residential Lighting		**0.5100**	**0.8300**
Residential Lighting LI		**1.0000**	**1.0000**
HomeWorks		1.0000	1.0000
Energy Smart		1.0000	1.0000
Easy Savings		**0.5985**	**0.4300**
Easy Savings LI		**1.0000**	**1.0000**
New Home Construction		0.7130	0.7130
Residential Behavioral HER		1.0000	1.0000
Commercial Behavioral SEM		1.0000	1.0000
Peak Saver		1.0000	1.0000
Power Saver		1.0000	1.0000

1.3 Process Evaluation Findings

Process evaluations of PNM’s energy efficiency and load management programs focus on assessing program delivery, customer engagement, and implementation effectiveness. The evaluation activities included participant surveys with a goal of identifying strengths and areas for improvement across multiple programs. A process component was included for the Easy Savings Kits and Residential Comprehensive program.

1.4 Cost-Effectiveness Results

Using net realized savings from this evaluation and cost information provided by PNM, the Evaluation team calculated the ratio of benefits to costs for each of PNM's programs and for the portfolio overall. The Evaluation team calculated cost effectiveness using the UCT, which compares the benefits and costs to the utility or program administrator implementing the program.[1] The Evaluation team conducted this test in a manner consistent with the California Energy Efficiency Policy Manual[2]. The portfolio was found to be cost effective with a UCT ratio of 1.38. Results are shown in Table 6.

Table 6: PY2025 Cost Effectiveness by Program

Program	Utility Cost Test (UCT)
Res Comp – Refrigerator Recycling	0.45
Res Comp – Home Energy Checkup	2.96
Res Comp – Home Energy Checkup LI	1.29
Res Comp – Residential Cooling	0.40
Residential Behavioral HER	0.73
Residential Lighting – Market Rate	0.85
Residential Lighting LI	2.00
Retail Products	1.44
Commercial Comprehensive	1.55
Commercial Comprehensive – Multifamily	1.03
Easy Savings – Market Rate	4.09
Easy Savings LI	4.20

[1] The Utility Cost Test is sometimes referred to as the Program Administrator Cost Test, or PACT.
[2] California Public Utilities Commission. 2020. California Energy Efficiency Policy Manual – Version 6. https//www.cpuc.ca.gov/-/media/cpuc-website/files/legacyfiles/e/6442465683-eepolicymanualrevised-march-20-2020-b.pdf

Program	Utility Cost Test (UCT)
Energy Smart (MFA)	0.70
New Home Construction	1.02
PNM HomeWorks	1.50
Commercial Behavioral SEM	2.29
PNM Power Saver	1.00
PNM Peak Saver	0.71
Overall Portfolio	**1.38**

2 EVALUATION METHODOLOGY

This section describes the evaluation methods used to evaluate each program. The portfolio evaluation included a combination of the following components listed below:

- Gross and net impacts for kWh and kW
- Cost-effectiveness analysis for all PNM programs
- Assisting PNM as needed in providing real-time feedback on programs
- Coordinating with the New Mexico PRC on evaluation activities

The evaluation report still summarizes programs that were not evaluated in PY2025. For any program that was not evaluated, the Evaluation team applied an engineering adjustment factor of 100% for that program as well as a net-to-gross (NTG) ratio that was specified in the PY2024 evaluation report.

These programs have the following elements compiled and reported:

- Gross impacts (kWh, kW) using PNM's ex ante values for savings
- Net impacts calculated using the existing ex ante net-to-gross ratio
- Cost-effectiveness calculations using the ex-ante net impact values

2.1 Program Descriptions

Different programs require leveraging different techniques for program evaluation based on measure type and program delivery. This section describes the program offerings the team evaluated in PY2025. Table 7 summarizes the types of energy savings methodologies used in each of the evaluated programs.

Table 7: Summary of PY2025 Evaluation Methods by Program

Program	Sub-Program	Prescriptive	Custom	Load Management
Commercial Comprehensive	Retrofit Rebate	✓	✓	
	Quick Saver	✓		
	Building Tune-Up	✓	✓	
	Midstream	✓		
	Multifamily	✓		
	New Construction	✓	✓	
Retail Products	Residential Lighting	✓		
	Residential Products	✓		
Power Saver				✓
Peak Saver				✓

Commercial Comprehensive. Most projects in the Commercial Comprehensive program are prescriptive in nature, and as such the evaluation of this program centered on a deemed savings review, phone survey verification where applicable, and project desk reviews. The deemed savings review for prescriptive measures focused on verifying that the appropriate savings values were applied based on the equipment installed and per the referenced source of savings, whether that is the New Mexico TRM or another source. Finally, desk reviews conducted by engineers examined the savings assumptions and calculations specific to each project that was selected for review and provided installation verification.

Residential Comprehensive. As part of the regulatory oversight and energy efficiency initiatives in New Mexico, the Public Regulation Commission (PRC) has requested an evaluation of heat pump and heat pump water heater installations through the Midstream Cooling program. The Evaluation team fulfilled this request by providing insights into the types of heating systems replaced, the operational characteristics of installed heat pump systems, and the anticipated energy savings and emissions reductions resulting from these projects. The evaluation team completed this effort through interviews with participants, and an assessment of impacts including avoided fuel use, avoided electrical use, and emissions reductions resulting from the installation of heat pump systems by utilizing established fuel-savings equations and regional adjustments. The participant survey focused on the following aspects:

- Identification of the existing heating system before heat pump installation, including whether the heat pump was installed as a sole or supplemental heating source
- Determination of change-over temperatures for heat pumps with supplemental heating sources to establish when backup heating systems are activated
- Assessment of replaced water heaters, identifying whether new installations were grid-enabled
- Collection of data to support a deemed approach analysis for estimating avoided fuel use, electricity savings, and emissions reductions

Residential Products. This program includes two sub-programs: Residential Lighting and Retail Products. Both programs involve the implementation of prescriptive-based measures, where Residential Lighting supports the installation of upstream lighting equipment (primarily nightlights), and Retail Products supports the installation of non-lighting equipment (through upstream, downstream, and instant-rebate program pathways). The equipment supported in the Retail Products program includes appliances (such as refrigerators, freezers, clothes washers, and clothes dryers), insulation measures, smart thermostats, air purifiers, and air conditioners. The evaluation of both programs focused on a deemed savings review and an elasticity model to estimate net impacts. Since the majority of program rebates are provided upstream, participant data was not available, and a participating customer phone survey to verify the purchase and installation of bulbs was not possible. Instead, we reviewed the savings values in the tracking database and those documented in the TRM to verify that the correct savings values were being applied and that rebated equipment was program-qualifying. The elasticity model that was used to determine net impacts is described in more detail in Section 4.2.

Easy Savings Kits. The Easy Savings program provides kits for households with easy-to-install measures such as LEDs, faucet aerators, and low-flow showerheads. As part of the PY2024 evaluation efforts, the evaluation team recommended applying a net-to-gross ratio for the Market Rate

Expansion portion of the program based on results from the Residential Comprehensive and Home Energy Checkup participants who received an apartment kit or move-in kit. The PY2025 evaluation efforts included participation surveys to provide a program-specific NTG ratio.

Commercial SEM. The Commercial SEM program helps business customers reduce energy consumption through organizational training, technical support for operations and maintenance (O&M) improvements, energy monitoring, and reporting tools that track facilities energy costs. The evaluation team utilized billing regression models to analyze the savings resulting from program activities. Gross demand impacts were determined by applying calculated demand savings during New Mexico's peak demand windows.

Home Energy Reports. This program provides customers with information on their energy consumption, including a "neighbor comparison" with a matched set of similar households. This normative comparison is delivered via email or regular mail and motivates recipients to conserve energy. For the PY2025 evaluation cycle, the evaluation team applied a realization rate of 96% to the reported energy savings, considering there have not been significant changes to the program, and the results have been fairly consistent over the years. This realization rate is an average of the realization rates found in the PY2024 (100%) and PY2023 (91%) analyses.

To estimate demand savings associated with HER exposure, the evaluation team applied a peak demand multiplier to the verified energy savings. This approach assumes that the HER effect is load-following (i.e., savings are higher when the load is greater). The peak demand multiplier, which was originally calculated during the PY2023 evaluation cycle, is based on a New Mexico residential whole-house electric load shape from NREL's ResStock load shape library. The demand savings calculation is provided below:

$$Peak\ Demand\ Savings = \frac{Peak\ Months\ Energy\ Savings\ (MWh)}{2{,}208\ hours} * 1.519$$

In the equation above, "Peak Months Energy Savings" refers to the total verified energy savings between June and August; 2,208 represents the number of hours during that period; and 1.519 is the peak demand multiplier. The realization rate noted above (96%) was applied prior to applying the peak demand multiplier.

Power Saver and Peak Saver. These are demand response programs targeting different customer groups. The Power Saver program focuses on single-family, multi-dwelling units (MDUs), and small and medium commercial customers. There are five separate Power Saver components. The Peak Saver program is for larger commercial customers that typically have unique load shapes. For Peak Saver and four of the five Power Saver components, savings were estimated based on the difference in load shapes between event and recent non-event weekdays for the same customer. For the fifth Power Saver component (residential direct load control through AC switches), impacts were estimated by comparing participants' load with load from a control group. All analyses use 5-minute intervals, load data and are consistent with what our team has done in prior evaluations of these programs.

Additional detail on each of these evaluation methods is included in the remainder of this section.

2.2 Phone Surveys

Phone surveys were fielded in February through March of 2026 for participants in the Commercial Comprehensive, Residential Comprehensive, and Easy Savings Kits programs. The phone surveys ranged from 15 to 30 minutes in length and covered the following topics:

- Verification of measures included in PNM's program tracking database.
- Verification of heat pump installation and operating.
- Survey responses for use in the free ridership calculations.
- Customer characteristics.

The final survey instruments for the Residential Comprehensive and Easy Savings Kits programs are included in Appendix A and B.

2.3 Engineering Desk Reviews and Deemed Savings Reviews

To verify gross savings estimates, the evaluation team conducted engineering desk reviews for a sample of the projects in the Commercial Comprehensive and SEM program, while the Residential Products program received a deemed savings review. The goal of the desk reviews was to verify equipment installation, operational parameters, and estimated savings. Reviews of the deemed savings values were also completed for those program measures that used prescriptive savings values.

Deemed, prescriptive, and custom savings reviews were completed for the PY2025 Commercial Comprehensive, Commercial SEM, and Retail Products programs. Both prescriptive and custom projects received desk reviews that included the following:

- Review of project description, documentation, specifications, and tracking system data.
- Confirmation of installation using invoices and post-installation reports.
- Review of post-installation reports detailing differences between installed equipment and documentation, and subsequent adjustments made by the program implementer.

For those programs and projects that used deemed savings values, the review process included the following:

- Review of measures available in the New Mexico TRM and PNM deemed workbooks to determine the most appropriate algorithms that apply to the installed measures.
- Recreation of savings calculations using TRM algorithms and inputs as documented by submitted specifications, invoices, and post-installation inspection reports.
- Review of New Mexico TRM algorithms to identify candidates for future updates and improvements.

2.4 Load Management Impact Estimation

Load management programs and how they are evaluated depend on how the program is designed and how customers are engaged in it. The details regarding how PNM's load management programs were evaluated are presented in Section 8.

2.5 Net Impact Analysis

The evaluation team estimated net impacts for the Easy Savings program using the self-report approach. This method uses responses to a series of carefully constructed survey questions to learn what participants would have done in the absence of the utility's program. The goal is to ask enough questions to paint an adequate picture of the influence of the program activities within the confines of what can reasonably be asked during a phone survey.

With the self-report approach, specific questions that are explored include the following:

- What were the circumstances under which the customer decided to implement the project (i.e., new construction, retrofit/early replacement, replace-on-burnout)?
- To what extent did the program accelerate installation of high efficiency measures?
- What were the primary influences on the customer's decision to purchase and install the high efficiency equipment?
- How important was the program rebate on the decision to choose high efficiency equipment?
- How would the project have changed if the rebate had not been available (e.g., would less efficient equipment have been installed, would the project have been delayed)?
- Were there other programs or utility interactions that affected the decision to choose high efficiency equipment (e.g., was there an energy audit done, had the customer participated before, was there an established relationship with a utility account representative, was the installation contractor trained by the program)?

The method used for estimating free ridership (and NTG ratio) using the self-report approach is based on the 2017 Illinois (IL) TRM.[3] For the PNM programs evaluated, questions regarding free ridership were divided into several primary components:

[3] IL TRM can be found at http//www.ilsag.info/il_trm_version_6.html

- A **Program Component** series of questions that asked about the influence of specific program activities (rebate, customer account rep, contractor recommendations, other assistance offered) on the decision to install energy efficient equipment.
- A **Program Influence** question, where the respondent was asked directly to provide a rating of how influential the overall program was on their decision to install high efficiency equipment.
- A **No-Program Component** series of questions, based on the participant's intention to carry out the energy-efficient project without program funds or due to influences outside of the program.

Each component was assessed using survey responses that rated the influence of various factors on the respondent's equipment choice. Since opposing biases potentially affect the main components, the No-Program Component typically indicates higher free ridership than the Program Component/Influence questions. Therefore, combining these opposing influences helps mitigate the potential biases. This framework also relies on multiple questions that are cross-checked with other questions for consistency. This prevents any single survey question from having an excessive influence on the overall free ridership score.

2.6 Gross and Net Realized Savings Calculations

The final step in the impact evaluation process is calculating the realized gross and net savings based on the program-level analysis described above. The Evaluation team applied appropriate impact analysis methods described above and calculate gross realized savings by modifying the original ex-ante savings values from the participant tracking databases using an Installation Adjustment factor and an Engineering Adjustment factor:

$$Gross\ Realized\ Savings = \alpha_{install} * \alpha_{engineer} * ExAnte\ Savings$$

Where,

$\alpha_{install}$= installation rate verified by phone surveys or product documentation

$\alpha_{engineer}$= factor from engineering analysis, desk reviews, etc.

Net realized savings are then determined by multiplying the Gross Realized Savings by a free ridership adjustment factor as described in the Net Savings Estimation section.

2.7 Cost Effectiveness

The EUEA requires that utilities include in their publicly available annual reports "the most recent measurement and verification report of the independent program evaluator, which includes documentation, at both the portfolio and individual program levels of expenditures, savings, and cost-effectiveness of all energy efficiency measures and programs and load management measures and programs, expenditures, savings, and cost-effectiveness of all self-direct programs, and all assumptions used by the evaluator."[4] The UCT is the method used for cost-effectiveness testing.

In preparation for the cost-effectiveness analysis, the Evaluation team requested key assumptions and inputs from PNM, including:

- Avoided cost of energy – time differentiated production costs per kWh over a 20+ year time horizon.
- Avoided cost of capacity – estimated cost of adding a kW/year of generation, transmission, and distribution to the system. Used to monetize peak demand impacts.
- Discount rate – used to calculate the net present value of future savings.
- Administrative costs – all non-incentive expenditures associated with program delivery.

The verified savings values were gathered as part of the primary impact evaluation analysis effort and used to calculate benefits for each program. We compiled incentive payments from program tracking data for use in calculating UCT costs.

[4] https//www.srca.nm.gov/parts/title17/17.007.0002.html, Section 17.7.2.14 - D1

3 COMMERCIAL COMPREHENSIVE

The Commercial Comprehensive program is designed to support commercial customers in reducing energy consumption and operating costs through the installation of high-efficiency equipment including lighting, HVAC systems, refrigeration, and other building systems. The program includes six subprograms which are each described below:

- Multifamily: The Multifamily subprogram focuses on energy-saving measures for multifamily housing units, helping reduce energy consumption across residential buildings. The subprogram includes incentives for improvements in lighting, appliance replacements, HVAC, and other energy-efficient upgrades specific to Multifamily housing units.
- New Construction: The New Construction subprogram provides rebates for conducting enhanced building commissioning in new construction scenarios aiming to exceed energy efficiency standards.
- Retrofit Rebate: The Retrofit Rebate subprogram helps businesses upgrade their existing facilities with energy-efficient equipment. It offers both prescriptive and custom rebates for measures like energy-efficient lighting, HVAC systems, motors, and refrigeration.
- Quick Saver: The Quick Saver (Direct Install) subprogram is available for all Small Businesses with an average monthly peak demand of 200 kW or less. The subprogram provides rebates for lighting and refrigeration upgrades and is designed for quick payback.
- Midstream: The Midstream subprogram provides instant discounts to commercial customers and distributors for purchasing energy-efficient lighting, HVAC, and refrigeration equipment. By applying incentives at the point of sale, the program reduces upfront costs, making high-efficiency equipment more accessible and encouraging widespread adoption of energy-saving technologies.
- Building Tune-Up: The Building Tune-Up subprogram aims to support existing building owners by improving operational performance through a whole-building approach. The subprogram provides incentives for activities such as advanced HVAC tune-ups, retro-commissioning studies, and building operator training, with the objective of identifying and

implementing low and no-cost efficiency improvement.

The evaluation of the Commercial Comprehensive program included a gross assessment, which examined the six key subprograms Multifamily, New Construction, Quick Saver, Building Tune-Up, Midstream, and Retrofit Rebate. Building Tune-Up and Midstream did not have any participation on record for PY2025. The gross evaluation assessed the energy savings across these subprograms, focusing on the performance and impact of each initiative through a series of desk reviews. All desk reviews included either a prescriptive or custom calculation approach leveraging the NM TRM or PNM’s deemed product workpapers and workbook.

3.1 Realized Gross Impacts

The impact evaluation process calculates the realized gross savings based on the program-level analysis described above. The Gross Realized Savings are calculated by taking the original ex ante savings values from the participant tracking databases and adjusting them using an Installation Adjustment factor (based on the count of installed measures verified through the phone surveys and a review of project documentation) and an Engineering Adjustment factor (based on the engineering analysis, desk reviews, etc.)

$$Gross\ Realized\ Savings = (Ex\ Ante\ Savings) * (Installation\ Adjustment) * (Engineering\ Adjustment\ Factor)$$

The ex-ante PY2025 impacts for the Commercial Comprehensive program are summarized in Table 8 and Table 9.

Table 8: PY2025 Commercial Comprehensive Savings Summary (kWh)

Program	Sub-Program	# of Projects	Expected Gross kWh Savings	Engineering Adjustment Factor	Realized Gross kWh Savings
Commercial Comprehensive	Retrofit Rebate	173	25,660,681	0.7867	20,187,741
	New Construction	44	7,675,816	0.9222	7,078,485
	Quick Saver	205	8,006,599	1.0093	8,080,742
	Multifamily	83	5,621,964	1.0154	5,708,302
	Building Tune-Up	0	0	N/A	0
	Midstream	0	0	N/A	0
Total		**505**	**46,965,060**	**0.8742**	**41,055,271**

Table 9: PY2025 Commercial Comprehensive Savings Summary (kW)

Program	Sub-Program	# of Projects	Expected Gross kW Savings	Engineering Adjustment Factor	Realized Gross kW Savings
Commercial Comprehensive	Retrofit Rebate	173	3,510	0.8758	3,074
	New Construction	44	1,300	0.8993	1,169
	Quick Saver	205	1,247	1.0183	1,270
	Multifamily	83	725	1.0302	747
	Building Tune-Up	0	0	N/A	-
	Midstream	0	0	N/A	-
Total		**505**	**6,782**	**0.9230**	**6,260**

Most of the gross impact evaluation activities were devoted to engineering desk reviews of sampled projects. The sample was stratified to cover a range of different measure types so that no single measure (often lighting) would dominate the desk reviews. The sample was also stratified based on total energy savings within each measure group. Overall, the sampling strategy ensured that a mix of projects in terms of both project size and measure type would be included in the desk reviews.

The final sample design is shown in Table 10. The resulting sample achieved a relative precision equal to 90/5.7 overall for annual energy savings.

Table 10: Commercial Comprehensive Desk Review Sample

Sub-Program	Count	Average kWh	Total kWh Savings	% of Savings	Sample
Retrofit Rebate	173	148,328	25,660,681	55%	15
New Construction	44	174,450	7,675,816	16%	11
Quick Saver	205	39,057	8,006,599	17%	11
Multifamily	83	67,735	5,621,964	12%	8
Building Tune-Up	0	-	-	0%	0
Midstream	0	-	-	0%	0

As discussed in the Evaluation Methods section, the evaluation team determined gross realized impacts for the Commercial Comprehensive program by performing engineering desk reviews on the sampled projects. PNM has developed deemed excel-based calculators to estimate savings for several measures including lighting, HVAC, appliance, and pump or motor projects, which often refer back to PNM's measure Workpapers and the NM TRM. The factors and assumptions used in these calculators were reviewed by the evaluation team and compared to the New Mexico TRM and applicable International Energy Conservation Code (IECC)[5]. The PNM Excel-based calculators mostly appear to be in alignment with the New Mexico TRM, but several measures were found to refer to older TRM versions, older code versions, and TRMs from other jurisdictions. For the projects that received engineering desk reviews, the evaluation team made updates to several projects which impact the engineering adjustment factor. More details on desk review discrepancies are found in Appendix D.

In evaluating prescriptive projects, the team encountered various measures in both the New Mexico TRM and the PNM Workpapers. However, the team observed some inconsistencies in the savings calculation methodologies between these sources. In such cases, the team conducted a review of both sources for consistency and applicability but relied on the methodology and algorithm inputs specified in the PNM measure workbooks and workpapers, the NM TRM when values differed, and the IL TRM in cases where the NM TRM did not have applicable measures. Some of the incentivized

[5] See 2021 International Energy Conservation Code (IECC)

measures in older projects existed only in the latest PNM Workpapers, and in these cases, the algorithms were reviewed for accuracy and adjusted as necessary to calculate realized energy and demand savings based on project specific information. When feasible, the evaluation team relied on non-prescriptive values, as described in the project files. To ensure the validity of these values, the Evaluation Team cross-referenced documented input parameters with sources like the TRM or posted business hours, to assess their reasonableness.

The evaluation identified several discrepancies between ex-ante and verified savings. A key issue is the deviation from the updated methodology and deemed inputs provided in the NM TRM compared to PNM's deemed workbooks and workpapers. Further deviations stemmed from methodology differences, notably for HVAC cooling equipment, horticultural lighting projects, and transformer retrofits. Additionally, it is difficult to replicate program savings for Quick Saver lighting projects as baseline equipment is not presented in a standard format.

A summary of the individual desk review findings for each of the reviewed projects is included in Appendix D.

3.2 Realized Net Impacts

The net-to-gross evaluation process calculates the Net-to-Gross (NTG) savings, which reflect the effectiveness of the program in achieving energy savings. The NTG ratio is calculated by comparing the Net Realized Savings (i.e., the savings that result directly from the program's influence on participants) to the Gross Realized Savings (the total savings from all measures installed from the impact evaluation above). This ratio accounts for factors such as free ridership (participants who would have implemented the measures without the program) and spillover (savings from participants who were influenced by the program but did not directly participate). The NTG ratio is crucial for assessing the overall impact of the program.

Net Realized Savings are then determined by multiplying the Gross Realized Savings by the NTG ratio:

$$Net\ Realized\ Savings = (Net - to - Gross\ Ratio) * (Gross\ Realized\ Savings)$$

Table 11 and Table 12 summarize the PY2025 net impacts for the Commercial Comprehensive program using the prospective NTG ratios calculated by the evaluation team during the PY2024 evaluation. Please note that the total NTG ratios bolded are calculated based on the ratio of program realized net savings to gross.

Table 11: PY2025 Commercial Comprehensive Net Impact Summary (kWh)

Program	Sub-Program	# of Projects	Realized Gross kWh Savings	NTG Ratio	Realized Net kWh Savings
Commercial Comprehensive	Retrofit Rebate	173	20,187,741	0.7563	15,267,989
	New Construction	44	7,078,485	0.7563	5,353,458
	Quick Saver	205	8,080,742	1.0000	8,080,742
	Multifamily	83	5,708,302	0.7563	4,317,189
	Building Tune-Up	0	0	0.7563	-
	Midstream	0	0	0.7563	-
Total		**505**	**41,055,271**	**0.8043**	**33,019,378**

Table 12: PY2025 Commercial Comprehensive Gross Impact Summary (kW)

Program	Sub-Program	# of Projects	Realized Gross kW Savings	NTG Ratio	Realized Net kW Savings
Commercial Comprehensive	Retrofit Rebate	173	3,074	0.7563	2,325
	New Construction	44	1,169	0.7563	884
	Quick Saver	205	1,270	1.0000	1,270
	Multifamily	83	747	0.7563	565
	Building Tune-Up	0	-	0.7563	-
	Midstream	0	-	0.7563	-
Total		**505**	**6,260**	**0.8057**	**5,044**

3.2.1 Net-To-Gross Update for PY2025

The evaluation of the Commercial Comprehensive program did not include a net-to-gross update for PY2025. PNM should continue to prospectively apply the NTG ratios calculated as part of the PY2024 study to PY2026 program savings.

3.3 Conclusions and Recommendations

A discussion of findings and recommendations are provided in the following subsections for each of the evaluated sub-programs within the Commercial Comprehensive program.

3.3.1 Multifamily Gross Impact

The evaluation findings highlight discrepancies with appropriate reference sources, rounding equipment inputs rather than using rated capacity, using averaged deemed inputs rather than site-specific inputs based on the NM region, and an energy savings methodology for HVAC cooling equipment, which led to variations in reported and verified savings.

Table 13: Multifamily Evaluation Findings and Recommendations

Findings	Recommendation
1. Five sampled projects (PRJ-39637-2025, PRJ-39629-2025, PRJ39659-2025, PRJ-404797-2025, and PRJ-41633-2025) were found to round refrigerator volume capacity as opposed to using the rated capacity, resulting in minor deviations.	When feasible, utilize the rated capacity of appliances to determine savings
2. For four sampled projects (PRJ-39637-2025, PRJ-39659-2025, PRJ-39617-2025, and PRJ-41633-2025), which all included the installation of a dishwasher, ex-ante savings were calculated by referencing the IL TRM version 10, which was effective in 2022, as opposed to version 13, which was effective in 2025. Version 13 includes an updated deemed value for both annual savings and peak demand reductions.	Implementors and evaluators should utilize the most recent reference material applicable at the time of implementing a project, as it is likely more reflective of recent research and market shifts. Specifically, projects implemented in 2025 should reference a TRM version effective in the same Program Year. Note, New Construction projects differ, where the reference used should be applicable to the time of permitting dates.
3. For PRJ-40280-2025, which included the installation of ENERGY STAR windows referred to an incorrect deemed value sourced from the measure Workpaper when applying peak kW reductions, which were off by a factor of 10. For example, the deemed savings kW value for Refrigerated Air systems in the Workpaper is 0.00041 as opposed to 0.0041 as specified in the NM TRM.	PNM should update the measure Workpapers and workbook to ensure alignment with the current version of the NM TRM. Specifically, the deemed savings values for the Energy Star windows need to be updated by a factor of 10.
4. For PRJ-39659-2025 which included the installation of a top-load clothes washer, the ex-ante savings calculation included deemed values based on a front-load machine.	Project savings should be reflective of actual on-site conditions, including the specific equipment type for appliance measures.

Findings	Recommendation
5. For PRJ-41633-2025, ex-ante calculations for the low flow measures (faucet aerators and showerheads) applied an average savings value from different NM regions (Albuquerque, Las Cruces, and Sante Fe) from the NM TRM as opposed to applying deemed inputs based on the Albuquerque region, which was applicable based on the site address.	Implementors should apply deemed values from the NM TRM for the specific NM region, determined by the project site address. This approach increases accuracy in estimating site-specific impacts.
6. For PRJ-41633-2025, ex-ante calculations for the heat pump measure were found to be inconsistent and not transparent. The savings methodology is split into two portions. Savings for the first portion is equal to the difference in the code required baseline efficiency and a qualifying efficiency, which appears to be an arbitrary value that is 7.143% greater than the baseline efficiency. Savings for the second portion, which is classified as “bonus”, is equal to the difference between the qualifying efficiency and the installed efficiency. This approach differs from the NM TRM and industry standards, which calculate savings for cooling equipment as the difference between the code-required baseline and installed efficiencies. Furthermore, ex-ante demand savings refer to the calculations described, which incorrectly incorporates the IEER or SEER, as opposed to the EER per the NM TRM.	PNM measure workbooks for cooling equipment should be updated to reflect the methodology present in the NM TRM. This will increase transparency and consistency in the recreation of energy savings and demand reductions, and align with industry standards. This recommendation is applicable to all Commercial Comprehensive subprograms that use the deemed workbook.

3.3.2 New Construction Gross Impact

Key issues include discrepancies in hours of operation, inconsistencies between project documentation and reported inputs, the use of old code versions not applicable to the project, and misalignment between deemed inputs in measure workpapers and the NM TRM. Aligning PNM workpapers with the appropriate IECC reference (based on the date of initiation or permitting) and the NM TRM, and reviewing the applicable code values, including efficiency and LPD, will help maintain consistency and increase the program's effectiveness and reliability.

Table 14: New Construction Evaluation Findings and Recommendations

Findings	Recommendation
1. For PRJ-38782-2025, the ex-ante calculations used a value for hours of operation sourced from the PNM workpaper, which differed from the NM TRM for the “retail” space type. Furthermore, for PRJ-37922-2024, ex-ante calculations included effective full load hours (EFLH) based o the average of three retail categories from the 2023 NM TRM as opposed to reporting the applicable value based on the specific space. For PRJ-41240-2025, the hours of operation used in the ex-ante calculations was a custom input without backup evidence to support it.	PNM should align measure workpapers with the NM TRM values for inputs such as operating hours, or provide supporting evidence within the workpaper to support values that deviate. If custom inputs are reported, additional evidence should be provided including customer emails confirming the custom input.
2. For PRJ-38782-2025, two of the installed units had a lower EER than baseline per IECC 2021, resulting in an increase in demand compared to the counterfactual.	Negative impacts should be considered in savings calculations and peak demand reductions for incentivized measures for equipment that does not meet code requirements. Furthermore, the program should aim to incentive equipment that is above and beyond code requirements for all efficiency values, ensuring positive impacts are captured for both annual savings and peak demand reductions.
3. For PRJ-40496-2025, there was a misalignment between the COMcheck and inputs used in the ex-ante estimates. Specifically, the COMcheck specified LPD based on the space-by-space values from IECC 2021 (0.61 for an open office plan, and 0.33 for warehouse storage with bulky material), which was the applicable code at the time of permitting. The reported savings were based on LPD equal to 0.79 and 0.48 respectively, which are building weighted values specified from IECC 2018, which was not the effective code based on the COMcheck and permitting dates. There was also misalignment in the appropriate use of the TRM. The ex-ante calculations utilized inputs from the 2023 version, when the 2025 version was most applicable based on the date of project initiation.	For New construction lighting projects, implementors should ensure there is alignment between LPDs specified on the COMcheck document vs. what is used within energy savings calculations. This will enforce the use of the applicable code requirements for the project.
4. For PRJ-40872-2025 which includes the installation of an air source heat pump, several inputs were found to be incorrect. First, the ex-ante calculations applied a	Ensure consistency between project files and deemed inputs from TRM references. Utilize savings calculation inputs based on site-specific

Findings	Recommendation
coincidence factor of 0.34 irrespective of building type. Secondly, the ex-ante calculations referred to efficiencies that were overwritten on an AHRI certificate and were found to be unsupported within project documentation.	details. Ensure all inputs are supported, including equipment efficiency.
5. For PRJ-37922-2024 and PRJ-40463-2025, the ex-ante calculations in the PNM workpaper were sourced from the 2021 NM TRM, which included LPD values from IECC 2009. This code specifies the LPD for building façade as 3.75 W/linear feet, while the applicable IECC 2018 code specifies it as .075 W/ft^2. The evaluators did not include any savings for this space as the lighting design did not qualify based on code.	Ensure the correct code baseline is applied based on permit date. The PNM workpapers should be updated based on the more recent code versions effective in NM.
6. For PRJ-37922-2024, the ex-ante calculations for the hot food cabinet and steam cookers applied the coincidence factor to the deemed demand savings reported in the NM TRM, which effectively double counts the coincidence factor.	Apply deemed savings and demand reduction values presented in the NM TRM as reported, without applying additional factors unless directed to do so.
7. The ex-ante methodology used to calculate savings for ice machines differs from the PNM workpaper and the NM TRM. Furthermore, the workbook includes deemed savings values. It is not clear where this information is sourced as the NM TRM provides a prescriptive algorithm to calculate savings.	Update the ex-ante methodology and PNM workpaper for ice machines to align with the methodology presented in the NM TRM.
8. For PRJ-38442-2024 which included the installation of a dehumidifier, the ex-ante savings reported deemed savings based on unit capacity per the PNM workpaper, which are likely based on an old TRM version.	Update measure-level deemed savings in the workpapers and workbooks based on the recent version of the NM TRM to align project savings with updated guidance.

3.3.3 Quick Saver Gross Impact

The Evaluation findings of the Quick Saver subprogram indicate the use of unsupported custom inputs and lack of transparency in baseline lighting equipment wattage were observed, which affect the accuracy and consistency of savings calculations. Clearer documentation and better alignment with site-specific details are needed to enhance program effectiveness.

Table 15: Quick Saver Evaluation Findings and Recommendations

Findings	Recommendation
1. For 21168, ex-ante calculations included the use of site-specific inputs including hours of use (HOU), but supporting evidence was not provided to verify the use of the inputs. Site-specific inputs should be supported by documentation, such as an email from the site indicating operating hours. If information cannot be provided, then default values specified in the New Mexico TRM or Workpapers should be used.	Site specific inputs such as hours of use (HOU) should be supported by evidence to increase confidence in results. If supporting documentation cannot be provided, then implementation should refer to the NM TRM or measure Workpapers.
2. Reported savings for four projects (21154, 21179, 21157, and 21215) were found to use pre-existing wattages that were unsupported from reference material. Specifically, wattages were not sourced from the most up to date Workpaper which provides baseline wattages by fixture and bulb type including the ballast factor. The Evaluation team sourced the baseline wattages from these tables based on the fixture descriptions provided in the program tracking data, assuming a normal ballast factor when unspecified.	To increase transparency and consistency, implementors should explicitly describe baseline fixtures and lamps including equipment type, ballast type, ballast factor, size, and wattage. Wattage should be sourced from the PNM workpaper based on the mentioned inputs to enhance consistency.

3.3.4 Retrofit Rebate Gross Impact

Evaluation findings include methodology differences for transformer replacements, the use of reported wattage rather than DLC tested wattage, the use of SEER rather than SEER2 equipment efficiency, misalignment with deemed savings in PNM workpapers compared to the NM TRM, and deviations with the allocation of fixture installations in different horticultural areas. Aligning PNM workpapers with the updated NM TRM and updating methodology for interior horticultural lighting projects and transformer retrofits will help increase the consistency and accuracy of program estimates.

Table 16: Retrofit Rebate Evaluation Findings and Recommendations

Findings	Recommendation
1. For PRJ-38462-2024, the ex-ante savings analysis included the reported fixture wattage from the equipment specification sheet as opposed to the tested wattage on the DLC certificate.	When available, utilize the tested wattage on the DLC certificate to inform the installed wattage as opposed to the reported wattage on product specification sheets or DLC.

Findings	Recommendation
2. For PRJ-39462-2025 and PRJ-40401-2025 which included the installation of air conditioning units, ex-ante savings calculations used SEER values as opposed to SEER2, which is the requirements for units manufactured after 1/1/2023 per IECC 2021.	Ensure appropriate code baselines, notably efficiency for air conditioning equipment, is chosen appropriately based on site conditions. Specifically, if air conditioning equipment is manufactured after 1/1/2023 then the applicable minimum efficiency should be used to define baseline.
3. For PRJ-39952-2025 which included the installation of interior horticultural lighting, ex-ante savings were calculated assuming operating inputs solely for the propagation area. The project documentation indicates that this is not the case, as lighting fixtures were installed to multiple areas serving various stages of growth (flowering, vegetative, propagation), which all have varying operational characteristics.	For horticultural lighting applications, ensure savings are calculated individually for each stage of growth (flowering, vegetative, and propagation) based on the inputs provided in the NM TRM to accurately determine energy impacts.
4. For PRJ-41260-2025 which included the installation of variable speed drives on fans and pumps, ex-ante savings were reported based on deemed values in the PNM workpaper, which differ from those reported in the NM TRM.	Update PNM workpapers including the version for VSDs on fans and pumps to align with the recent version of the NM TRM. Ensure all workpapers are updated on a biennial basis at a minimum to align with potential future updates to the NM TRM.
5. For PRJ-40148-2025 which included the replacement of transformers, ex-ante savings calculations included the assumption that there is a linear relationship between transformer load and loss. The losses provided on the equipment spec sheets show that losses have an exponential relationship with transformer load.	Update the transformer calculator to model losses exponentially based on the curves provided on the equipment specification sheets. Site-specific transformer load should be applied to the curve to calculate expected loss at varying intervals.

4 RESIDENTIAL PRODUCTS

The Residential Products program includes two sub-programs: Residential Lighting and Retail Products. Both programs involve the implementation of prescriptive-based measures, where Residential Lighting supports the installation of upstream lighting equipment (entirely nightlights), and Retail Products supports the installation of non-lighting equipment (through upstream, downstream, and instant-rebate program pathways). The equipment supported in the Retail Products program include appliances (such as refrigerators, freezers, clothes washers, clothes dryers), insulation measures, smart thermostats, air purifiers, and air conditioners. The evaluation of the Residential Products program includes a gross savings impact assessment and a net-to-gross (NTG) evaluation. The gross evaluation assessed the claimed engineering parameters compared to those documented in the TRM to verify the accuracy of reported savings. The NTG assessment utilized the elasticity model, which analyzes the sensitivity of customers to price changes for provided energy efficient rebates to assess the influence of price reductions on overall equipment sales.

4.1 Realized Gross Impacts

The Gross evaluation included a census-level deemed review utilizing site-specific information provided in the population data and the appropriate TRM reference. The Gross Realized Savings are calculated by taking the original ex ante savings values from the participant tracking databases and adjusting them using an Installation Adjustment factor (based on the count of installed measures verified through project documentation) and an Engineering Adjustment factor (based on the engineering analysis, desk reviews, etc.)

$$Gross\ Realized\ Savings = (Ex\ Ante\ Savings) * (Installation\ Adjustment) * (Engineering\ Adjustment\ Factor)$$

The PY2025 energy savings impacts for the Residential Products program are summarized in Table 17 and Table 18.

Table 17: PY2025 Residential Products Savings Summary (kWh)

Program	Sub-Program	# of Projects	Expected Gross kWh Savings	Engineering Adjustment Factor	Realized Gross kWh Savings
Retail Products		353,839	29,670,883	0.9036	26,811,360
Residential Lighting		17,356	459,386	1.0000	459,386
Residential Lighting LI		51,486	1,374,944	1.0000	1,374,944
Total		**422,681**	**31,505,213**	**0.9092**	**28,645,690**

Table 18: PY2025 Residential Products Savings Summary (kW)

Program	Sub-Program	# of Projects	Expected Gross kW Savings	Engineering Adjustment Factor	Realized Gross kW Savings
Retail Products		353,839	2,964	1.0321	3,060
Residential Lighting		17,356	-	N/A	-
Residential Lighting LI		51,486	-	N/A	-
Total		**422,681**	**2,964**	**1.0321**	**3,060**

As mentioned previously, the gross evaluation included a census-level review, where equipment-level savings for all equipment incentivized in PY2025 were reviewed for consistency and accuracy. The process consisted of a deemed review, in which information from the population data was used to inform deemed inputs and savings from applicable TRMs.

The ex-ante savings were found to utilize approaches and deemed inputs reported in references other than the applicable 2025 NM TRM, including the PA TRM, the Mid-Atlantic TRM, and older versions of the NM TRM. The evaluation team used the current version of the NM TRM, when applicable to verify savings. For measures that were not supported in the NM TRM, the evaluation team utilized other sources (primarily the TX TRM) following the order of references specified in Section 1.1. The primary difference in savings is due to the use of different TRMs. Table 19 provides a list of measure inputs and deviations between TRM sources used to determine claimed and verified savings.

Table 19: Deviations in Inputs by Measure

		Claimed		Verified	
Measure	Variable	Source	Value	Source	Value
Air Purifier	Deemed inputs (based on clean air delivery rate)	2020 PA TRM	Vary	2025 TX TRM	Vary
Cinch Door Seal	CDD	2021 NM TRM	1,938	2025 NM TRM	1,322
	HDD	2021 NM TRM	4,187	2025 NM TRM	4,180
ENERGY STAR Bath Vent Fans	Application	Mid-Atlantic TRM	Continuous usage	2025 NM TRM	Standard usage
	CFM	Mid-Atlantic TRM	20	2025 NM TRM	92.4
	Base CFM/watt	Mid-Atlantic TRM	3.1	2025 NM TRM	2.2
	Efficient CFM/watt	Mid-Atlantic TRM	8.3	2025 NM TRM	5.3
	Hours	Mid-Atlantic TRM	8760	2025 NM TRM	1089
	Deemed inputs	Mid-Atlantic TRM	35.4 kWh, 0.004 kW	2025 NM TRM	27.4 kWh, 0.0034 kW
ENERGY STAR Dishwasher	Default fuel mix (%elec DHW)	2021 PA TRM	43%	2025 NM TRM	42%
	Deemed savings	2021 PA TRM	22.8 kWh, .00254 kW	2025 TX TRM	43.51 kWh (weighted between electric and gas)
ENERGY STAR Freezer	Coincident factor	2020 PA TRM	.0001614	2025 NM TRM	1.028
ENERGY STAR Refrigerator	Coincident factor	2020 PA TRM	.0001614	2025 NM TRM	1.081
ENERGY STAR Water Cooler	Deemed kWh/unit	2016 PA TRM	733.7	2025 NMN TRM	245.645
Evaporative Central Cooler	Deemed kWh/unit	2023 NM TRM	2,223	2025 NM TRM	1,833

		Claimed		Verified	
Measure	Variable	Source	Value	Source	Value
Heat Pump Clothes Dryer	Combined Energy Factor EE: standard	2021 PA TRM	4.5 (deemed)	2025 NM TRM	3.93-9 (based on equipment certificate)
	Combined Energy Factor EE: compact	2021 PA TRM	4.71 (deemed)	2025 NM TRM	3.93-9 (based on equipment certificate)
Pleated Air Filter	EFLHc	2021 NM TRM	1,038	2025 NM TRM	852
	EFLHh	2021 NM TRM	2,162	2025 NM TRM	1,358
Room Air Conditioner	EFLHc	2025 NM TRM	553	2025 NM TRM	1,081
	Room AC adjustment factor	2025 NM TRM	0.49	2025 NM TRM	0.51
Smart Thermostat	Reductionheat	2023 NM TRM	7%	2025 NM TRM	8.5%
	EFLHc	2023 NM TRM	1,038	2025 NM TRM	852
	Reductioncool	2023 NM TRM	8%	2025 NM TRM	8.4%

The savings claimed for all equipment incentivized through the Residential lighting subprogram were found to be within expectations as the appropriate baseline wattage and other engineering parameters were in alignment with the NM TRM, and EISA baseline requirements.

4.2 Net Impact

The evaluation team used a Poisson regression model to estimate the free ridership level and net-to-gross (NTG) ratio for PNM's upstream Residential Products program and for each measure offered through the program.[6] This includes measures from the upstream lighting subprogram and upstream retail products (non-lighting) subprogram. The Poisson regression modeling approach utilizes (incentivized) price and quantity sales data on items purchased through the upstream Residential Products program to estimate the impact that the rebates provided by PNM have on the demand for each respective product.[7] The impact of a rebate is measured as the incremental effect that the point-of-sale rebate has on sales of the measure.[8]

The Residential Products program provided a single lighting measure, LED nightlights, and various other energy efficiency measures, ranging in (pre-rebate) cost from $5.03 for big gap filler to $370.84 for a room air conditioner (see Table 20). Likewise, the average rebate offered for each measure differed substantially in both dollar value and in the percentage of the retail (pre-rebated) price it represented. For example, the average rebate for an advanced power strip was $25.68, which is equal to 95 percent of the average retail price for the measure. Incentives for advanced power strips account for 16.2 percent of PNM's total rebate costs. The largest rebate (in dollars) offered through the Residential Products program was $50.26 for an air purifier, which represents 37 percent of the measure's retail cost on average, yet only 3.9 percent of total rebate spending by PNM.[9]

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[6] For programs with an upstream incentive, the rebate is provided to the retailer and then passed along to the customer as a rebate at the point of sale.

[7] This is in contrast to indirect methods that use surveys or interviews (e.g., in-store intercept surveys) of customers asking them how important the incentive was in their decision to purchase a particular measure. Matching rebates provided by manufacturers were combined with rebates from PNM in the analysis.

[8] As Table 17 shows, there is substantial variation among measures rebated through the Residential Products program in the absolute and proportional size of rebates.

[9] For additional background, a portion of measures offered at dollar stores and charity retaiulers are discounted by the manufacturer in addition to the incentive provided by PNM.

The most impactful measures rebated through the Residential Products program—as measured by percent of total spending on rebates—were LED nightlights (27.2% of rebate spending), big gap filler (27.1% of rebate spending), advanced power strips (16.2% of rebate spending), and cinch door seal (bottom) (8.4% of rebate spending). Not coincidentally, as we discuss below, these were four of the five measures with the highest NTG ratios (and the lowest rates of free ridership). The purpose of the incentives is to encourage consumers who would not otherwise purchase a specific energy efficiency measure to do so. However, since the rebate is available to all purchasers of the measure, even those who would have purchased it without the rebate receive it. Larger incentives, particularly as a share of the retail price, are associated with higher participation/purchasing. As participation increases, free riders represent a smaller share of total participants, resulting in lower observed free ridership rates and higher NTG ratios.

*Table 20: Average Price per Measure, Rebate as a Percent of Pre-Rebated Price, and Proportion of Each Measure's Rebated Cost as a Percent of the Cost of All Rebates**

Rebated Measure	Average Price Pre-Rebate	Average Rebate	% Reduction from Pre-Rebate Price	Rebate Cost as a % of Total Cost of All Rebates**
LED Nightlight	$9.58	$8.07	84%	27.2%
Advanced Power Strip	$25.68	$24.30	95%	16.2%
Air Purifier	$135.07	$50.26	37%	3.9%
Big Gap Filler	$5.03	$2.56	51%	27.1%
Ceiling Fan	$244.24	$33.00	14%	1.7%
Cinch Door Seal (bottom)	$11.54	$8.26	72%	8.4%
Cinch Door Seal (top)*	$28.19	$5.04	18%	0.9%
ENERGY STAR Bath Vent Fan	$152.66	$33.03	22%	2.4%
ENERGY STAR Water Cooler	$168.87	$34.82	21%	1.8%
Pleated Air Filter	$9.11	$4.26	47%	10.0%
Room Air Conditioner (RAC)	$370.84	$33.00	9%	0.1%
Window Film Roll	$40.34	$6.05	15%	0.1%

Source: Analysis by Evergreen Economics of data provided by PNM.

* Data includes only those units sold and rebated through a retail outlet

**Includes PNM program incentive and any manufacturer or retailer incentives.

4.2.1 Realized Net Impacts

The purpose of the Poisson regression model is to estimate the price sensitivity of retail demand for each of the products incentivized through PNM's upstream Residential Products program. Using the output of each regression model, we estimated the marginal price effect—the impact on consumer demand for an energy efficiency measure—between the rebated and non-rebated price for the respective measure offered through the Residential Products program. With these relationships established, we estimated how much the program influences overall sales of each energy efficiency measure through the point-of-sale rebate.

We estimated separate regression models for each product (12 models total). The model specification we used for the analysis is as follows:

$$ln(quantity_{i,t,s}) = \alpha + \beta_1 price_{i,t,s} + \beta_2 days_i$$

$$quantity_{i,t,s} = \text{Number of measure type } i \text{ sold in period } t \text{ by store } s$$

$$price_{i,t,s} = \text{Rebated price of measure type } i \text{ sold in period } t \text{ by store } s$$

$$days_{i,t,s} = \text{For measure type } i\text{, number of days in sales period } t \text{ by store } s$$

Using the estimated coefficients from the Poisson regression models, we simulated average monthly sales volume for each of the 12 energy efficiency measures under two price assumptions: regular retail price (i.e., no rebate) and rebated price. We then used the simulated sales volumes developed for each of the 12 measures to derive estimates of the free ridership rate and NTG ratio using the following equation:

$$Free\ Ridership\ Ratio = \frac{Estimated\ Measure\ Sales\ without\ Rebate}{Estimated\ Measure\ Sales\ with\ Rebate}$$

$$Net - to - Gross\ Ratio = 1 - Free\ Ridership\ Rate$$

Table 21 shows the evaluation team's estimates of the free-ridership rate and NTG ratio for each measure rebated through the Residential Products program. Our estimates of free ridership vary greatly across the 12 measures analyzed—from a low of zero for advanced power strips, which were proportionally the most highly rebated measures (95%), to a high of 1.0 for cinch door seal (top) and ENERGY STAR water coolers, which were far more modestly rebated. Recall that free ridership represents the (estimated) proportion of sales that would have occurred in the absence of the program.[10] Our estimate of zero free ridership for advanced power strips means that, without PNM's point-of-sale rebate, no advanced power strips would have been purchased by consumers during this program year. In contrast, the estimated free ridership of 1.0 for cinch door seals (top) indicates that PNM's rebate did not lead to additional sales of the measure. That is, for rebated products with a NTG ratio of zero or near-zero, there is little/no evidence that people are purchasing the rebated products who would not already be purchasing the products without the rebate.

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[10] As the rebated price decreases (i.e., the value of the rebate increases), more and more consumers—who would otherwise not purchase the respective measure—are motivated to purchase the respective measure, resulting in a decreasing proportion of purchasers that are free riders.

For LED nightlights, the only lighting measure offered through the Residential Products program (as part of the upstream lighting subprogram) and the measure for which the most rebate dollars were spent (27.2% of total rebates), the free ridership rate is 0.17, and the NTG ratio is 0.83. This NTG ratio should be applied prospectively for the upstream lighting subprogram in PY2026 through PY2028.

Big gap filler, which accounted for 27.1 percent of total rebate costs, has an estimated free ridership rate of 0.17 and an NTG ratio of 0.83. For non-lighting retail products overall, when weighting by each measure's total rebates provided through all retailers and through giveaways, the evaluation team estimates free ridership to be 0.34 and the NTG ratio to be 0.64.[11] Either this NTG ratio or the measure-level ratios presented in Table 21 should be applied prospectively for the Retail Products subprogram (measures) in PY2026 through PY2028.

[11] Giveaways were provided for nightlights (33,912 units) and cinch door seal (bottom) (15,000 units). For nightlights we assumed the same NTG ratio as for units rebated and sold in stores (0.83); for cinch door seal (bottom), we assumed a NTG ratio of 0.5, which is more than six times greater than the estimated NTG ratio based solely on units rebated through retailers.

Table 21: Estimates of Free Ridership and NTG Ratio for Energy Efficiency Measures Offered Through the Residential Products Program

Energy Efficiency Measure	Free Ridership	NTG Ratio at Mean Rebate Price
LED Nightlight (Residential Lighting Subprogram)	**0.17**	**0.83**
Advanced Power Strip	0.00	1.00
Air Purifier	0.67	0.33
Big Gap Filler	0.17	0.83
Ceiling Fan	0.96	0.04
Cinch Door Seal (bottom)	0.60	0.40
Cinch Door Seal (top)*	1.00	0.00
ENERGY STAR Bath Vent Fan	0.92	0.08
ENERGY STAR Water Cooler*	1.00	0.00
Pleated Air Filter	0.37	0.63
Room Air Conditioner (RAC)	0.94	0.06
Window Film Roll	0.92	0.08
(Non-Lighting) Retail Products	**0.34**	**0.64**

Source: Analysis by Evergreen Economics of data provided by PNM. * From our analysis, we find no price effects associated with the rebates provided for this product.

To further show the relationship between the price of a product, monthly sales, and associated NTG ratio, the evaluation team plotted predicted monthly sales and NTG ratio by the price per unit paid by the customer, for all measures. Results for nightlights and advanced power strips are shown in Figure 1 and Figure 2, respectively, and figures for all other measures are in Appendix E.

Figure 1 shows a clear inverse relationship between price and predicted monthly nightlight sales, with sales declining steadily as the price increases. At the same time, the NTG ratio decreases as the price increases, indicating that higher incentive amounts – i.e., lower price to consumers – induce more customers to purchase nightlights.

Figure 1: Predicted Average Monthly Nightlight Sales and NTG Ratio by Price

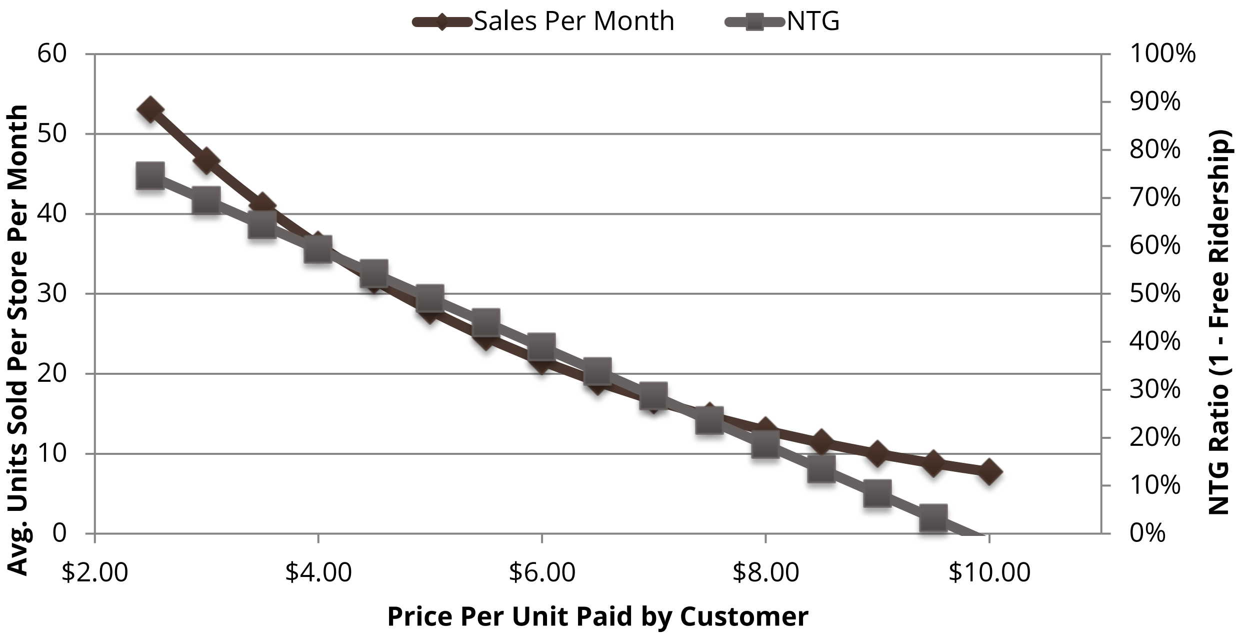
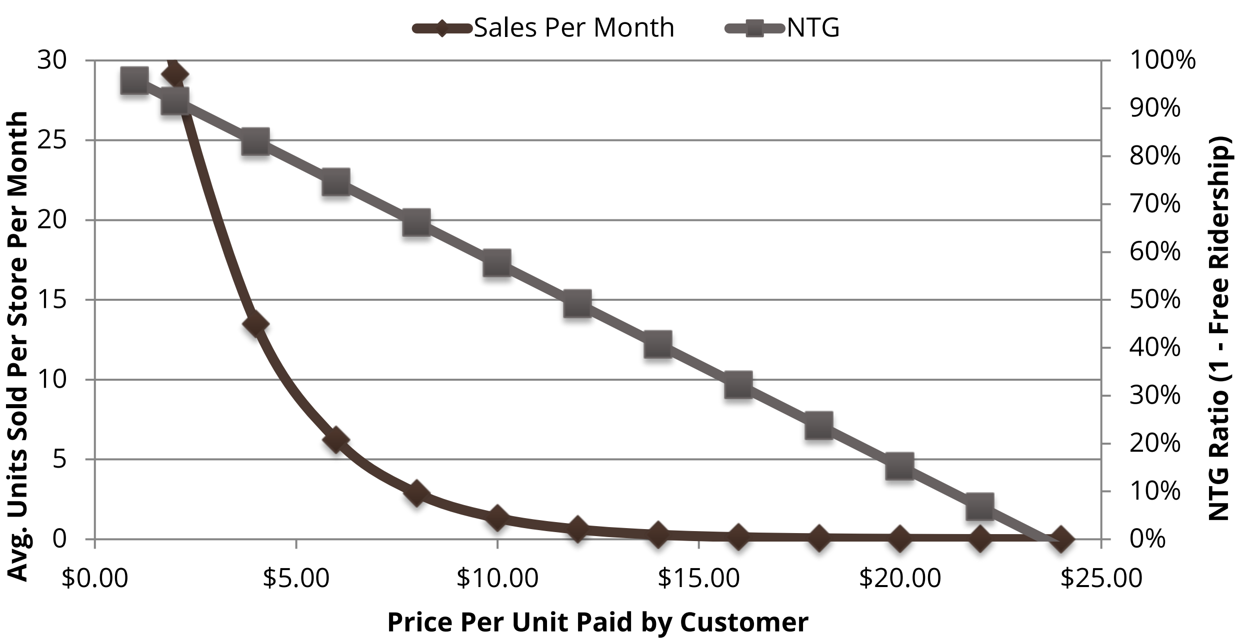


Figure 2 shows a similar but more extreme pattern for advanced power strips, where predicted monthly sales decline rapidly as the price increases. The NTG ratio decreases as the price increases, indicating that higher incentive amounts – i.e., lower price to consumers – induce more customers to purchase advanced power strips.

Figure 2: Predicted Average Monthly Advanced Power Strip Sales and NTG Ratio by Price



Net Realized Savings are determined by multiplying the Gross Realized Savings by the NTG ratio:

$$Net\ Realized\ Savings = (Net - to - Gross\ Ratio) * (Gross\ Realized\ Savings)$$

Table 22 and Table 23 summarize the PY2025 net impacts for the Residential Products program using the prospective NTG ratios calculated by the evaluation team during the PY2022 evaluation from the Poisson regression model.

Table 22: PY2025 Residential Products Net Impact Summary (kWh)

Program	Sub-Program	# of Projects	Realized Gross kWh Savings	NTG Ratio	Realized Net kWh Savings
Retail Products		353,839	26,811,360	0.5100	13,673,794
Residential Lighting		17,356	459,386	0.5100	234,287
Residential Lighting LI		51,486	1,374,944	1.0000	1,374,944
Total		**422,681**	**28,645,690**	**0.5335**	**15,283,025**

Table 23: PY2025 Residential Products Net Impact Summary (kW)

Program	Sub-Program	# of Projects	Realized Gross kW Savings	NTG Ratio	Realized Net kW Savings
Retail Products		353,839	3,060	0.5100	1,560
Residential Lighting		17,356	-	0.5100	-
Residential Lighting LI		51,486	-	1.0000	-
Total		**422,681**	**3,060**	**0.5100**	**1,560**

4.2.2 Net-to-Gross Ratio Update for PY2025

The Evaluation Team calculated NTG ratios form the Poisson regression model equal to 0.83 for the Residential Lighting subprogram, and 0.64 (or measure-level NTG values) for the Retail Products subprogram, which will be applied to the respective subprogram beginning in PY2026

Table 24 shows the updated Residential Comprehensive NTG ratios for PY2026 compared to the PY2025 NTG evaluation results.

Table 24: Residential Comprehensive NTG Ratio Update for PY2025

Program	PY2025 NTG Ratio	PY2026 NTG Ratio
Retail Products	0.51	0.64
Residential Lighting	0.51	0.83
Residential Lighting LI	1.00	1.00

4.3 Conclusions and Recommendations

The Evaluation findings of the Residential Products program indicate deviations in engineering parameters and deemed savings from the use of varying technical references. Aligning methodology with the current version of the NM TRM will help to increase consistency and accuracy in claimed program savings.

Table 25: Residential Products Evaluation Findings and Recommendations

Finding	Recommendation
1. The ex-ante methodology for most measures were sourced from references in Eastern US jurisdictions such as PA and the mid-Atlantic region, which differ from the NM TRM, most notably for climate-related inputs. Furthermore, some measures were found to reference older versions of TRMs, which include outdated research and inaccurate deemed savings.	Align program methodology for all measures with the current version of the NM TRM. If a measure is not supported in the NM TRM, refer to technical references in the following order: NM, TX, IL, other references.

5 EASY SAVINGS

The Easy Savings program is designed to provide low-income and income-qualified customers with no-cost energy efficiency kits containing a variety of pre-installed or self-installed measures to reduce energy consumption and lower utility costs. The program primarily serves customers who may face financial barriers to energy-efficiency upgrades by distributing kits that include high-efficiency lighting, water-saving devices, and weatherization materials. By offering these direct-install and mail-in measures, the program ensures that energy-saving technologies reach households that may not otherwise have access to them. The evaluation of the Easy Savings program included a NTG evaluation which assesses the degree to which savings can be directly attributed to the program.

5.1 Realized Gross Impacts

The Easy Savings program provides low-income and income-qualified customers with pre-packaged energy-efficiency kits, designed to help households reduce electricity use at no cost. These kits contain deemed measures such as LED lighting, faucet aerators, low-flow showerheads, weatherization materials, and advanced power strips, which are either self-installed by participants or installed by program partners. A gross impact evaluation was completed as part of the PY2024 evaluation efforts and assessed the realized energy savings from these measures by verifying installation rates, tracking data accuracy, and measure performance.

The energy impacts for the Easy Savings program are summarized in Table 26 and Table 27. Note, an engineering adjustment factor of 100% was applied, as a gross impact evaluation was not conducted as part of PY2025 evaluation efforts.

Table 26: PY2025 Easy Savings Summary (kWh)

Program	Sub-Program	# of Projects	Expected Gross kWh Savings	Engineering Adjustment Factor	Realized Gross kWh Savings
Easy Savings		7,902	4,683,470	1.0000	4,683,470
Easy Savings LI		4,686	3,173,205	1.0000	3,173,205
Total		**12,588**	**7,856,676**	**1.0000**	**7,856,676**

Table 27: PY2025 Easy Savings Summary (kW)

Program	Sub-Program	# of Projects	Expected Gross kW Savings	Engineering Adjustment Factor	Realized Gross kW Savings
Easy Savings		7,902	2,258	1.0000	2,258
Easy Savings LI		4,686	1,730	1.0000	1,730
Total		**12,588**	**3,988**	**1.0000**	**3,988**

5.2 Realized Net Impacts

The Low-Income portion of the Easy Savings program receives a Net-to-Gross (NTG) ratio of 1.00 (100% attribution to the program) because it is a kit-based initiative where energy-saving measures are provided at no cost to participants. Unlike rebate-driven programs, where free ridership must be assessed, the Easy Savings program ensures that all installed measures result directly from program intervention rather than independent customer action. Since participants do not purchase the equipment independently and only receive energy-saving kits through program outreach, all reported savings are fully attributable to the program. As a result, a net impact adjustment is not necessary, and realized savings are equal to the gross verified savings.

The net-to-gross evaluation for the Market Rate Expansion program process calculates Net-to-Gross (NTG) savings, which reflect the program's effectiveness in achieving energy savings. Table 28 and Table 29 summarize the PY2025 net impacts for the Easy Savings program using the prospective NTG ratios calculated by the evaluation team during the PY2024 evaluation.

Table 28: PY2025 Easy Savings Net Impact Summary (kWh)

Program	Sub-Program	# of Projects	Realized Gross kWh Savings	NTG Ratio	Realized Net kWh Savings
Easy Savings		7,902	4,683,470	0.5985	2,803,057
Easy Savings LI		4,686	3,173,205	1.0000	3,173,205
Total		**12,588**	**7,856,676**	**0.7607**	**5,976,262**

Table 29: PY2025 Easy Savings Summary (kW)

Program	Sub-Program	# of Projects	Realized Gross kW Savings	NTG Ratio	Realized Net kW Savings
Easy Savings		7,902	2,258	0.5985	1,352
Easy Savings LI		4,686	1,730	1.0000	1,730
Total		**12,588**	**3,988**	**0.7727**	**3,082**

5.2.1 Net-to-Gross Ratio Update for PY2026

The Evaluation Team developed a program-specific Net-to-Gross (NTG) ratio for the market rate component of Energy Savers Kits program using results from the 2026 participant survey.[12] A total of 240 participant responses were included in the analysis, with a small number of responses removed due to inconsistencies. The NTG estimate is based on participants' reported likelihood of installing measures in the absence of the program, along with observed measure adoption patterns across the kit. To better reflect differences in customer behavior, the analysis considered variation across measure categories, including lighting, advanced power strips, weatherization, and water-related measures.

$$NTG = 1 - Free\ ridership$$

Lighting measures, particularly LEDs, were evaluated separately from other measure categories due to their widespread availability and relatively high baseline adoption in the market. The Table 28 below shows the NTG results across different scenarios, including overall program performance and estimates excluding lighting measures.

[12] The Low-Income portion of the program does not receive a Net-to-Gross (NTG) evaluation, so therefore the updated NTG ratio for the LI portion will continue as currently defined, 1.00 (100% net realization).

Table 30: PY2025 Easy Savings NTG Ratio

Measure	Free Ridership	NTG Ratio
Electric Kits (Excluding Lighting)	0.38	0.62
Gas Kits (Excluding Lighting)	0.31	0.69
Overall (All Measures)	**0.57**	**0.43**

The NTG results highlight a clear distinction between lighting and non-lighting measures within the Energy Savers Kits program. Lighting measures, particularly LEDs, exhibit higher levels of free ridership due to their accessibility and widespread market adoption. Consequently, including these measures lowers the overall NTG estimate. In contrast, non-lighting measures, such as weatherization and water-related products, demonstrate stronger program attribution, as participants are less likely to install these measures without program support. The overall NTG estimate (including lighting) is 0.43. However, results excluding lighting measures show higher NTG values, reflecting stronger program attribution for non-lighting measures. While lighting contributes to total program savings, these results indicate that program influence is more pronounced for measures with lower baseline adoption.

Table 31 shows the updated Easy Savings NTG ratios for PY2026 compared to the PY2025 NTG evaluation results.

Table 31: Easy Savings NTG Ratio Update for PY2025

Program	PY2025 NTG Ratio	PY2026 NTG Ratio
Easy Savings	0.5985	0.4300
Easy Savings LI	1.0000	1.0000

5.3 Process Evaluation

The EcoMetric team conducted a participant survey with customers in PNM's New Mexico territory who received Energy Savers Kits through the Easy Savings program. The objective of this survey was to gather insights on participant household characteristics, familiarity with energy efficiency measures included in the kits, and overall experiences with the program. The survey also collected information used to estimate program free ridership and calculate the Net-to-Gross (NTG) ratio.

Survey invitations were distributed to eligible customers, and respondents were first asked to confirm that they recalled receiving a kit from PNM before proceeding with the survey. A total of 275 respondents completed the survey and were included in the analysis. While all respondents met the eligibility criteria for participation, not every respondent answered every survey question.

Table 32: Survey Target and Completes

Respondent Group	Target Completed	Completed Surveys
Kit Respondents	90	275

The following sections report results on participant household demographics and characteristics, familiarity with energy efficiency measures included in the Easy Savings Kits, program awareness, and participant satisfaction with the NM Easy Savings program.

5.3.1 Respondent Demographics

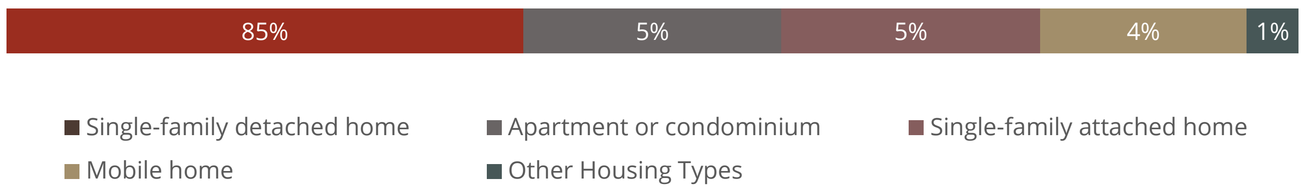
Table 33 presents key demographic characteristics of the survey respondents. Responses from 275 Easy Savings Kit participants were included in the analysis, representing a range of household sizes and housing types across PNM's service territory. Among respondents, 91% reported owning their homes, while 9% reported renting.

Table 33: Demographic Information by Response Type

Demographic	Respondents (n=275)
% Homeowners	91%
% Renters	9%

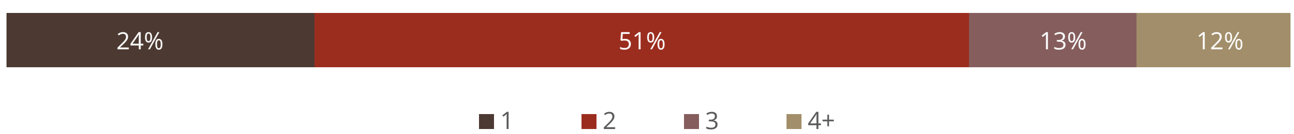
Most respondents live in single-family detached homes (85%), with smaller shares residing in apartments or condominiums (5%), attached homes such as townhouses or row houses (5%), and mobile homes (4%). A small share of respondents (1%) reported other housing types. These results indicate that the Easy Savings program reaches a diverse range of residential households across PNM's service territory.

Figure 3: Respondent Home Type



The majority of survey respondents represent small households with 88% consisting of only one to three people. Larger families (four or more) make up only 12% of the respondents.

Figure 4: Respondent Home Size



5.3.2 Program Awareness

Participants were asked whether they were aware of the NM Easy Savings Program prior to receiving the Energy Savers Kit. Among respondents, 62% reported that they were not aware of the program prior to receiving the kit, while 38% indicated prior awareness.

Among respondents who reported prior awareness, the most common source of awareness was utility communications, including emails, newsletters, bill inserts, and other outreach materials. Specifically, 79% of respondents (80 out of 101) reported learning about the program through utility communications. A smaller share of respondents reported hearing about the program through the utility website (14%), while very few respondents cited other sources such as a utility representative, advertisements, or word-of-mouth. These findings indicate that direct utility outreach is the primary driver of program awareness, while other channels such as digital advertising, community events, and referrals currently play a limited role in reaching customers.

Figure 5: Respondent Sources of Program Awareness

5.3.3 Familiarity with Energy Efficiency Measures

Participants were asked whether they were aware of the energy efficiency measures included in the Energy Savers Kits prior to receiving the kit. Overall, awareness was high for commonly used or visible measures, particularly LED light bulbs (94%), plumber's tape (85%), weatherstripping (84%), and door draft stoppers (83%). Other measures such as fixed showerheads (75%), window shrink and seal kits (76%), and foam tape (81%) also showed relatively high levels of familiarity. In contrast, lower awareness was observed for less commonly recognized or more technical measures, including advanced power strips (58%), foam outlet and switch gaskets (55%), bathroom aerators (56%), and kitchen aerators (58%).

These findings suggest that while participants were generally familiar with several energy-saving measures prior to program participation, the Energy Savers Kits play an important role in introducing less familiar technologies and expanding awareness of additional energy-saving opportunities. This variation in familiarity also supports the NTG analysis by indicating that program influence is likely stronger for measures with lower baseline awareness.

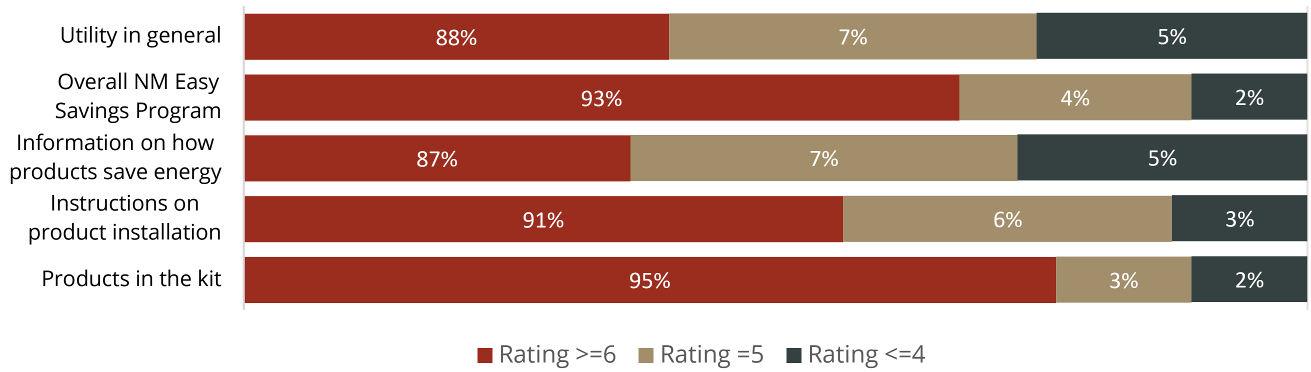
Table 34: Respondent Familiarity with Energy Efficiency Measures

Measure	Awareness of Energy-Saving Products (Pre-Kit)
Foam Outlet and Switch Gaskets	55%
Bathroom Aerators	56%
Advanced Power Strips	58%
Kitchen Aerators	58%
Candelabra Bulb	63%
Fixed Showerhead	75%
Window Shrink and Seal Kits	76%
LED Night Light	80%
Foam Tape	81%
Pipe Insulation	82%
Door Draft Stoppers	83%
Weatherstripping	84%
Plumber's Tape	85%
LED Light Bulbs	94%

5.3.4 Program Satisfaction

Participants reported high levels of satisfaction with the Energy Savers Kit and the NM Easy Savings Program overall. The majority of respondents provided high satisfaction ratings (≥6) across all program components, indicating a consistently positive experience. Satisfaction was highest for the products included in the kit (95%), followed by the overall program (93%) and the instructions on how to install the products (91%). Slightly lower, but still strong, satisfaction levels were observed for the utility overall (88%) and the energy-saving information provided in the kit (87%). Across all components, only a small share of respondents reported low satisfaction (ratings ≤4), ranging from 2% to 5%, while neutral ratings (rating = 5) ranged from 3% to 7%. These results indicate minimal dissatisfaction with the program and its components.

Figure 6: Program Satisfaction Across Key Program Components



Participants were also asked to provide open-ended feedback on their experience with the Energy Savers Kit and the NM Easy Savings Program. Overall, responses were largely positive, with many participants highlighting the usefulness of the products and the value of receiving energy-saving items at no cost. The following sentiments are summarized based on customer responses.

- Many participants reported that the products were useful and practical, particularly items such as light bulbs, weatherstripping, and water-saving devices. Several noted that the kit introduced them to products they had not previously used but found beneficial.
- At the same time, some participants mentioned that not all items were relevant to their household needs, with a few indicating that certain products were unused or already installed.
- Participants generally found the products easy to use and install, although some reported challenges and suggested that clearer instructions or additional guidance would improve usability.
- Feedback on instructions and information was mixed; while some found them helpful, others indicated that they were limited or unclear and could benefit from more detailed or visual explanations.
- Participants also noted that the program helped increase awareness of energy efficiency practices and provided cost-saving benefits, making it easier to adopt energy-saving measures.

- Suggestions for improvement included offering more detailed instructions, allowing customization of kit contents, and including more relevant or higher-quality products.

5.4 Conclusions and Recommendations

The survey findings indicate that the Easy Savings Program delivers a positive participant experience, with high satisfaction and increased awareness of energy-saving practices. Results also highlight key areas for consideration. Program awareness prior to kit receipt remains limited, and program influence is stronger for less familiar measures, while commonly available measures contribute to higher baseline adoption and free ridership. Participant feedback further suggests opportunities to improve alignment of kit contents and clarity of installation guidance. The following table summarizes the key findings and associated considerations for the Easy Savings Program.

Table 35: Findings and Recommendations

Finding	Recommendation
Low awareness among participants: Many participants (62%) reported not being aware of the program prior to receiving the Energy Savers Kit, indicating there may be an opportunity to expand awareness. Among those aware of the program, 79% reported learning about it through utility-led channels.	Expand outreach efforts beyond existing utility communications to improve program visibility prior to kit distribution, exploring complementary outreach approaches to diversify engagement and reach new customer segments.
NTG results indicate higher free ridership driven by lighting measures: The overall NTG is 0.43, with significantly higher NTG values (0.62-0.69) when lighting measures are excluded.	The evaluation team recommends PNM assume a 0.43 NTGR for prospective purposes. As participants reported high free ridership, particularly for lighting measures, PNM could consider removing the lighting measures from the kit to potentially improve program-driven impacts.
Some products are not fully relevant to participant needs: Participants noted that certain items were already owned or not applicable, leading to unused products.	Explore opportunities to improve alignment between kit contents and household needs, including potential segmentation or limited customization approaches.
Feedback on installation instructions and guidance While many participants found the instructions useful, others reported that they were unclear or insufficient.	Enhance instructional materials through clearer, more detailed, and potentially visual formats to improve usability and installation outcomes.

6 COMMERCIAL SEM

The Commercial Strategic Energy Management (SEM) program is designed to support commercial customers in achieving sustained energy savings through operational and behavioral changes, ongoing energy monitoring, and engagement in strategic energy management practices. The program provides technical guidance, training, and tools to help businesses identify and implement low- and no-cost energy efficiency measures while fostering a culture of continuous improvement in energy performance. The evaluation of the Commercial SEM program includes a gross assessment, where savings were typically calculated using a billing regression model to directly analyze the impact of program intervention on building consumption, and a bottom-up engineering assessment for facilities that experienced non-routine events, making billing regression models a difficult method to parse out savings.

6.1 Realized Gross Impacts

An evaluation of gross savings impacts was originally planned for PY2024 evaluation efforts but was deferred to this cycle to account for sufficient post-installation data to conduct a robust analysis. For a comprehensive and accurate gross impact evaluation, at least one year of post-installation data is necessary to assess the full energy savings impact across participating sites. The gross evaluation included custom desk review and site-specific billing regression models to analyze programmatic impacts on participant consumption.

The PY2025 energy savings for the Commercial SEM program are summarized in Table *36*, and Table *37* shows peak demand savings.

Table 36: PY2025 Commercial SEM Savings Summary (kWh)

Program	# of Projects	Expected Gross kWh Savings	Engineering Adjustment Factor	Realized Gross kWh Savings
Commercial Behavior SEM	15	8,380,824	0.9930	8,321,887
Total	**15**	**8,380,824**	**0.9930**	**8,321,887**

Table 37: PY2025 Commercial SEM Savings Summary (kW)

Program	# of Projects	Expected Gross kW Savings	Engineering Adjustment Factor	Realized Gross kW Savings
Commercial Behavior SEM	15	0.00	N/A	1,366
Total	**15**	**0.00**	**N/A**	**1,366**

For seven of the ten evaluated projects, consumption data was provided on the hourly level for all impacted meters. Regression models were developed to determine annual energy impacts by aggregating hourly data to daily intervals as the independent variables were all defined on a daily basis. To determine peak demand impacts as part of the ex-post analysis, hourly consumption data were used to develop load shapes, which were applied to the predicted daily consumption calculated from the regression models.

For one evaluated project, consumption data were provided at the hourly level for one meter, while the others were provided at daily intervals. To determine peak demand impacts, the evaluator followed the same approach as discussed above but applied the load shape derived from hourly metered data to facility-wide consumption. As a sanity check, the facility load shape was compared with an industrial load shape from the Electric Power Research Institute (EPRI).[13] Both load shapes were similar, so the evaluator used the site-specific shape to inform site-level impacts. Figure 6-1 shows the comparison between the site-specific load shape and the one provided from EPRI.

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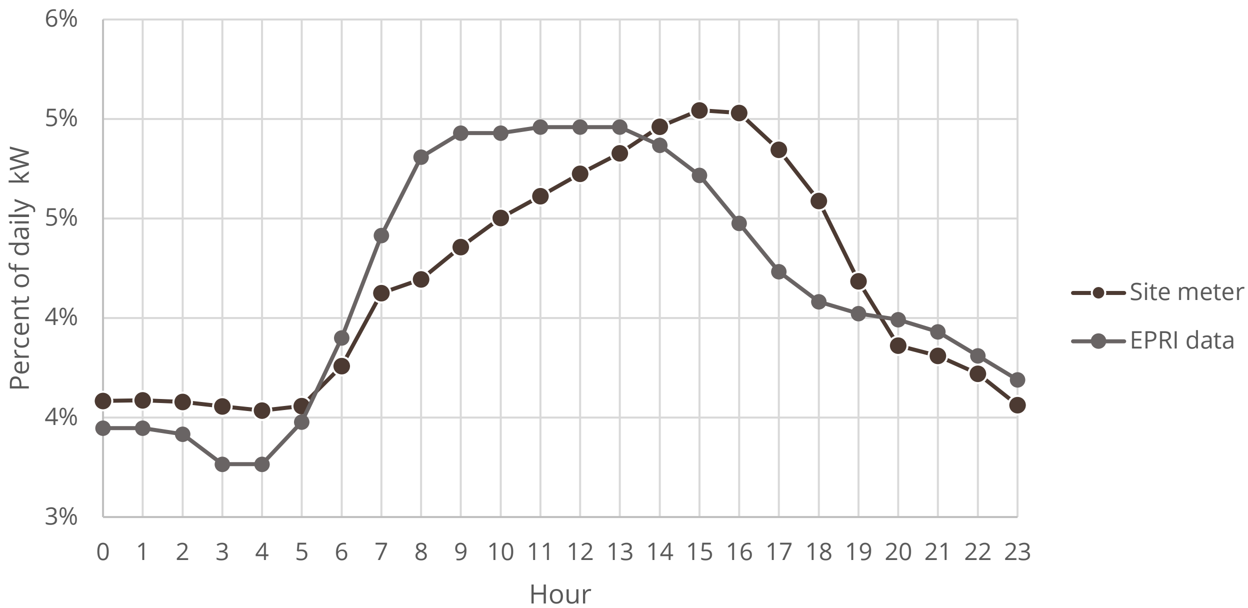
[13] See https://loadshape.epri.com/enduse

Realized gross kW savings are based on the expected impact between 5:00 and 6:00 PM on a summer weekday.

Figure 7: *Industrial Load Shapes*



The final two evaluated projects had non-routine events, caused by increases in production and growth during the measure implementation period, which made the regression models misrepresent program impacts. For participants experiencing significant operational growth, the ex-ante calculations were based on bottom-up engineering methods, using equipment specifications and operational parameters to inform program impacts. Both participants implemented projects such as lighting retrofits, insulation, and chiller replacements, which are more easily quantified using a bottom-up approach than smaller incremental behavioral modifications.

The Evaluation team re-purposed the ex-ante bottom-up engineering approach for both projects. For one, the inputs and methodology were found to be within expectations, resulting in no change to verified savings. For the other, there were two minor deviations described below for the impacted measures:

- Preheater insulation: Savings are based on the reduction in operating temperature by reducing control settings from 7.75 to 5.75, decreasing the temperature needed to achieve component temperature, and reducing heat loss. The project resulted in a reduction in kW from 2 to 0.61. The ex-ante model calculated savings based on a kW reduction equal to the change in the temperature setting, rather than on the actual demand reduction. The Evaluation team updated the model by calculating savings based on the reduction in calculated demand.
- Lighting BAS controls: Savings are based on the reduction in operating schedule due to the controls. The ex-ante model specifies the quantity of fluorescent lamps affected, the watts per bulb, the ballast, and the total fixtures. Each fixture includes two lamps and one ballast, equating to 109W per fixture. The ex-ante model calculates total power by multiplying 109W per fixture by the number of bulbs, rather than by the number of fixtures. The Evaluation team updated the model by utilizing the fixture quantity.

The evaluator calculated peak demand savings for both projects by applying coincidence factors. All measures included process installations, or 8,760 operations, indicating a coincidence factor of 1.0.

6.2 Realized Net Impacts

The Commercial Strategic Energy Management (SEM) program achieves energy savings through ongoing engagement, training, and operational improvements facilitated by program support. Unlike rebate-driven programs, where participant free ridership must be assessed, SEM savings are entirely program-driven, as businesses implement energy efficiency strategies, monitoring practices, and operational adjustments directly influenced by SEM participation. Because these savings result from active program intervention, an NTG ratio of 1.00 (100% attribution to the program) is applied, meaning all realized savings are considered fully attributable to SEM efforts. Program effectiveness is therefore evaluated through participant engagement metrics, energy performance tracking, and feedback from SEM cohort participants, rather than through traditional NTG adjustments.

Table *38* and Table 39 summarize the PY2025 net impacts for the Commercial SEM program using the prospective NTG ratios calculated by the evaluation team during the PY2023 evaluation.

Table 38: PY2025 Commercial SEM Net Impact Summary (kWh)

Program	Sub-Program	# of Projects	Realized Gross kWh Savings	NTG Ratio	Realized Net kWh Savings
Commercial Behavior SEM		15	8,321,887	1.0000	8,321,887
Total		**15**	**8,321,887**	**1.0000**	**8,321,887**

Table 39: PY2025 Commercial SEM Net Impact Summary (kW)

Program	Sub-Program	# of Projects	Realized Gross kW Savings	NTG Ratio	Realized Net kW Savings
Commercial Behavior SEM		15	1,366	1.0000	1,366
Total		**15**	**1,366**	**1.0000**	**1,366**

6.2.1 Net-to-Gross Ratio Update for PY2025

The program does not receive a Net-to-Gross (NTG) evaluation, so the updated NTG ratio will remain at 1.00 (100% net realization).

6.3 Conclusions and Recommendations

The engineering desk reviews determined that the expected energy savings calculated through the applied regression models and one of the bottom-up engineering analyses were consistent and appropriate for determining the impacts of the SEM program in reducing facility consumption. However, none of the claimed projects included estimates for peak demand reduction. All SEM templates should be updated to include the calculation for peak demand impacts associated with

SEM modifications, per the NM TRM. Table *40* contains further findings and recommendations developed from the engineering desk reviews.

Table 40: Commercial SEM Net-to-Gross Findings and Recommendations

Finding	Recommendation
1. The claimed SEM projects did not include any estimates for peak demand reductions due to program modifications.	The SEM workbook should be updated to calculate peak-demand reductions resulting from the implementation of SEM measures. Demand reductions can be calculated using the provided hourly consumption data to determine site-specific load shapes, which can be applied to the daily predicted usage determined from the regression models. If consumption is provided in larger intervals, implementors and evaluators should develop load shapes using EPRI or NREL data based on the facility type.
2. For one project that includes a bottom-up engineering analysis, savings were reduced for the insulation and lighting controls measures based on reference errors. For insulation, savings calculations used reductions in control settings rather than calculated demand reductions. For lighting, total power applied the fixture kW to the quantity of bulbs as opposed to the quantity of fixtures. Note these finding impacted one project, and adjusting for observed discrepancies led to a reduction equal to <1% of overall program savings.	Ensure QC checks are in place to verify that savings calculations for control measures incorporate the correct inputs.

7 RESIDENTIAL COMPREHENSIVE

The Residential Comprehensive program includes several subprograms, Home Energy Checkup and Midstream Cooling, designed to improve energy efficiency in residential settings. The Home Energy Checkup subprogram achieved energy savings through residential audits, offering personalized recommendations for homeowners to improve energy efficiency. Home-mailed kits were utilized to achieve energy savings from sites that did not consent to an evaluation, and, in most cases, to achieve a higher level of participation for the home visits. The Midstream Cooling program focused on offering incentives for energy-efficient cooling equipment, such as high-efficiency air conditioners and evaporative coolers.

As part of the regulatory oversight and energy efficiency initiatives in New Mexico, the Public Regulation Commission (PRC) has requested an evaluation of heat pump and heat pump water heater installations supported through the Residential Comprehensive program. The Evaluation team fulfilled this request by conducting a process assessment to collect insights into the types of heating systems that were replaced, the operational characteristic of new heat pump system, and the anticipated energy savings and emissions reductions. The findings presented are based on survey responses from participants in PNM's Residential Comprehensive program and will attempt to inform future program improvement, energy efficiency strategies, and policy decision. Participant surveys provided additional insights into the program's delivery, identifying areas for improvement in customer outreach, process efficiency, and overall program effectiveness to maximize energy savings and participation.

7.1 Realized Gross Impacts

A gross assessment was not conducted as part of PY2025 evaluation activities.

7.2 Realized Net Impacts

A net-to-gross assessment was not conducted as part of PY2025 evaluation activities.

7.3 Process Assessment

The process assessment for the Residential Comprehensive program included a participant survey designed to assess customer experiences, program interactions, and decision-making factors related to equipment installation. The survey targeted residential participants who received incentives for high-efficiency equipment through the program. While the evaluation approach was designed to capture insights across all eligible measure types, the achieved sample was predominantly composed of heat pump participants, with limited representation from heat pump water heater (HPWH) participants. Accordingly, the findings presented in this section primarily reflect the experiences of heat pump participants.

A total of 39 phone surveys were completed in March 2026, with each survey lasting approximately 20–30 minutes. The survey was primarily conducted via phone; however, due to a limited initial response rate, participants were also allowed to respond via email. The sample was drawn from the program tracking database and included participants across multiple project tiers and installation types within the heat pump segment to capture a range of customer experiences.

The survey instrument was structured to align with key evaluation objectives and included the following components:

- Measure verification and installation characteristics
- Equipment usage and heating system integration
- Contractor and retailer engagement
- Program awareness and decision drivers
- Rebate experience and timing
- Participant satisfaction and challenges

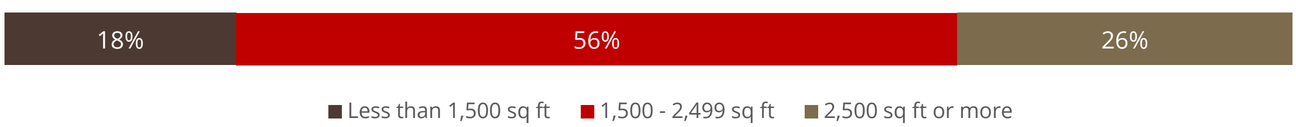
Data collection was conducted via telephone interviews to enable in-depth responses and allow for clarification where needed. Responses were analyzed to identify key themes related to the customer journey, the role of contractors, and overall program effectiveness.

7.3.1 Respondent Demographics

Survey respondents were asked a series of questions to characterize their household and housing attributes, including ownership status, housing type, home size, year of construction, household size, and length of residence. These characteristics provide important context for interpreting participant responses related to program engagement and experience.

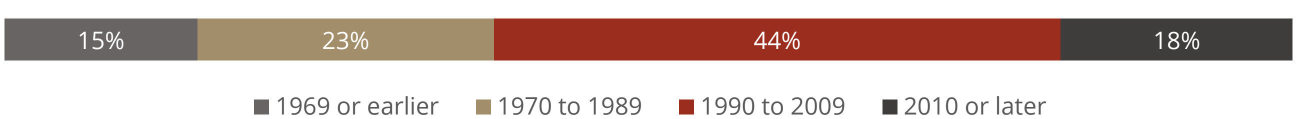
All respondents reported owning their homes. Nearly all respondents (97%) reported living in single-family homes, while a small share (3%) reported residing in multifamily buildings. Respondents reported a range of home sizes, as shown in Figure 8 below with responses concentrated in mid- to larger-sized homes. Approximately 56% of respondents reported living in homes between 1,500 and 2,499 square feet, including 38% in the 2,000 to 2,499 square foot range. Smaller shares of respondents reported living in homes under 1,500 square feet (18%) and in homes 2,500 square feet or larger (26%), including 8% in homes exceeding 4,000 square feet, indicating variation across housing sizes within the sample (Figure 8).

Figure 8: Respondent Home Size (n=39)



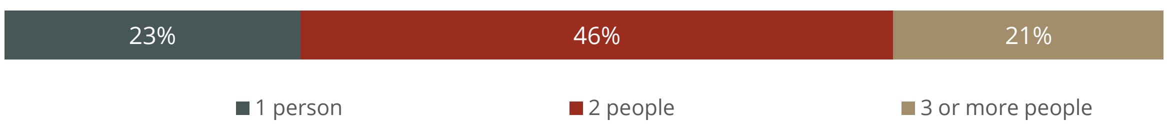
The age of respondents' homes varied across multiple construction periods. The largest share of respondents (44%) reported living in homes built between 1990 and 2009, followed by 23% in homes built between 1970 and 1989 (Figure 9). Additional respondents reported living in homes constructed prior to 1970 or after 2010, indicating representation across both older and newer housing stock.

Figure 9: Respondent Home Age (n=39)



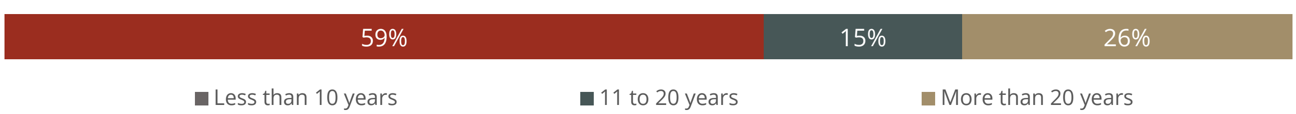
Household size varied across respondents, with the majority residing in smaller households. Figure 10 shows that nearly half of respondents (46%) reported living in two-person households, while 23% reported single-person households and 21% reported households with three or more occupants.

Figure 10: Respondent Household Size (n=39)



Respondents also reported a range of tenure in their current residence. The largest share (59%) indicated that they had lived in their home for less than ten years, while 26% reported living in their home for more than 20 years (Figure 11). The remaining respondents (15%) reported tenure between 11 and 20 years, indicating a mix of newer and long-term residents within the sample.

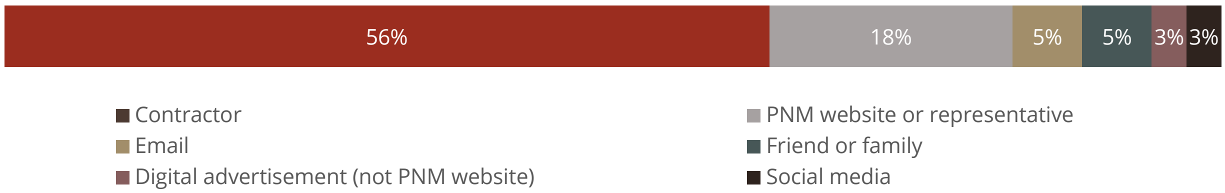
Figure 11: Respondent Years Lived in Home (n=39)



7.3.2 Source of Awareness

Participant awareness of the Residential Comprehensive program was primarily driven by contractors, with limited contribution from other channels. Over one-half of participants (56%) reported learning about the program through a contractor, making it the dominant awareness pathway. Figure 12 demonstrates that all other sources, including the PNM website, representatives, email, and word-of-mouth, accounted for a relatively small share of responses, indicating limited reach of other marketing and outreach efforts.

Figure 12: Respondent Source of Awareness (n=39)



7.3.3 Participant Satisfaction

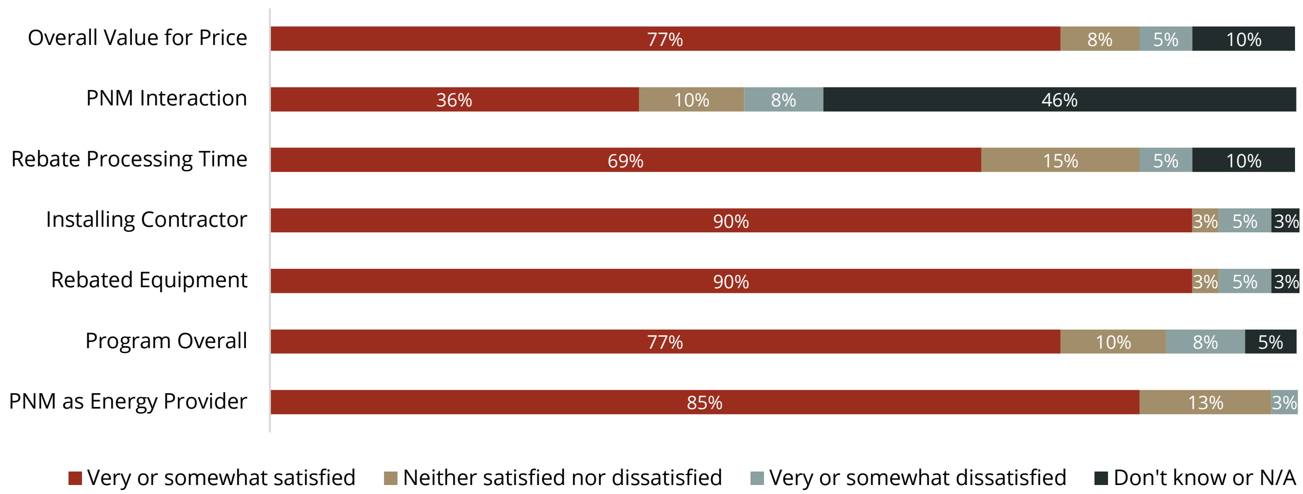
Survey results indicate generally high levels of participant satisfaction across key components of the program. Participant satisfaction was strongest for program delivery elements closely tied to implementation, including the installing contractor and the rebated equipment. A majority of participants reported being very or somewhat satisfied with the contractor who installed the equipment (90%) and with the equipment itself (90%), suggesting positive experiences with installation quality and equipment performance. These findings also point to the important role contractors play in shaping the customer experience, which is explored in more detail in subsequent sections.

Participants also reported favorable perceptions of the rebate program overall and the timeliness of rebate receipt. Figure 13 indicates over one-half of customers were very or somewhat satisfied with these aspects (77 % and 69%, respectively). Satisfaction with PNM as an energy provider was similarly positive, with the majority of respondents indicating very or somewhat satisfied (85%).

In contrast, satisfaction with PNM interaction was less clearly defined. While 36% of participants reported very or somewhat satisfied, a substantial proportion (46%) selected “Don’t know or N/A.” Many participants reported limited or no direct interaction with PNM during the program process. Instead, interactions were often mediated through contractors, who served as the primary interface for participants. As a result, participants may have been less able to assess or attribute their experience directly to PNM.

Perceptions of overall value for price were generally positive, with 77% reporting being very or somewhat satisfied. Across all satisfaction measures, reported dissatisfaction was minimal, indicating few negative participant experiences. These findings are further contextualized by insights on decision-making drivers and program processes presented in subsequent sections.

Figure 13: Respondent Satisfaction

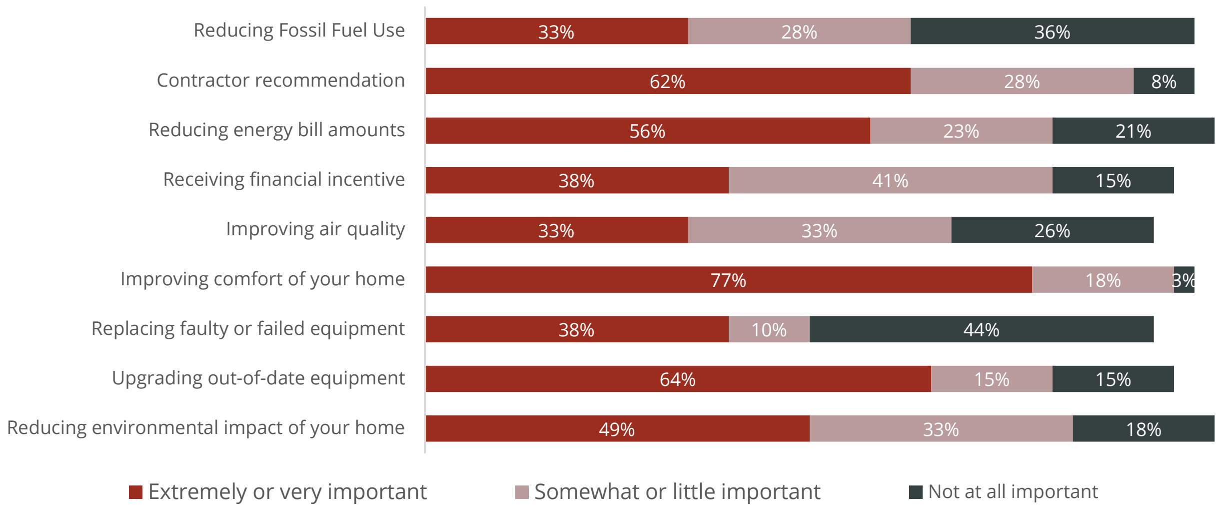


Qualitative feedback provides additional context for these findings. Participants who reported lower satisfaction cited concerns such as higher-than-expected electricity consumption, lower realized energy savings, and uncertainty regarding long term performance. Some participants also noted communication gaps related to rebate timelines or program details, while a small number expressed dissatisfaction with contractor performance or unmet system expectations.

7.3.4 Participant Decision-Making & Motivation

Survey respondents were asked to rate the importance of various factors influencing their decision to install high-efficiency equipment through the program. Results indicate that participation is primarily driven by comfort-related needs and equipment replacement considerations. Improving comfort emerged as the most influential factor, with 77% of respondents rating it as extremely or very important. This was followed by upgrading out-of-date equipment (64%) and replacing faulty or failed systems (38%), indicating that most participants engaged with the program in response to existing equipment needs rather than proactive energy-saving intentions (Figure 14).

Figure 14: Key Drivers of Program Participation (n=39)



Energy cost considerations also played a meaningful role in decision-making, over half of respondents (56%) rated reducing energy bills as highly important. This indicates that the expected cost savings were a key driver of participation, though still secondary to comfort or equipment-related drivers. The relatively lower emphasis on cost savings may reflect participant experiences with variability and uncertainty in realized savings. Some respondents reported higher-than-expected electricity consumption, lower-than-anticipated savings, or difficulty interpreting their energy use relative to others, which may reduce confidence in cost savings as a motivating factor compared to more immediate and tangible benefits such as comfort.

Contractor recommendations were also a key influence, with 62% of respondents rating them as highly important, reinforcing the role of contractors in shaping customer decisions. Financial incentives were less consistently identified as a primary driver. While 38% of respondents rated receiving a financial incentive as highly important, responses were more distributed across importance levels compared to other factors.

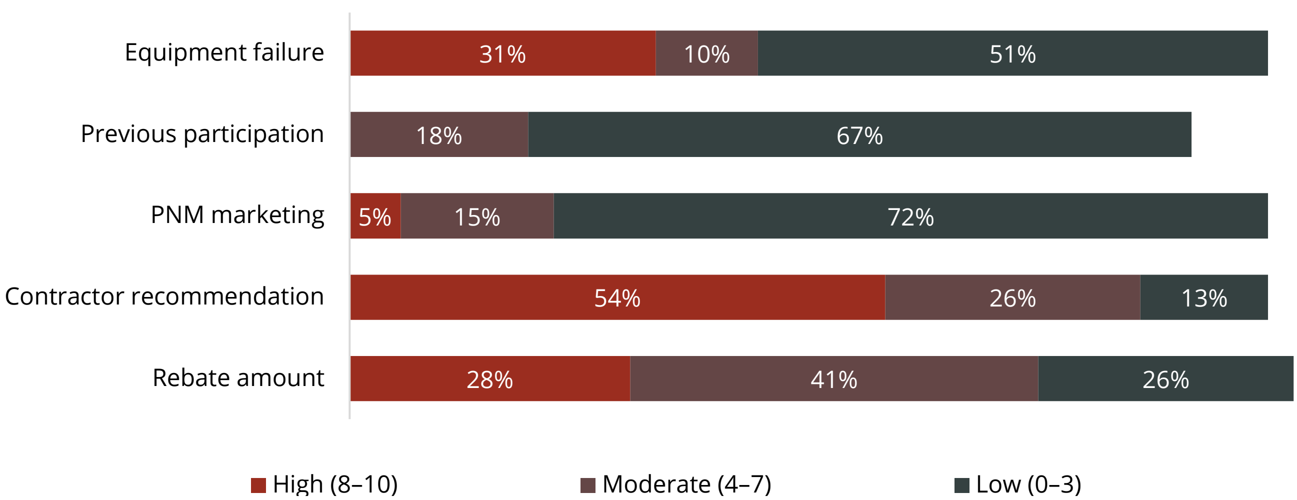
Other factors, including improving air quality and reducing environmental impact, were identified as important by a subset of respondents but were not consistently strong drivers of participation. While 33% of respondents rated improving air quality and 49% rated reducing environmental impact as highly important, these factors were generally secondary.

Reducing fossil fuel use was among the less influential considerations, with responses skewing toward lower importance (36% not important compared to 33% highly important). In addition, several respondents indicated limited awareness of these benefits, suggesting that environmental outcomes are not clearly understood or valued at the point of decision-making.

Findings from the 0-10 influence scale summarized in Figure 15 further reinforce these results. Contractor recommendations emerge as one of the most influential factors, with 54% of respondents rating them as highly important. In contrast, both equipment failure and rebate amount show more mixed distributions across importance levels. Equipment failure was rated as low importance by 51% of respondents and highly important by 31%, while rebate amount was distributed across high (28%), moderate (41%), and low (26%) importance. Together, these findings suggest that while equipment condition and financial incentives can influence decisions, they are not consistently strong drivers across participants.

Factors such as PNM marketing and prior program participation were largely rated as low importance, with 72% and 67% of respondents, respectively, assigning low importance ratings, indicating limited direct influence on participation.

Figure 15: Key Program Decision Drivers (n=39)



7.3.5 Contractor Role and Customer Journey

The Residential Comprehensive program is strongly contractor-driven, with contractors playing a central role across all stages of the customer journey, including equipment purchase, installation, and communication of program benefits. Nearly all participants (97%) reported purchasing their equipment through a contractor, with only one participant purchasing through retail channels. In addition, all surveyed installations (100%) were completed by contractors.

A large majority of respondents (85%) reported that their contractor mentioned the availability of rebates, while only a small number indicated that the rebate was not mentioned or could not be recalled. This highlights the critical role contractors play in conveying program information and shaping participant awareness.

Beyond facilitating purchases and installations, contractors significantly influence customer decision-making. As discussed in the previous section, contractor recommendations were identified as an important factor in participant decisions, further reinforcing their role as trusted advisors in the equipment selection process. The customer journey is therefore largely mediated by contractors, with limited direct interaction between the utility and participants. Customers typically rely on contractors for guidance on equipment options, installation, and information about available incentives.

7.3.6 Program Process Experience

Participant feedback indicates that the overall program process, from installation to rebate receipt, was generally smooth, with most respondents reporting minimal issues and a positive experience navigating the program. Over half of participants (62%) indicated that they experienced no issues at any stage, suggesting that installations were typically completed without major complications.

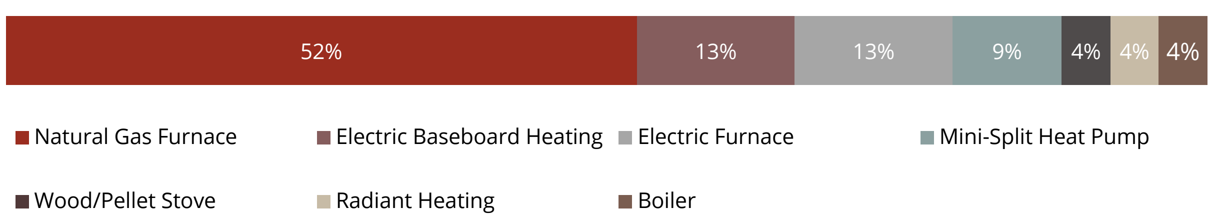
The scheduling and installation process was largely managed by contractors, who coordinated equipment selection, timing, and system setup. Participants generally reported that installations were handled efficiently, with limited disruption. Communication of program details was primarily facilitated through contractors, with participants relying on them for information regarding eligibility, incentives, and next steps. While many participants reported receiving sufficient information, others indicated gaps in clarity, particularly related to rebate timelines, expected energy savings, and system performance. These findings suggest that communication quality may vary depending on contractor knowledge and engagement.

7.3.7 Equipment and Behavioral Insights

Findings indicate strong early performance and functionality of installed equipment, with most participants reporting that systems are operating as expected. In addition, a large majority of participants (95%) reported that their installed equipment is functioning properly.

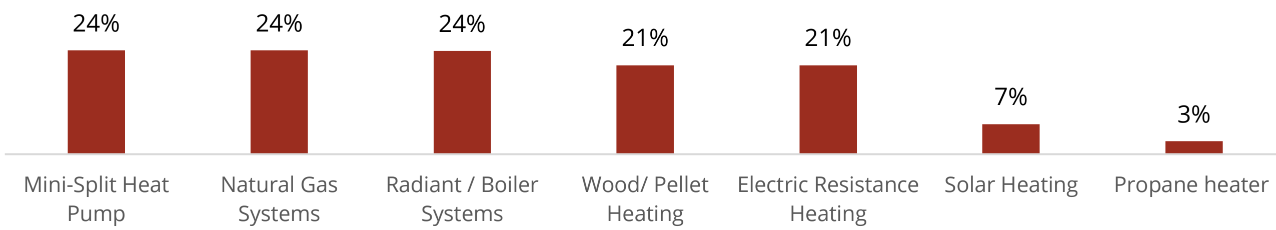
The program is also associated with significant changes in heating system configurations. As shown in Figure 16, many participants (59%) reported the heat pump replaced existing heating equipment, most commonly natural gas furnaces (52%), followed by electric baseboard heating and electric furnaces (13% each).

Figure 16: Respondent Heating Equipment Replaced (n=23)



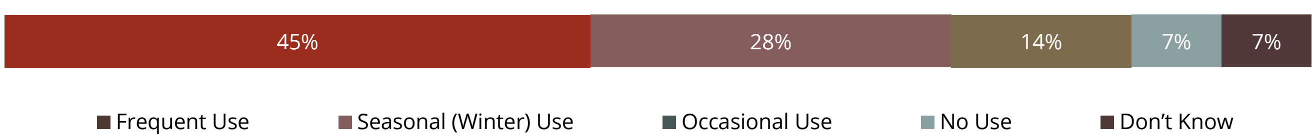
A substantial share of households continue to use supplemental heating systems, with 74% of participants reported having additional heating equipment (Figure 17). Common systems include mini-split heat pumps (24%), natural gas heating systems (24%), radiant and boiler systems (24%), wood and pellet heating (21%), and electric resistance heating (21%).

Figure 17: Respondent Other Heating Equipment Used (n=29)



Usage patterns varied, with 45% reporting frequent use of supplemental systems and an additional 28% using them seasonally, as shown in Figure 18. This suggests that heat pumps are often integrated into hybrid heating arrangements rather than functioning as standalone systems. Responses to questions on automatic backup heating switchover and associated temperature thresholds were limited, with only three participants providing response. Consequently, the available data are insufficient to draw meaningful conclusions regarding backup heating switchover behavior or temperature thresholds.

Figure 18: Respondent Other Heating Equipment Usage Timing (n=29)



Consistent with this, 62% of participants identified the heat pump as their current primary heating system, while 28% reported using a combination of systems. A majority of participants (77%) indicated that they expect the heat pump to be their primary heating system over time, suggesting sustained use and continued reliance on the installed equipment.

This highlights that while heat pumps are widely adopted as primary systems, a significant share of participants rely on dual-system configurations, particularly during colder periods. The survey did not explicitly assess whether installations were primarily driven by cooling or heating needs.

7.3.8 Rebate

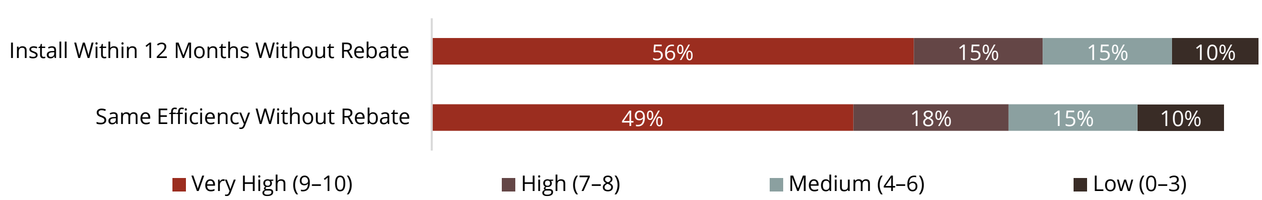
Experiences with the rebate process were generally positive, though some variability was observed. Most participants reported receiving rebates relatively quickly, with 56% indicating that they received the rebate within one week or less (Figure 19). However, a smaller share reported longer timelines of one month or more (8%) or uncertainty regarding rebate timing (21%). Additionally, 10% indicated that the rebate was incorporated into contractor pricing, while 8% reported not receiving the rebate at the time of the survey.

Figure 19: Respondent Rebate Timing (n=39)

Participant awareness of the rebate varied across the decision-making process. Roughly one-half of participants (51%) reported learning about the rebate after deciding on equipment efficiency, while 38% became aware prior to making their decision. A small share of customers (10%) were uncertain about when they became aware of the rebate.

Many participants indicated a high likelihood of selecting the same efficient equipment even in the absence of the rebate. Specifically, 56% of respondents reported they would have installed the same equipment at the same time, and 49% indicated they would have selected the same efficiency level within a 12-month timeframe (Figure 20). This suggests that a portion of participants would have proceeded with similar upgrades regardless of program incentives and is reflected in the NTGR.

Figure 20: Respondent Likelihood of Adoption Without Rebate (n=39)



Qualitative responses indicate that the PNM rebate generally played a supporting, rather than primary, role in participant decision-making. Many described it as helping to reduce upfront costs, making the investment more affordable, or supporting the decision to select higher-efficiency equipment. In some cases, the rebate influenced the timing of installation by accelerating planned upgrades. However, several participants noted that the rebate did not drive their initial decision. Installations were often already planned due to equipment failure, aging systems, or comfort needs, with the rebate viewed as a secondary benefit or added bonus. Some participants also reported being unaware of the rebate at the time of decision-making or indicated that it had minimal impact relative to overall project costs.

7.4 Emissions Reductions and Avoided Fuel Use

As part of this evaluation, the Evaluation team was tasked with estimating the avoided fuel use, avoided electricity use, and emissions reductions resulting from the installation of ductless heat pumps and heat pump water heaters. The calculation of emissions reductions from ductless heat pump and heat pump water heater installations followed a structured methodology based on established fuel savings equations from the Illinois (IL) TRM v12[14]. The analysis methodology followed these steps:

1. IL TRM v12 – Fuel Savings Equations for HPs and HPWHs
    - The IL TRM v12 provided the baseline fuel savings equations applicable to heat pumps and heat pump water heaters.
2. Regional Matching to NM Conditions
    - The Evaluation team identified cities with similar climate conditions to synchronize IL TRM assumptions to New Mexico's context.
    - Sante Fe was matched to Rockford, and Albuquerque to Springfield, adjusting Heat Load Factors, outdoor air temperatures (OAT), and regional variations.

[14] Illinois Statewide Technical Reference Manual (IL-TRM), Version 12.0 – Volume 3 (Residential Measures), "Fuel Savings Equations for HP and HPWHs," 108–114, effective January 1, 2024, published September 22, 2023, https://www.ilsag.info/wp-content/uploads/IL-TRM_Effective_010124_v12.0_Vol_3_Res_09222023_FINAL_clean.pdf

3. Weighting Heat Load Factors and Switch Over Temperature Calculations
    - The Evaluation team calculated a weighted Heat Load Factor for Albuquerque and Sante Fe, incorporating contractor-reported data between the two cities.
    - Due to the absence of installed controls, the switchover temperature was assumed to be equal to the default value specified in the IL TRM (17°F), representing the equivalent of no installed controls with a low setpoint.
    - Survey results indicated that most sites (74%) did switch between systems, however, respondents did not confirm whether that changeover temperature was the primary drive for the switch. Three respondents indicated that backup equipment switches on, and two respondents specifies a temperature. Considering the lack of trends in the data given limited responses, the IL TRM default temperature were used, which assumed heat pumps function as the primary heating system with a temperature changeover.
        - This assumption discrepancy between installed conditions and analysis is avoidable in the future by 1) Collecting more information on changeover temperature from implementors and contractors, if installed by the contractor; or 2) Including a question for respondents to provide the percentage of heat load met by the heat pump vs. the pre-existing system, if a similar survey is completed.
4. Carbon Savings Estimation
    - The Evaluation team applied the fuel switch savings algorithms as defined in the IL TRM to estimate carbon savings.
5. Total Greenhouse Gas (GHG) Emission Reductions
    - The total emissions reduction calculation accounts for heating-related reductions comparing baseline to installed conditions, and additional savings from cooling and furnace fan operation.

- The analysis includes a PNM-specific portfolio conversion of CO_2 per MWh of electricity generated.[15]
- Further fuel conversions were sourced from the Energy Information Administration (EIA) to determine pounds of CO_2 per MMBtu.[16]

Table 41 below summarizes the estimated CO_2 emissions reductions resulting from the program's fuel replacement efforts. The replaced fuel mix was derived from survey data on heating equipment replaced. The replaced fuel ratio was calculated as follows:

- Natural Gas: Includes natural gas furnaces, radiant heating, and boilers
- Oil: Includes baseboard heaters and wall heating systems
- Electric: Includes Electric furnaces, ductless heat pumps, and heat pumps
- Wood: Includes wood fired and pellet stoves.

The analysis calculates CO_2 emissions avoided by applying the carbon intensity of each replaced fuel source savings to the proportion of heating load that was offset by heat pump installation and the total savings attributed from existing equipment. The total energy savings from the installation of heat pumps and heat pump water heaters are 55,485.69 MMBtu.

Table 41: Total Avoided Carbon Emissions from Installed Heat Pumps and Heat Pump Water Heaters

Pre-Existing Fuel	CO_2 pounds per MMBtu	Replaced Fuel Ratio	Avoided CO_2	Avoided Tons of CO_2
Natural gas	116.65	61%	3,689,842	1,845
Oil	163.45	13%	1,101,848	551
Electric	77.37	22%	882,659	441
Wood	195.20	4%	404,886	202
Overall Portfolio	**117.23**	**100%**	**6,079,235**	**3,040**

7.5 Conclusions and Recommendations

[15] 264 lbs/MWh for generated emissions for electricity generation as provided by PNM staff.
[16] U.S. Energy Information Administration (EIA), "Carbon Dioxide Emissions Coefficients", https://www.eia.gov/environment/emissions/co2_vol_mass.php

The following sections provide findings and recommendations for the process evaluation and the assessment of emissions reductions associated with the installation of heat pumps and heat pump water heaters.

7.5.1 Residential Comprehensive Process Evaluation

The survey findings indicate that the Residential Comprehensive Program delivers a generally positive participant experience, with high satisfaction related to equipment performance and contractor interactions. Results also indicate that contractors play a central role throughout the customer journey, including program awareness, equipment selection, and communication of rebates. While the overall process is efficient, participant feedback also highlights several considerations related to communication, clarity, and overall customer experience within the program. Participants' understanding of program requirements, eligibility criteria, and rebate processes varied, with some noting uncertainty around pre installation requirements and how contractor provided rebates are communicated and applied, suggesting an opportunity to further align messaging across program touchpoints. Feedback also indicates opportunities to enhance the accessibility of customer-facing resources, as some participants found program materials, particularly online, difficult to navigate and expressed a need for clearer presentation of system tradeoffs, expected savings, and long-term benefits to support decision making. While rebates were generally viewed positively, responses indicate variability in how rebate value, eligibility, and delivery are understood, particularly when contractors act as intermediaries, highlighting a need for greater consistency in communication. In addition, participants' experiences were often centered around contractors rather than the utility, suggesting an opportunity to strengthen program visibility and coordination across delivery channels. Finally, some participants expressed interest in greater transparency in post installation processes, including improved visibility into rebate status, which tools such as online tracking could help address.

Among participants who reported challenges, feedback most commonly related to installation and setup issues, including system configuration, space constraints, and the need for electrical upgrades. A smaller subset identified performance related concerns, such as higher-than-expected energy use, systems operating more frequently than anticipated, and variability in performance across seasons.

In contrast, participants who reported positive experiences emphasized that installations were generally smooth and systems operated reliably with minimal issues. Many described the equipment as quiet, easy to use, and an improvement over their previous heating and cooling systems. Positive perceptions were also supported by experiences with knowledgeable contractors and efficient installation processes.

Table 42: Findings and Recommendations – Process

Finding	Recommendation
Program awareness and customer engagement are primarily contractor-driven: A majority of participants (56%) learned about the program through contractors, with limited direct engagement with PNM throughout the customer journey.	Consider enhancing direct customer engagement through complementary outreach channels, such as targeted communications, website improvements, and clearer program branding, to support contractor-led interactions and improve overall program visibility.
Communication gaps exist across key program elements. Participants reported variability in understanding rebate timelines, eligibility requirements, and expected system performance, particularly when information is conveyed through contractors.	Consider opportunities to enhance the consistency and clarity of program communications by strengthening contractor support through standardized messaging, training, and guidance, alongside clear and accessible customer-facing materials. This may help improve participant understanding of rebate timelines, eligibility requirements, and expected system performance, while ensuring more consistent communication across all program delivery channels and touchpoints.

7.5.2 Residential Comprehensive Emissions Reductions Assessment

Survey responses indicate that while many respondents installed heat pumps, the majority continue to use pre-existing heating systems in combination with their heat pump to provide total household heating. Specifically, 74% of respondents rely on non-heat pump heating equipment, while 62% use their newly installed heat pumps as the primary heating source. This suggests that heat pumps are being used in combination with other heating sources rather than as a full replacement for existing systems. Furthermore, respondents could not verify whether their heat pumps were installed with automated controls to transition between heating sources based on outdoor temperature, reinforcing the conclusion that heat pumps are operating alongside other heating systems rather than as the dominant or sole source of heat.

Regarding heat pump water heaters, the Evaluation team was unable to recruit program participants for an interview, so measure-specific insights could not be collected.

The evaluation team recommends PNM collects more information on changeover temperature from implementors and contractors, if controls are installed by the contractor. If a similar participant and contractor survey is completed, the Evaluation team recommends including questions for respondents that lead towards obtaining the percentage of heat load met by the heat pump vs. the pre-existing system. For example:

- Does each system have its own thermostat?
    - What is the set point for both systems?
    - if there’s only one thermostat, what logic is applied to sequence both machines?
- Does the participant turn off/on heating or cooling equipment depending on their needs?

8 LOAD MANAGEMENT

PNM offers two load management programs – Peak Saver and Power Saver. Whereas the purpose of most of PNM's programs is to provide energy efficiency and peak demand savings, the load management programs are capacity resources that can be dispatched when system loads are peaking to avoid the need for additional supply-side peaking capacity. Peak Saver serves a mix of commercial and industrial customers (including schools, retail stores, and several large industrial sites), and Power Saver primarily serves residential customers. In 2025, PNM dispatched test events for both programs but no real events. The following sections detail the Evaluation team's methods and findings for PNM's load management programs.

8.1 Power Saver

Power Saver is a direct load control program offered to residential, small commercial (< 50 kW), and medium commercial (50 kW – 150 kW) Public Service New Mexico (PNM) customers. There are seven program components:

- Residential Digital Control Unit (DCU)
- Small Commercial DCU
- Medium Commercial DCU
- Residential Two-Way Smart Thermostat
- Residential Bring Your Own Thermostat (BYOT) – Honeywell
- Residential BYOT – Nest
- Residential BYOT – Sensi

To facilitate load control in the DCU program components, participants must have a digital control unit attached to the exterior of their air conditioning unit. This device can receive a radio signal that turns off the unit's compressor for an interval of time. For the smart thermostat components, load curtailment is achieved via communication with the Wi-Fi-enabled thermostat. Residential and small commercial participants receive an annual $25 incentive for their participation. Medium commercial participants receive an annual incentive of $9 per ton of refrigerated air conditioning.

There were no demand response events during the 2025 demand response (DR) season, which began May 15th and ended September 30th. A 15-minute test event was dispatched at 11:00 AM on June 5th. For the 2025 evaluation, the Evaluation team reviewed load shapes from the test event day to confirm load reductions. To estimate the load relief capability under extreme conditions, the team combined current participation counts and Power Saver results from 2015 to 2024. Table 43 shows the results (and reflects operability/online adjustments). The Evaluation team estimates the program can deliver 42.9 MW of meter-level load reduction under planning conditions of 100°F between 5:00 PM and 6:00 PM MDT. Of the estimated 42.9 MW of load reduction capability, 32.9 MW comes from the Residential DCU segment, 6.0 MW comes from the Residential Thermostat segments, 2.9 MW comes from the Small Commercial DCU segment, and 1.2 MW comes from the Medium Commercial DCU segment. At 100% operability, the total portfolio capability would be 50.0 MW.

Table 43: Power Saver Load Relief Capability under Peak Conditions

Segment	Devices	kW/Device	Total MW
Residential DCU	53,203	0.62	32.86
Residential Two-Way Thermostat	615	1.34	0.82
Residential BYOT Honeywell	679	0.62	0.42
Residential BYOT Nest	4,101	1.02	4.20
Residential BYOT Sensi	925	0.62	0.57
Small Commercial DCU	5,983	0.48	2.87
Medium Commercial DCU	2,898	0.40	1.15
Total	**68,404**	**---**	**42.90**

8.1.1 Review of the 2025 Test Event

The 2025 test event occurred on Thursday, June 5th from 11:00 AM to 11:15 AM. For context, this was one of the coolest days of the 2025 summer. This explains why participant loads – and the DR signal – are relatively small on the test event day. Historically, Power Saver demand response events have been called on the hottest summer days in the 4:00 PM to 8:00 PM window when loads are peaking.

Figure 21: Average Daily Temperature and Average Daily Max Temperature, Albuquerque 2025

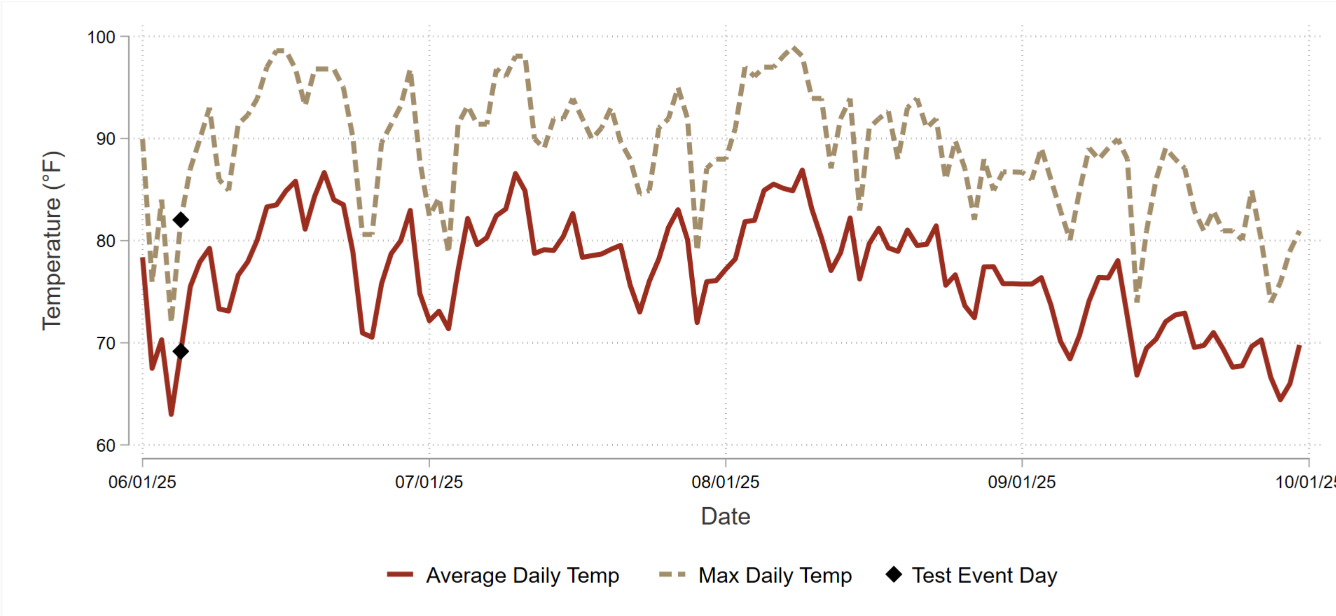


Figure 22, Figure 23, and Figure 24 show loads on the test event day for the residential components (including Residential DCU and the smart thermostat segments), the Small Commercial DCU component, and the Medium Commercial DCU component respectively. The dotted red reference lines in each figure isolate the 15-minute test event window. Load reductions during the dispatch window are small but evident. There is significant noise in the Small Commercial DCU load shape, but the Evaluation team spot-checked individual Small Commercial participants to verify load reductions.

Figure 22: Test Event Day Load Shape – Residential Components

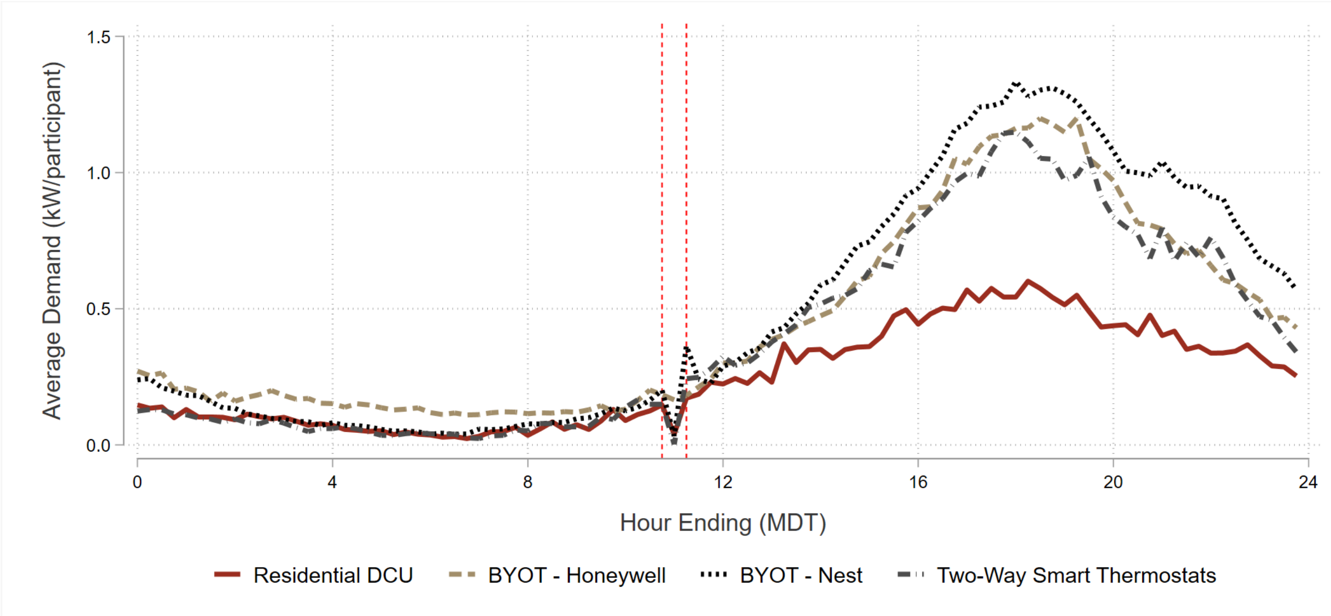


Figure 23: Test Event Day Load Shape – Small Commercial DCU Component

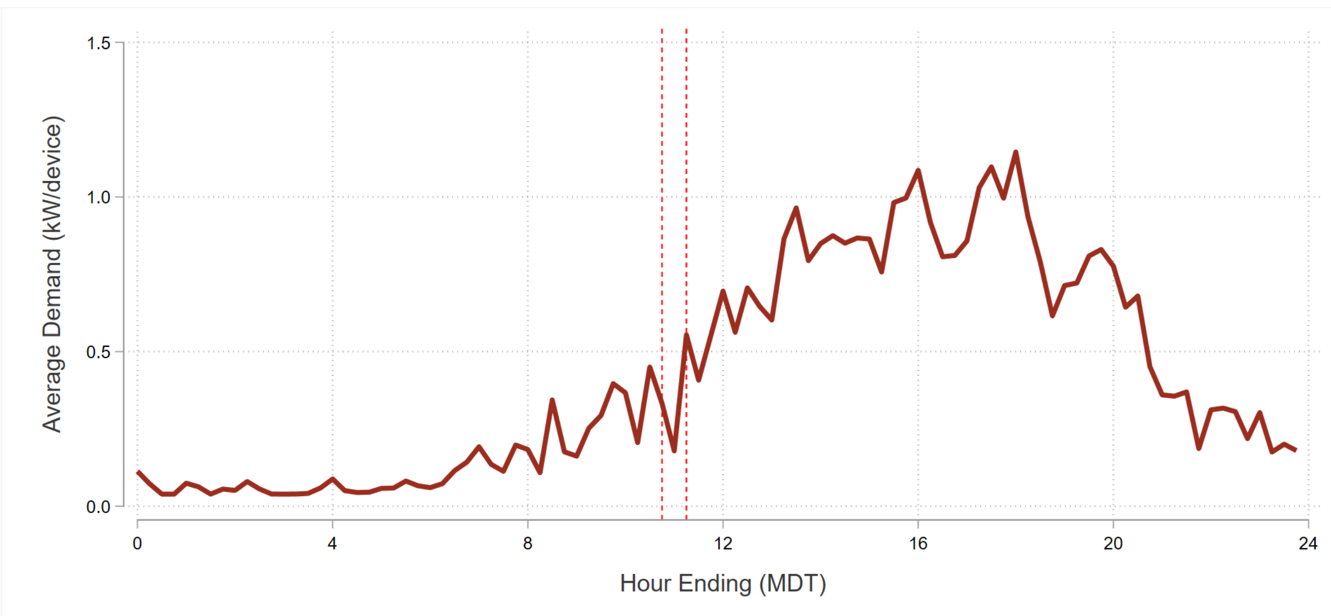
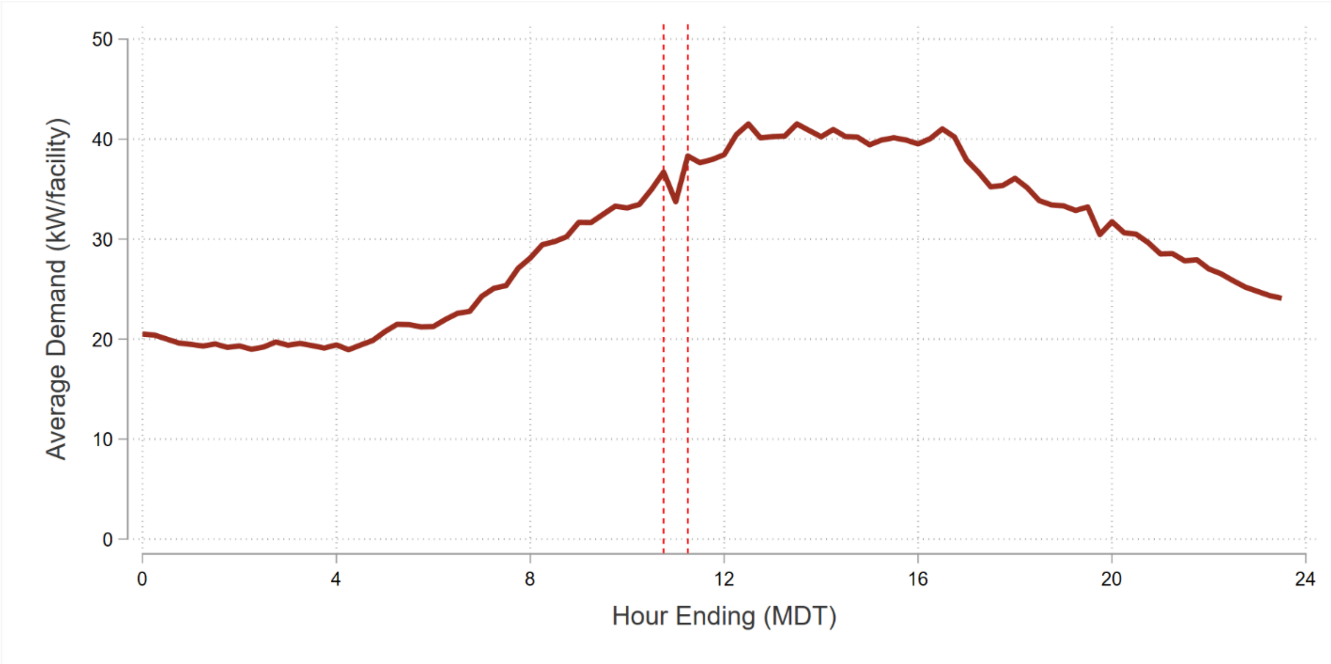


Figure 24: Test Event Day Load Shape – Medium Commercial DCU Component



8.1.2 Resource Capability

While historical impact estimates serve to measure prior program performance, forward-looking estimates should consider how sensitive the program performance is to temperature and time of day. When multiple years of data are included in such an analysis, a wider range of program conditions can be investigated which leads to a more robust understanding of the capability of the program.

Methods

The Evaluation Team compiled multiple years of event impacts for each segment and performed a regression analysis. For two segments, the Evaluation team performed simple averaging rather than using regression modeling due to insufficient data and poor model fit. The approach used for each segment is shown in Table 44. The general regression analysis is discussed following the table though there are component-specific nuances based on data availability.

Table 44: Estimating Resource Capability

Segment	Years Used	Approach
Residential DCU	2015-2024	Regression
Residential Two-Way Thermostat	2019-2024	Regression
Residential BYOT Honeywell	2020-2024	Averaging
Residential BYOT Nest	2023-2024	Averaging
Residential BYOY Sensi	Use most conservative Residential BYOT result due to lack of historical data.	
Small Commercial DCU	2015-2024	Regression
Medium Commercial DCU	2017-2024	Regression

Once data had been compiled for each customer segment, regression modeling was used to estimate the effect temperature and time of day have on historical demand reductions. The resulting regression model was used to predict impacts for a range of planning scenarios. The regression equation specified was:

$$\Delta kW_h = \alpha + \beta * T_t + \sum_{h=15}^{h=20} \gamma_h * I_h + \sum_{h=15}^{h=20} \delta_h * I_h * T_h + \varepsilon_h$$

Where the variables have the following interpretations:

Table 45: Ex-Ante Regression Terms

Variable	Interpretation
α	Constant term
β	The incremental kW usage associated with a warming of 1 degree Fahrenheit
T_t	Outdoor air temperature in hour h
γ_h	Incremental kW usage associated with each hour
I_h	Indicator variable equal to 1 if the hour is 14, 15, 16, etc., and 0 if not
δ_h	Incremental kW usage associated with a 1-degree increase in outdoor temperature in hour h
ε_h	The error term

Operability Adjustments

To reach a true estimate of program capability, load reduction estimates in this analysis need to be adjusted for operability. While all of the units in the estimation samples are operable or online, this is not the case for all units in the program population. In a previous evaluation, the Evaluation team recommended adjusting residential DCU impacts by 85% based on operability inspections that the team performed during Summer 2018. The 2018 Evaluation Report covered the inspection process and key findings in detail. In 2024, the adjustment factor was 86% for the Residential DCU, Small Commercial DCU, and Medium Commercial DCU segments. The 86% operability adjustment value represents a weighted average of 85% and 95% where the two values correspond to sites that have not been visited in the past two years and sites that have been visited in the past two years, respectively. For Residential Thermostat segments, the adjustment factors were set to the percentage of online thermostat devices during event hours. The adjustment factors applied to Two-Way, BYOT Nest, and BYOT Honeywell were 80%, 88% and 76%, respectively. Unless otherwise noted, results in this analysis are reported without the operability adjustment applied.

BYOT Connected Load Assumption

BYOT Smart Thermostats are not installed by Itron field technicians. As a result, A/C tonnage and amperage information is missing for all participants who have enrolled in the BYOT program component. In the absence of A/C unit nameplate information, a default value is used as the connected load estimate. This value is then used to convert A/C runtime to power draw (kW) for each 5-minute interval.

Itron uses a connected load assumption of 4.19 kW (based on the Two-Way Smart Thermostat residential population). The Evaluation team used a connected load of 3.22 kW based on the formulas and assumptions below drawn from the Smart Thermostat and High Efficiency Air Conditioner measures in the New Mexico 2025 Technical Reference Manual.

$$Connected\ Load = \frac{Capacity_{cool}}{1000\frac{W}{kW}} \times \frac{1}{EER} = 3.22\ kW$$

Where:

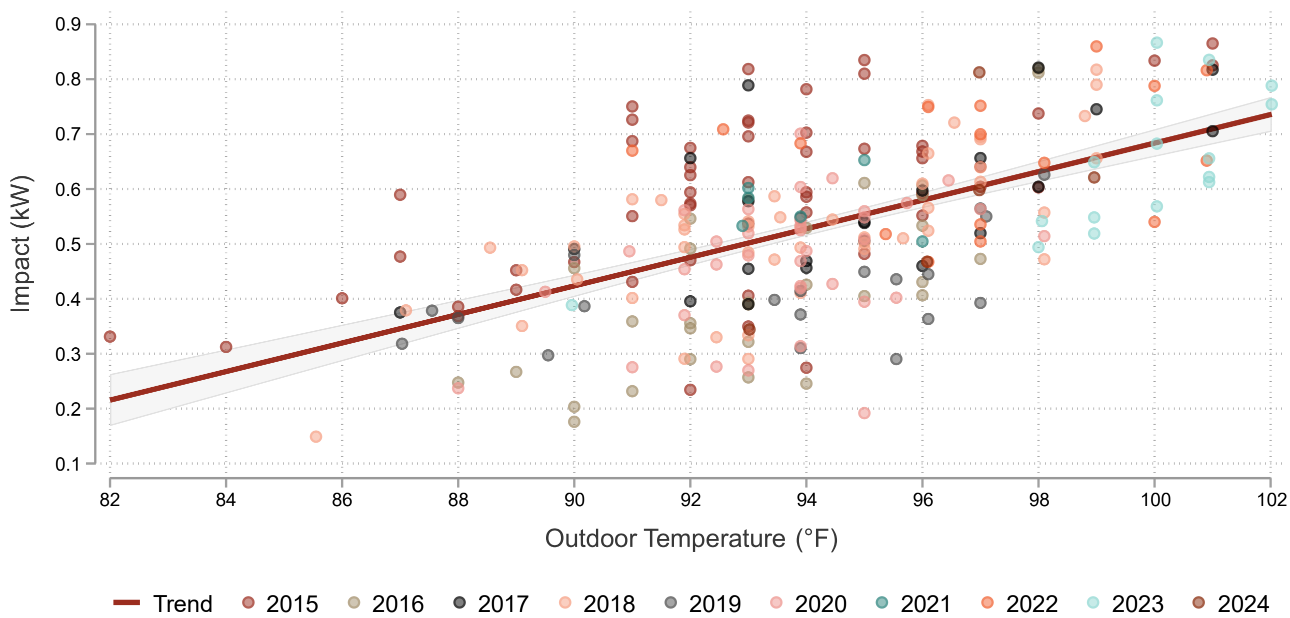
- Capacity$_{cool}$ = 36,000 BTU/hour (2025 TRM Section 4.19.3)
- EER = -0.02 * SEER^2 + 1.12 * SEER (2025 TRM Section 4.6.4)
  - Assuming SEER = 13 (2025 TRM Section 4.19.3)

Results

Residential DCUs

Figure 25 highlights the relationship between historical demand reduction estimates (2015-2024) for the Residential DCU component and outdoor air temperature (in Albuquerque). There is a clear trend in the figure – the hotter it is outside, the greater the impacts tend to be.

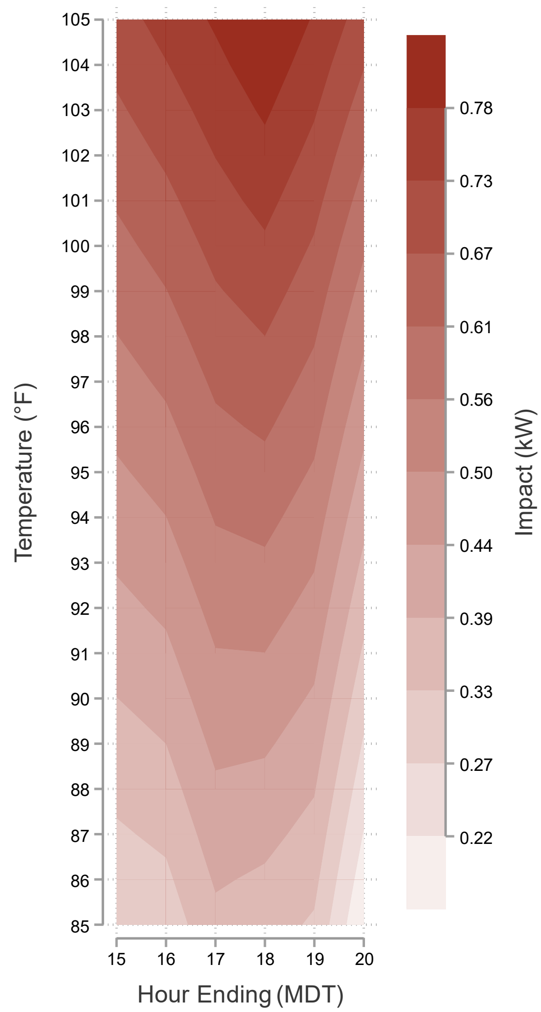
Figure 25: Hourly Impacts against Outdoor Temperature (F) – Residential DCU



The Evaluation team modeled historical impacts as a function of weather and time of day (see Section 7.1.2.1) and used the regression coefficients from the resulting model to create a time-temperature matrix (TTM) that shows expected load reductions (per device) for different outdoor temperatures and at different times of the day. The TTM for the Residential DCU component is shown in Table 46. The Evaluation team predicts that the impact of a Residential DCU DR event at peaking conditions (5:00 PM – 6:00 PM MDT when outdoor temperature is 100 degrees) is 0.72 kW per device.

Table 46: Residential DCU Time-Temperature Matrix

Temp	Hour Ending MDT					
	15	16	17	18	19	20
105	0.70	0.75	0.79	0.84	0.78	0.70
104	0.68	0.72	0.77	0.82	0.75	0.67
103	0.66	0.70	0.75	0.79	0.73	0.65
102	0.64	0.68	0.73	0.77	0.71	0.62
101	0.62	0.66	0.71	0.74	0.69	0.59
100	0.60	0.63	0.69	0.72	0.66	0.56
99	0.58	0.61	0.66	0.69	0.64	0.54
98	0.55	0.59	0.64	0.67	0.62	0.51
97	0.53	0.57	0.62	0.65	0.60	0.48
96	0.51	0.54	0.60	0.62	0.57	0.46
95	0.49	0.52	0.58	0.60	0.55	0.43
94	0.47	0.50	0.56	0.57	0.53	0.40
93	0.45	0.48	0.54	0.55	0.50	0.37
92	0.43	0.45	0.52	0.52	0.48	0.35
91	0.41	0.43	0.50	0.50	0.46	0.32
90	0.38	0.41	0.48	0.47	0.44	0.29
89	0.36	0.39	0.45	0.45	0.41	0.27
88	0.34	0.36	0.43	0.43	0.39	0.24
87	0.32	0.34	0.41	0.40	0.37	0.21
86	0.30	0.32	0.39	0.38	0.34	0.19
85	0.28	0.30	0.37	0.35	0.32	0.16



To estimate Residential DCU resource capability on aggregate, the number of active devices can be multiplied by the values shown in Table 39. As of the end of summer 2025, there were 53,203 active residential DCUs. Thus, the expected aggregate impact of an event hour ending at 6:00 PM (MDT) when the outdoor temperature is 100 degrees would be 38.2 MW. Residential DCU results are subject to an operability adjustment to better reflect the fact that not all devices in the population will be able to curtail load when called due to damage, wiring, or communication issues. The operability-adjusted aggregate impact is 86% of the unadjusted impact, or 32.9 MW.

Residential Thermostat Results

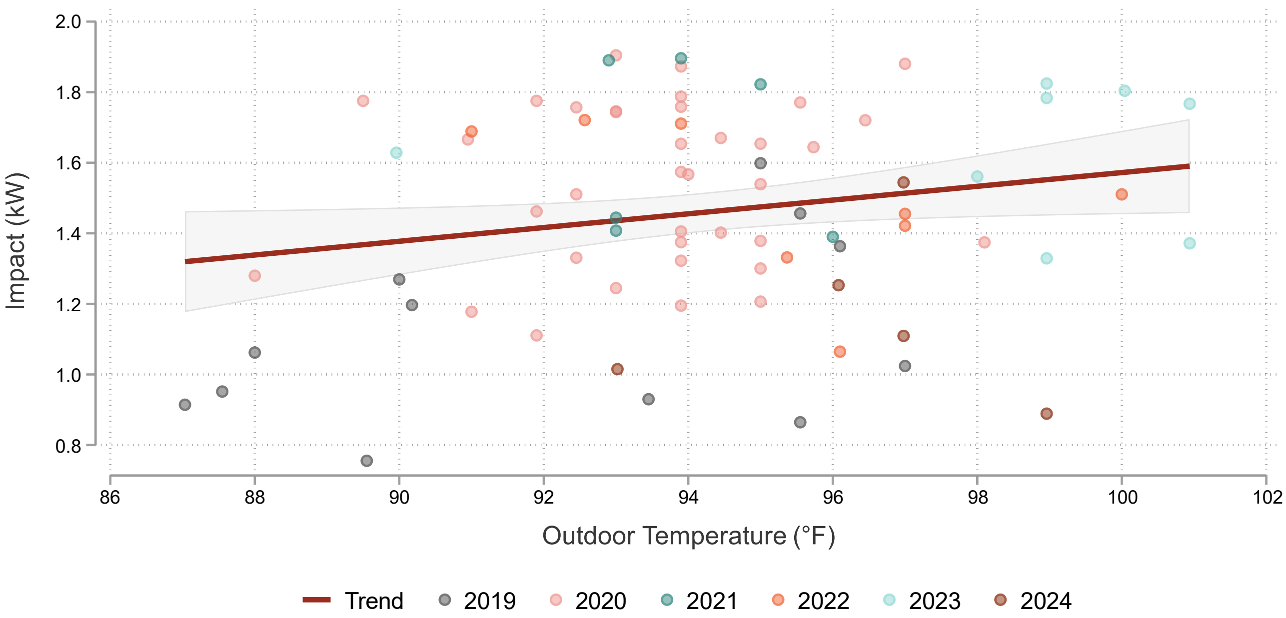
The Power Saver program includes four residential smart thermostat components: Two-Way Smart Thermostats, BYOT Honeywell, BYOT Nest, and BYOT Sensi. Each component has its own curtailment strategy. For the Two-Way group, an algorithm is used that bases the curtailment on runtime from the previous hour. For the BYOT Honeywell group, devices are curtailed using a 50% cycling strategy performed by the vendor. For the BYOT Nest group, thermostat setpoints are increased by three degrees.

In the remainder of this chapter, these four components are referred to as the Residential Thermostat component. The Evaluation team analyzed them separately but report on them in aggregate where possible. Note there is no historical data on performance for the BYOT Sensi group, so the evaluation results conservatively assume impacts for that group will mirror the BYOT Honeywell group.

Ex-ante results for the Two-Way segment are derived from a regression model that estimates the relationship between historical impacts and outdoor temperatures. The specification of the ex-ante regression model was shown in Section 7.1.2.1. Due to insufficient data and poor model fit, ex-ante results for the two BYOT segments are derived from simple averaging.

Figure 26 highlights the relationship between historical ex-post impact estimates and outdoor air temperature (in Albuquerque) for the Two-Way segment. There is some variability, but impacts tend to be larger when it is hotter outside.

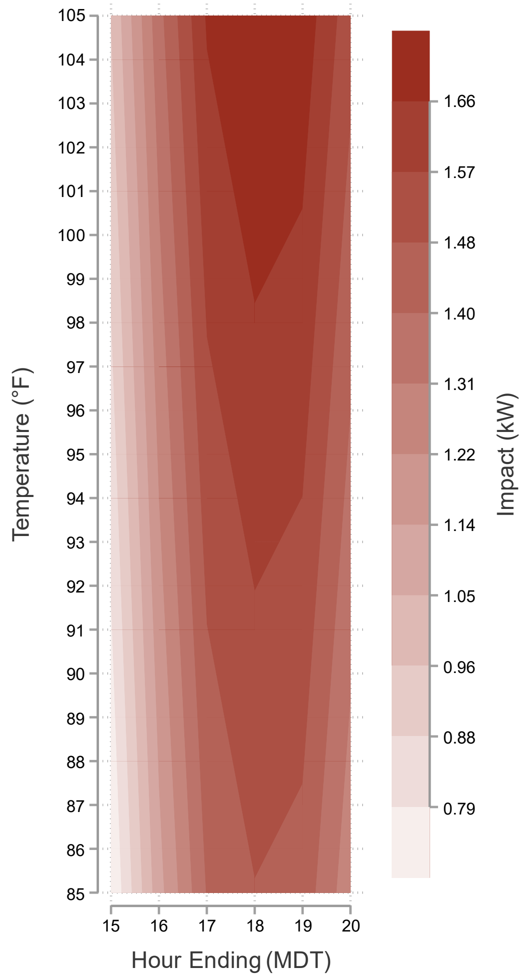
Figure 26: Hourly Impacts against Outdoor Temperature (F), Two-Way



The Evaluation team modeled historical impacts as a function of weather and time of day (see Section 8.1.2.1) and used the regression coefficients from the resulting model to create a TTM that shows expected load reductions (per device) for different outdoor temperatures and at different times of the day. The TTM is shown in Table 47. The Evaluation team predicts that the impact of a Residential Two-Way Smart Thermostat DR event at peaking conditions (5:00 PM – 6:00 PM MDT when outdoor temperature is 100 degrees) is 1.68 kW per device.

Table 47: Two-Way Smart Thermostat Time-Temperature Matrix

Temp	Hour Ending MDT				
	16	17	18	19	20
105	1.37	1.67	1.74	1.71	1.52
104	1.36	1.65	1.73	1.70	1.50
103	1.34	1.64	1.72	1.69	1.49
102	1.33	1.63	1.70	1.67	1.48
101	1.32	1.61	1.69	1.66	1.46
100	1.30	1.60	1.68	1.65	1.45
99	1.29	1.59	1.66	1.63	1.44
98	1.28	1.57	1.65	1.62	1.42
97	1.26	1.56	1.64	1.61	1.41
96	1.25	1.55	1.62	1.60	1.40
95	1.24	1.53	1.61	1.58	1.38
94	1.22	1.52	1.60	1.57	1.37
93	1.21	1.51	1.58	1.56	1.36
92	1.20	1.49	1.57	1.54	1.34
91	1.18	1.48	1.56	1.53	1.33
90	1.17	1.47	1.54	1.52	1.32
89	1.16	1.46	1.53	1.50	1.31
88	1.14	1.44	1.52	1.49	1.29
87	1.13	1.43	1.51	1.48	1.28
86	1.12	1.42	1.49	1.46	1.27
85	1.11	1.40	1.48	1.45	1.25



To estimate Two-Way Smart Thermostat resource capability on aggregate, the number of active facilities can be multiplied by the values shown in Table 40. As of the end of summer 2025, there were 615 active Two-Way Smart Thermostat devices. Thus, the expected aggregate impact of an event hour ending at 6:00 PM (MDT) when the outdoor temperature is 100 degrees would be 1.03 MW. Two-Way Smart Thermostat results are subject to an offline adjustment to reflect the fact that not all thermostats in the population will be able to curtail load when called due to being offline. The offline-adjusted aggregate impact is 80% of the unadjusted impact, or 0.82 MW.

Both BYOT segments showed a negative or flat relationship between temperature and kW impact when aggregating historical event data. These unexpected patterns indicate the possible presence of an omitted variable, such as hour-of-event or an interaction between hour-of-event and hour-of-day, which might confound ex-ante results derived from a simple regression specification. Instead of building an ex-ante regression model for these two segments, the Evaluation team calculated average impacts by time of day. Table 48 shows the results. The Evaluation team predicts that the impact of a DR event at peaking conditions (5:00 PM – 6:00 PM MDT when outdoor temperature is 100 degrees) is 0.81 kW per device for the BYOT Honeywell and BYOT Sensi segments and 1.17 kW per device for the BYOT Nest segment.

Table 48: Ex-Ante Impacts for BYOT Segments

Hour Ending (MDT)	Per-Device Impact (kW) BYOT Honeywell and Sensi	Per-Device Impact (kW) BYOT Nest
15	0.68	0.96
16	0.73	1.25
17	0.79	1.54
18	0.81	1.17
19	0.68	0.80
20	0.32	0.59

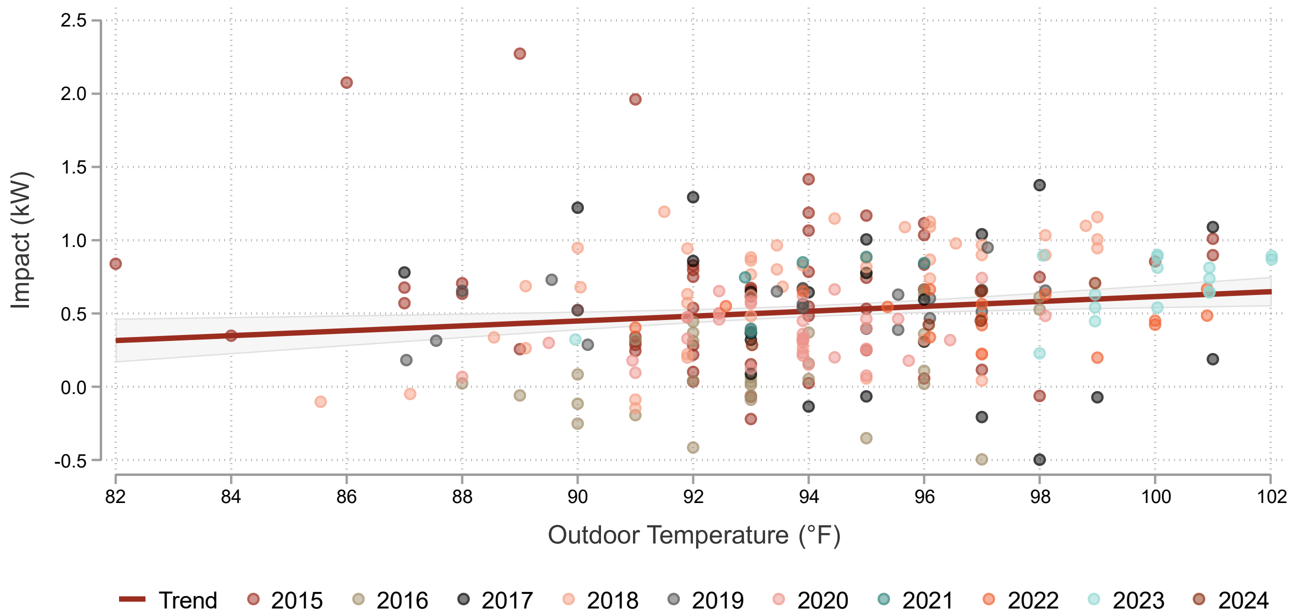
As of the end of summer 2025, there were 679 active BYOT Honeywell devices, 4,101 active BYOT Nest devices, and 925 BYOT Sensi devices. Thus, the expected aggregate impact of an event hour ending at 6:00 PM (MDT) would be 0.55 MW for BYOT Honeywell, 4.79 MW for BYOT Nest, and 0.75 for BYOT Sensi. All three segments are subject to an offline adjustment to reflect the fact that not all thermostats in the population will be able to curtail load when called due to being offline. The offline-adjusted aggregate impact for BYOT Honeywell is 76% of the unadjusted impact, or 0.42 MW. The offline-adjusted aggregate impact for BYOT Nest is 88% of the unadjusted impact, or 4.20 MW. The offline-adjusted aggregate impact for BYOT Sensi is 76% of the unadjusted impact, or 0.57 MW.

In aggregate, the offline-adjusted impact for the Residential Thermostat components during peaking conditions is 6.02 MW.

Small Commercial Results

Figure 27 highlights the relationship between historical demand reduction estimates (2015-2024) for the Small Commercial DCU segment and outdoor air temperature (in Albuquerque). The trend in temperature is subtle; there are only slight increases in impact magnitude as temperature increases.

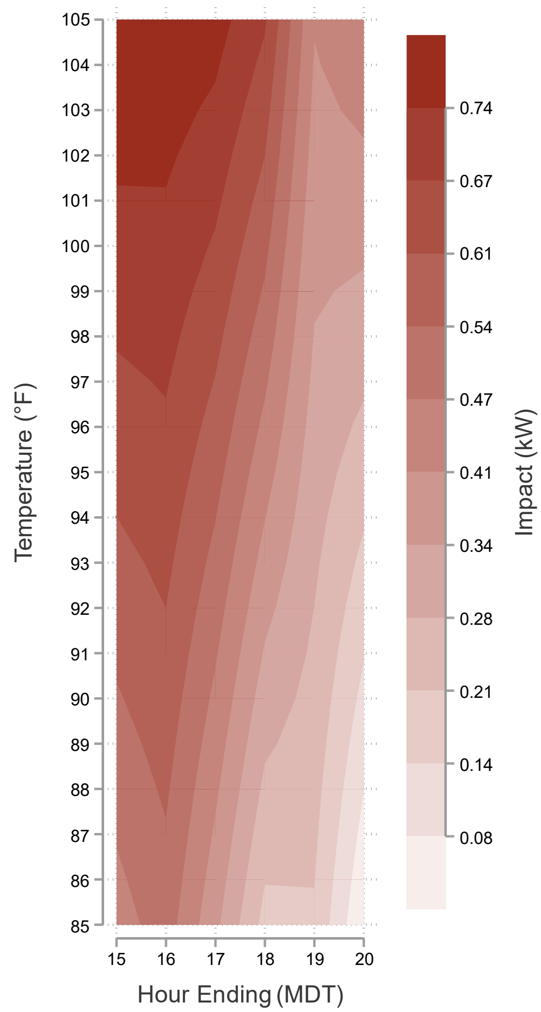
Figure 27: Hourly Impacts against Outdoor Temperature (F), Small Commercial



The Evaluation team modeled historical Small Commercial DCU impacts as a function of weather and time of day (see Section 8.1.2.1) and used the regression coefficients from the resulting model to create a TTM that shows expected load reductions (per device) for different outdoor temperatures and at different times of the day. The TTM is shown in Table 49. The Evaluation team predicts that the impact of a Small Commercial DCU DR event at peaking conditions (5:00 PM – 6:00 PM MDT when outdoor temperature is 100 degrees) is 0.56 kW per device. The expected load impact is lower for the 5-6 PM interval relative to earlier in the day because of the small commercial load profile – there is less load available for curtailment in the evening.

Table 49: Small Commercial Time-Temperature Matrix

Temp	Hour Ending MDT					
	15	16	17	18	19	20
105	0.81	0.79	0.77	0.68	0.41	0.47
104	0.79	0.78	0.75	0.66	0.40	0.45
103	0.77	0.76	0.73	0.63	0.39	0.42
102	0.75	0.75	0.71	0.61	0.38	0.40
101	0.73	0.73	0.69	0.58	0.37	0.38
100	0.71	0.72	0.67	0.56	0.36	0.35
99	0.70	0.71	0.64	0.53	0.35	0.33
98	0.68	0.69	0.62	0.51	0.34	0.31
97	0.66	0.68	0.60	0.48	0.33	0.29
96	0.64	0.66	0.58	0.46	0.32	0.26
95	0.62	0.65	0.56	0.43	0.31	0.24
94	0.61	0.64	0.54	0.41	0.30	0.22
93	0.59	0.62	0.52	0.39	0.29	0.19
92	0.57	0.61	0.50	0.36	0.28	0.17
91	0.55	0.59	0.48	0.34	0.27	0.15
90	0.53	0.58	0.46	0.31	0.25	0.13
89	0.52	0.56	0.44	0.29	0.24	0.10
88	0.50	0.55	0.42	0.26	0.23	0.08
87	0.48	0.54	0.40	0.24	0.22	0.06
86	0.46	0.52	0.38	0.21	0.21	0.03
85	0.44	0.51	0.36	0.19	0.20	0.01

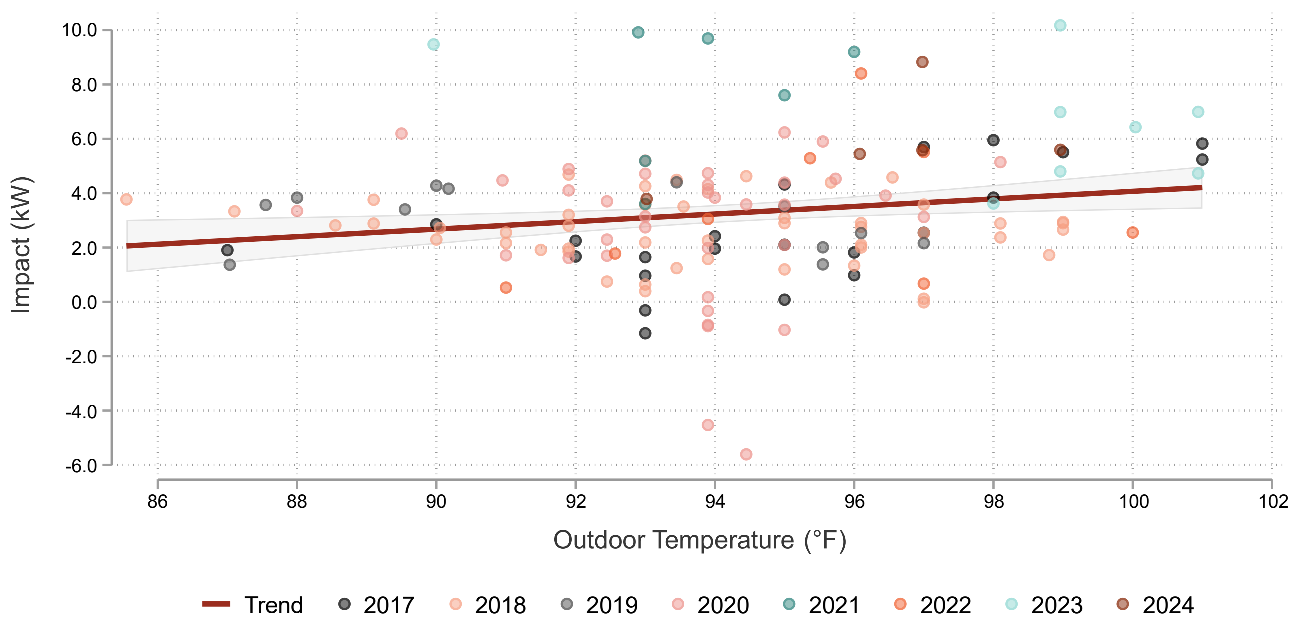


To estimate Small Commercial DCU resource capability on aggregate, the number of active devices can be multiplied by the values shown in Table 49. As of the end of summer 2025, there were 5,983 active small commercial devices. Thus, the expected aggregate impact of an event hour ending at 6:00 PM (MDT) when the outdoor temperature is 100 degrees would be 3.34 MW. Small Commercial DCU results are subject to an operability adjustment to better reflect the fact that not all devices in the population will be able to curtail load when called due to damage, wiring, or communication issues. The operability-adjusted aggregate impact is 86% of the unadjusted impact, or 2.87 MW.

Medium Commercial Results

Figure 28 highlights the relationship between historical ex-post impact estimates (2017-2024) for the Medium Commercial DCU component and outdoor air temperature (in Albuquerque). The trend in temperature is subtle; there are only slight increases in impact magnitude as temperature increases. With a small sample and large, variable customer loads, any change in sample composition can dramatically affect the overall result, meaning that any trends should be observed with caution.

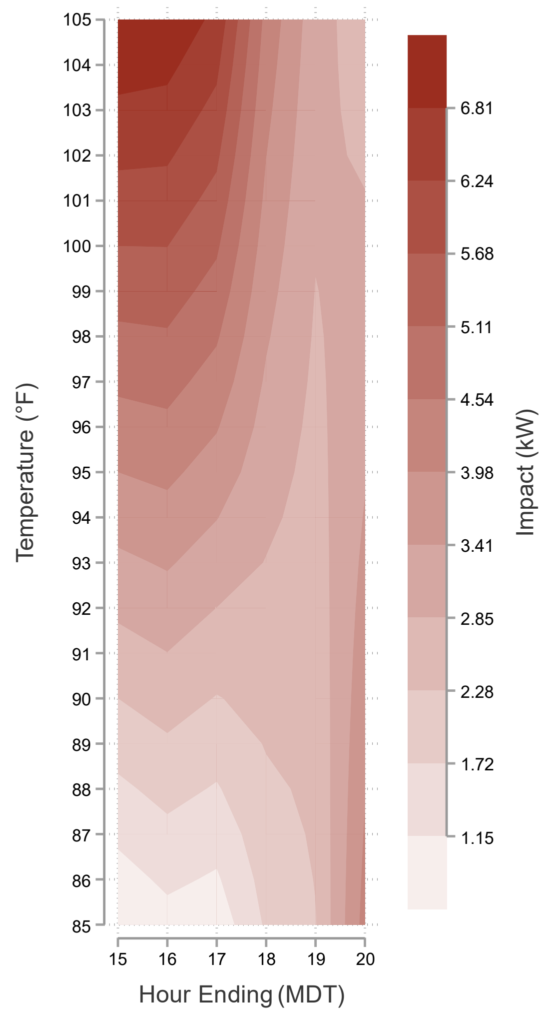
Figure 28: Hourly Impacts against Outdoor Temperature (F), Medium Commercial



The Evaluation team modeled historical impacts as a function of weather and time of day (see Section 7.1.2.1) and used the regression coefficients from the resulting model to create a TTM that shows expected load reductions (per facility) for different outdoor temperatures and at different times of the day. The TTM is shown in Table 50. Using the model, the Evaluation team predicts that the impact of a Medium Commercial DR event at peaking conditions (5:00 PM – 6:00 PM MDT when outdoor temperature is 100 degrees) is 3.73 kW per facility, or 0.46 kW per device.

Table 50: Medium Commercial Time-Temperature Matrix

Temp	Hour Ending MDT					
	15	16	17	18	19	20
105	7.37	7.26	6.66	4.38	3.08	2.54
104	7.03	6.95	6.37	4.25	3.04	2.62
103	6.69	6.63	6.08	4.12	3.00	2.70
102	6.35	6.32	5.78	3.99	2.96	2.79
101	6.01	6.00	5.49	3.86	2.92	2.87
100	5.68	5.68	5.19	3.73	2.88	2.95
99	5.34	5.37	4.90	3.60	2.83	3.04
98	5.00	5.05	4.61	3.47	2.79	3.12
97	4.66	4.74	4.31	3.34	2.75	3.20
96	4.32	4.42	4.02	3.22	2.71	3.29
95	3.98	4.10	3.73	3.09	2.67	3.37
94	3.64	3.79	3.43	2.96	2.63	3.45
93	3.30	3.47	3.14	2.83	2.59	3.53
92	2.96	3.16	2.85	2.70	2.55	3.62
91	2.62	2.84	2.55	2.57	2.51	3.70
90	2.28	2.53	2.26	2.44	2.47	3.78
89	1.94	2.21	1.96	2.31	2.42	3.87
88	1.60	1.89	1.67	2.18	2.38	3.95
87	1.26	1.58	1.38	2.05	2.34	4.03
86	0.93	1.26	1.08	1.93	2.30	4.12
85	0.59	0.95	0.79	1.80	2.26	4.20



To estimate Medium Commercial DCU resource capability on aggregate, the number of active facilities can be multiplied by the values shown in Table 50. As of the end of summer 2025, there were 369 active Medium Commercial facilities. Thus, the expected aggregate impact of an event hour ending at 6:00 PM (MDT) when the outdoor temperature is 100 degrees would be 1.33 MW.

Medium Commercial DCU results are subject to an operability adjustment to better reflect the fact that not all devices in the population will be able to curtail load when called due to damage, wiring, or connection issues. The operability-adjusted aggregate impact is 86% of the unadjusted impact, or 1.15 MW.

8.1.3 Conclusions and Recommendations

Findings and recommendations from the PY2025 evaluation can be found in Table 51.

Table 51: Findings and Recommendations

Finding	Recommendation
1. Planning: Historical demand reductions provide a helpful look at historical performance but vary based on event conditions and event timing.	For planning purposes, a consistent, weather-normalized impact estimate should be used. The Evaluation Team recommends that ex-ante program impacts from 5:00 PM to 6:00 PM MDT at 100°F, de-rated for operability, be used for reporting, cost-effectiveness, and planning.
2. Connected load assumption: The connected load assumption Itron uses to convert air conditioner runtime to electric demand for the thermostat program components is high given the average air conditioner size in the region. It is also higher than the assumed value in the smart thermostat protocol of the New Mexico TRM.	Currently the BYOT and Two-Way thermostat offerings represent a small fraction of the Power Saver resource capability, but as they grow it will be important to base the load impact calculations on sound assumptions. The Evaluation team revised the assumption for the ex-post analysis of the BYOT components, but not for Two-Way because Itron technicians record A/C nameplate information during installation of Two-Way thermostats.
3. Load reduction shape: For the BYOT Nest component, thermostat setpoints are increased by three degrees during the event. This results in relatively large impacts in the first event hour that get increasingly smaller throughout the event.	If this shape is a concern for PNM, consider discussing the curtailment algorithm with Nest. Using different offsets in each event hour (+2 in the first, +3 in the second, and +4 in the third and fourth) could flatten out the impacts, or Nest could implement a cycling strategy similar to the other thermostat components.
4. Operability/offline adjustments: Historically, Itron has adjusted capacity estimates to account for inoperable DCUs as well as offline thermostat devices. Those adjustments were not made in 2024, though they improve the accuracy of impact calculations.	Reintroduce the operability and offline adjustments to the analysis.
5. Baseline adjustment: Currently, Itron uses an additive adjustment factor to adjust their baselines. The additive adjustment factor creates bias in non-event hours.	Because Itron does not currently report on non-event hours, the fact that the additive adjustment approach creates bias in non-event hours is not an issue. If Itron were interested in calculating Power Saver energy savings in the future, they can lower bias by adopting a multiplicative baseline adjustment instead of an additive adjustment.

Finding	Recommendation
6. Input data: Impacts for the three DCU components currently rely on metering data for a sample M&V group.	If advanced metering infrastructure (AMI) data becomes widely available, statistical confidence of M&V for the DCU components would be improved by switching to an AMI analysis of the full population. This would also eliminate the need for an operability adjustment. Likewise, AMI data could be analyzed for the thermostat segments. This would eliminate the need for an offline adjustment and a connected load assumption.

8.2 Peak Saver

PNM offers the Peak Saver program to non-residential customers with peak load contributions of at least 50 kW. The program compensates participants for reducing electric load upon dispatch during periods of high system load. Itron implemented the Peak Saver program in 2025, handling the enrollment, dispatch, and settlement with participating customers. There were approximately 300 participants and two demand response (DR) test events during the 2025 demand response season. Both PY2025 events were dispatched to establish baseline kW factors rather than to provide capacity relief. Table 52 details the events.

Table 52: 2024 Peak Saver Event Summary

Date	Day of Week	Participants		Start Time (MDT)	End Time (MDT)	Daily High at KABQ (F)
		Metered	Total			
6/12/25	Thursday	156	284	3:00 PM	4:00 PM	92.3
10/2/25	Thursday	79	136	3:00 PM	4:00 PM	84.0

Table 53 shows a high-level comparison of reported and verified demand for each event, as well as verified energy impacts.[18] The Evaluation team estimates the Peak Saver program is a 14.1 MW summer capacity resource. Interval consumption data was not available for all Peak Saver participants, so reported impacts are based on a blend of metered load reduction estimates, historical verified reduction estimates, and nominated reductions. Note Itron did not report kW reduction estimates for the 6/12 test event. The demand realization rate for the 10/2 event (92%) is driven primarily by how sites without metering data were accounted for in the reported and verified analyses. The realization rate for participants with metering data was 103%.

Table 53: Evaluation Results

Date	Demand (kW)			Energy (kWh)	
	Reported	Verified	Realization Rate	Reported	Verified
6/12/25	N/A	14,116	N/A	N/A	8,556
10/2/25	20,098	18,488	92.0%	N/A	16,485

8.2.1 Methodology

The key steps in the Evaluation Team's verified savings analysis were:

1. Validate the performance estimates calculated by Itron using the contractually agreed upon CBL method.
2. Produce independent energy and demand impact estimates for each participant/event combination.
3. Perform a bias assessment to determine how the contractually agreed upon CBL method performs on non-event days when there are no demand reductions.

Additional details are provided in subsequent sections.

Data Sources

After the conclusion of the summer 2025 season, Itron provided the Evaluation team with a series of data sets for the evaluation.

These files included:

- Interval load data for select program participants spanning a period from May 2025 through October 2025. The interval data is used to calculate DR impacts. Most sites with interval data had 5-minute interval data, but some had 1-minute interval data (16%) or 15-minute interval data (1%).

- Hourly interval data for program participants covering the 2024 summer. The Evaluation team used this data with the 2025 load data to identify which participants have weather-sensitive loads.

- Itron's reporting workbook, which contains Itron's estimated customer baselines (CBLs) and capacity impacts for each metered participant. For each participant without metering, the annual report contains a nominated kW value, which represents the expected capacity relief the site will provide when DR is dispatched.

- Results from Itron's weather sensitivity analysis (including a description of the methods and key regression outputs for each participant).

Upon request, Itron also provided some of the R scripts used for their analysis.

Contract CBL Methodology

The settlement calculations call for a "high 3-of-5" CBL approach. A CBL is an estimate of participant load absent the DR event dispatch. Participants with weather-sensitive loads receive a weather-based additive adjustment to their baseline. Under the high 3-of-5 approach, the average load for three of the previous five eligible days is used as a proxy for what load would have been if the DR event had not been called.[17] To determine the high 3-of-5 days, the following process was used

1. Select the five non-holiday, non-event weekdays that immediately preceded the event.
2. Calculate the average demand during the event window on each of the five baseline days. Remove the day with the lowest average.
3. For the remaining four baseline days, perform a sum-of-squared error (SSE) calculation to determine which three baseline days are most similar to the event day. The SSE calculations are performed as follows:

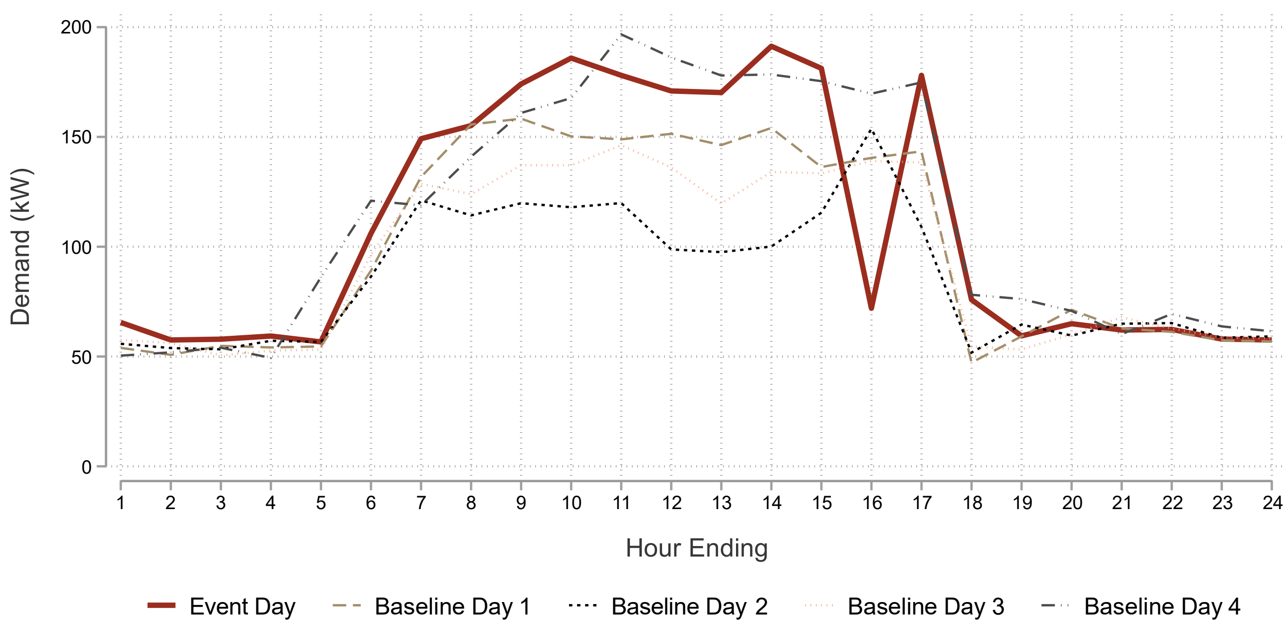
[17] Eligible days are weekdays that are neither holidays or DR event days.

a. By hour, compute the difference between load on the baseline day and the event day. Remove event hours, the hour before the event, and the hour after the event. Do this for each baseline day.

b. Square the differences and then sum them by date. The day with the highest SSE is removed.

Figure 29 shows hourly loads on an event day and four baseline days for a 2024 participant. Event day load is represented by the solid maroon line, and the event was dispatched during the hour ending 16 (3-4 PM). The thin lines represent the four baseline days. For the SSE calculations, hours 15-17 (2-5 PM) are ignored. Baseline days 1, 3, and 4 are clearly more like the event day than baseline day 2. Baseline day 2 ultimately gets dropped.

Figure 29: Baseline Day Selection

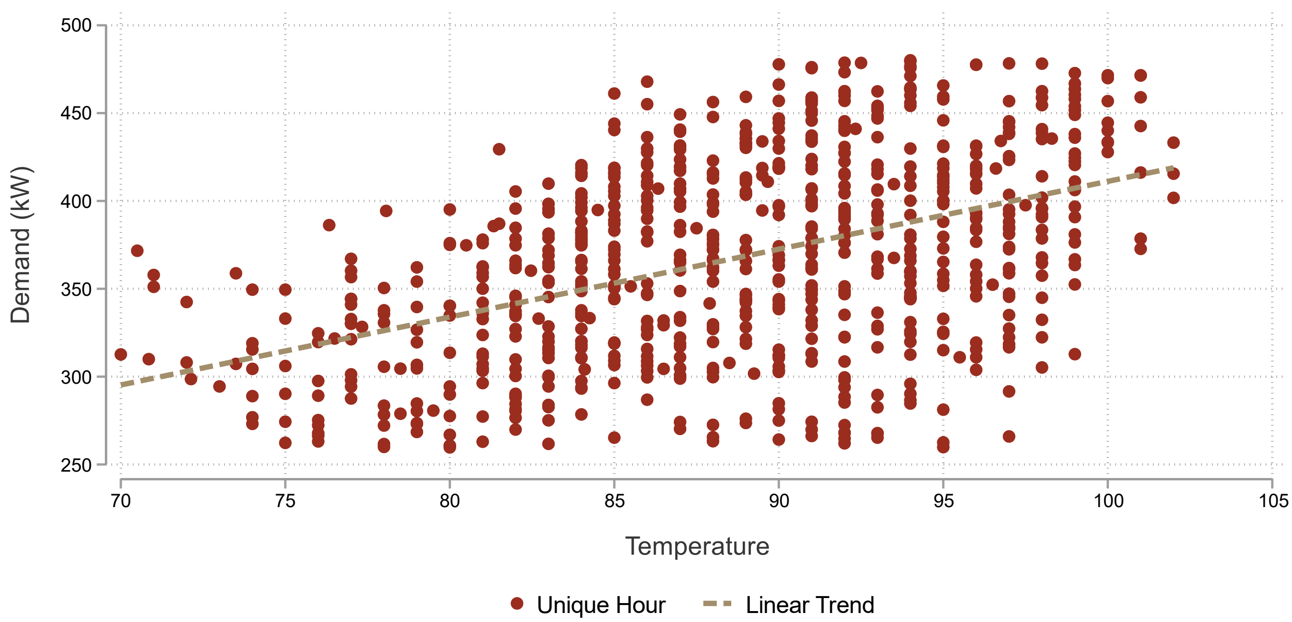


Once the baseline days are selected, the CBL is calculated by averaging loads across the three baseline days for each 5-minute interval. If the participant's load is found to be weather sensitive, then a weather-based baseline adjustment is added to the CBL. The adjustment is calculated as:

$$Adjustment = Slope * (\Delta_{Temp})$$

In the equation above, ΔTemp represents the difference between the average outdoor temperature during the event and the average outdoor temperature during the event window on the three selected baseline days. "Slope" is a value that quantifies the relationship between outdoor temperature and load for the facility (i.e., for each one-degree increase in temperature, how much does load increase on average?). This value is determined via regression modeling using hourly demand data over two summers. Note only common event hours (1:00 PM through 8:00 PM) are included in the regression. An example for one site is shown in Figure 30. The slope of the trend line in this example is 3.86.

Figure 30: WSA Factor Determination



Performance Metrics

Once the Evaluation team validated that the baselines were calculated according to the contract method, the team replicates Itron's performance metrics:

- **10-Minute Capacity Performance –** The difference between the baseline and the lowest actual electrical demand measured by a one-minute interval reading between eight and ten minutes after the start of an event.

- **Average Capacity Performance –** The average difference between the baseline and the participant's actual electric demand beginning ten minutes after the initiation of the event.

- **Participant Event Capacity Performance –** Weighted average of 10-Minute Capacity Performance (40% weight) and Average Capacity Performance (60% weight).

Estimating Verified Demand Impacts for Sites with Metering Data

Metering data was available for approximately 60% of Peak Saver sites, and the metered sites represent approximately 80% of the reported Peak Saver load reductions (see Table 54). The evaluation approach for developing verified demand impacts for the metered sites is described in this section. The evaluation approach for non-metered sites is shown in the following section. Reported performance metrics for the non-metered sites were based on site-level kW nominations. These nominations represent how much load the site expects to curtail when DR is dispatched.

Table 54: Participation Counts and Demand Reductions by Metering Status

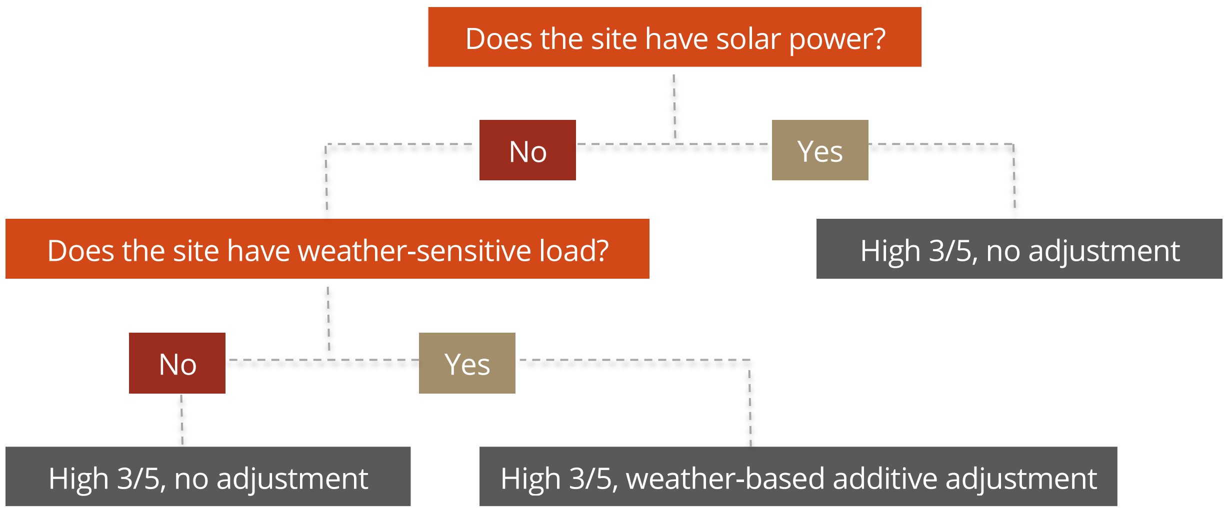
Event Date	Participation Count			Reported kW Impact		
	With Metering	Without Metering	Total	With Metering	Without Metering	Total
6/12/25	156	128	284	N/A	N/A	N/A
10/2/25	79	57	136	15,696	4,402	20,098

The verified savings analysis largely followed the approach laid out in Section 7.2.1.2, which details how Itron calculates baselines and demand reduction estimates per their contract with PNM. However, the verified savings results reflect the following modifications to the Itron methodology:

- The Evaluation team did not use an R^2 threshold when determining which sites are eligible for the weather-sensitive baseline adjustment. The team did retain the other two conditions used by Itron (positive slope and p-value < 0.05 for the temperature coefficient in the regression). Figure 31 shows a CBL assignment flow chart.
- The Evaluation team, did not zero out negative demand reduction estimates. When settling with customers, it makes sense to zero out negative performance values. From an evaluation

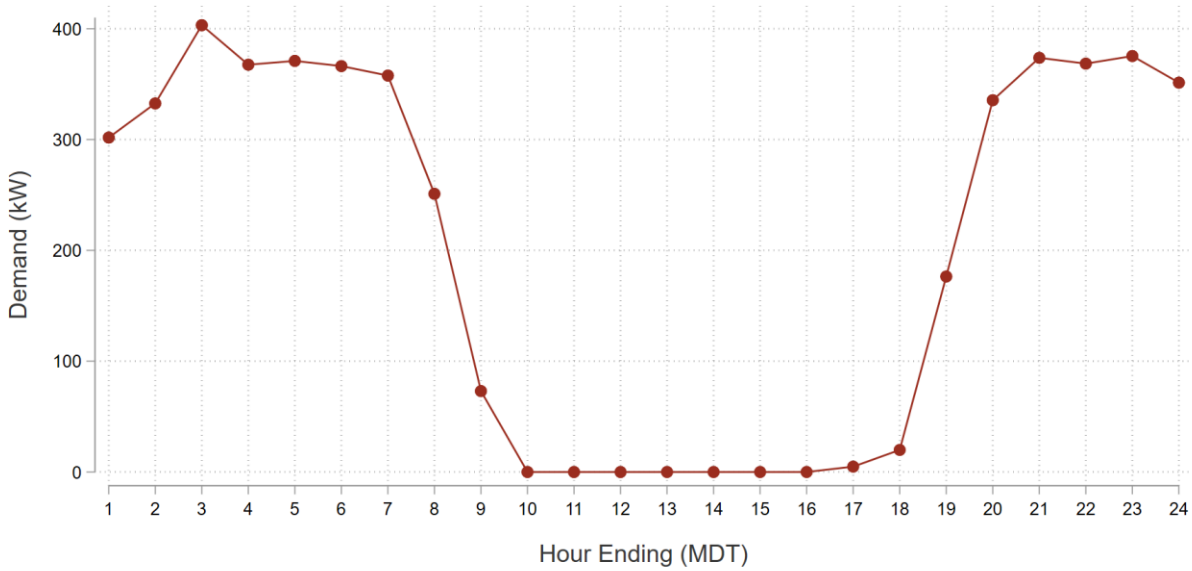
standpoint, zeroing out negative impact estimates creates an upwards bias in the results due to the asymmetric treatment of estimation error (favorable estimation error is attributed to the program but some unfavorable estimation error is ignored).

Figure 31: CBL Assignment Flow Chart



To determine which sites have behind-the-meter solar photovoltaic power, the Evaluation team reviewed hourly load profiles for the subset of participants with metering data. Sites that showed the distinct solar net load profile, as in Figure 32, were treated as solar sites. Additionally, sites that were previously designated as solar customers in 2022 Peak Saver interconnection data were marked as solar sites.

Figure 32: Example of Solar Load Profile



Regarding weather-sensitive loads, the Evaluation team estimated weather sensitivity at each site by assessing the historical relationship between load and temperature during afternoon hours (1:00 PM – 8:00 PM) on non-event, non-holiday summer weekdays. Sites were weather sensitive if (1) the correlation between temperature and load was positive and (2) temperature was found to be a statistically significant predictor of load (at the 5% significance level) and (3) the site was *not* designated as using solar power. In total, 172 out of 201 sites with metering data met these criteria. Table 55 shows the distribution of CBL methodology for the 2025 verified savings analysis.

Table 55: Distribution of CBL Method for Sites with Metering Data

CBL Approach	Number of Sites
High 3/5, no adjustment	29
High 3/5, weather-based additive adjustment	172
Total	**201**

Estimating Verified Demand Impacts for Sites with Metering Data

For sites without metering data, Itron's reported impact is equal to the site-level nominated kW value. This nomination value is established in the participation agreement and represents the site's expected load reduction when dispatched. The underlying assumption in Itron's reported savings values is that every site without meter data delivered exactly the kW reduction they nominated. For the verified savings analysis, the Evaluation team used historical verified capacity savings estimates for sites that have participated in the past. For others, the team applied realization rates (RRs) to the nominated kW values to reflect historic performance relative to nominations. The realization rates were based on verified capacity savings estimates from the 2022-2025 Peak Saver events. More details are provided in Figure 33.

Figure 33: Nomination Realization Rate Logic

1

Was the site a Peak Saver participant in 2022, 2023, 2024, or 2025?

- If yes, use their historical average verified reduction rather than applying a realization rate to the nominated kW value.
- If no, proceed to step 2.

2

Can the site be assigned a business type (e.g., school, hardware store) for which we have historical performance data?

- If yes, use the 2022-2025 verified Peak Saver results to calculate a realization rate. The nomination realization rate is the ratio of the sum of 2022-2025 verified reductions for the store type and the sum of 2022-2025 nominations for the same set of participants (capped at 100%).
- If no, proceed to step 3.

3

Using the 2022-2025 verified Peak Saver results, remove sites with nominations greater than 100 kW. Then, calculate the nomination realization rate as follows:

$$RR = \frac{Sum\ of\ 2022\ through\ 2025\ Verified\ Capacity\ Reduction\ Estimates}{Sum\ of\ 2022\ through\ 2025\ Nominations}$$

Table 56 shows the number of sites that fall into each RR bin and the average RR for each bin. Note that nomination RRs were not applied to the sites that have meter data. The sites with metering data are not included in the table.

Table 56: Average Nomination Realization Rates for Sites without Metering Data

RP Approach	Percent of Sites	Average RR
Historical Participant (Step 1)	48%	86%
Store Type (Step 2)	49%	51%
Other (Step 3)	3%	85%
Total	**100%**	**69%**

Estimating Energy Impacts

While the Evaluation team has historically considered pre-event and post-event hours when calculating energy impacts for Peak Saver, estimated energy impacts for 2025 are isolated to the test event hours and assume no pre-pumping or snapback. The Evaluation team did not see evidence of load shifting during 2025 DR event days. Load reductions during the event hours were not preceded by load increases prior to the event hour or followed by load increases after the event hours (see Figure 7-16).

8.2.2 Replication of Reported Metering Impacts

For the sites with metering data, the Evaluation team was able to replicate Itron's weather sensitivity results and successfully replicate most of their CBL and kW reduction estimates. Results from this replication exercise are shown in Table 57. For the 10/2 test event, replica calculations produced larger impacts for two sites. For the remainder of sites, differences between Itron's reported impacts and the Evaluation team's replica calculations were trivial. For a small number of metered sites (n = 7), Itron used a nominated kW value rather than a usage-based load reduction estimate.

Table 57: Replication Results for Participants with Metering Data

Date	Aggregate kW Reduction		
	Itron	Replica	% Difference
6/12/25	N/A	N/A	N/A
10/2/25	15,696	16,073	2.4%

8.2.3 Verified Results

Capacity Impacts

The results of the Evaluation team's 2025 Peak Saver evaluation are shown in Table 58 and visualized in Figure 34. Evaluation results indicate the Peak Saver program is approximately a 14.1 MW summer capacity resource. To estimate winter resource capability, the Evaluation team recommends dispatching an event on a cold winter day. The high temperature on October 2nd was approximately 84°F.

Table 58: Verified Impacts

Date	Demand Impact (kW)		
	Metered	Not Metered	Total
6/12/25	8,556	5,560	14,116
10/2/25	16,485	2,004	18,488

Figure 34: Distribution of Verified Capacity Savings by Metering Status

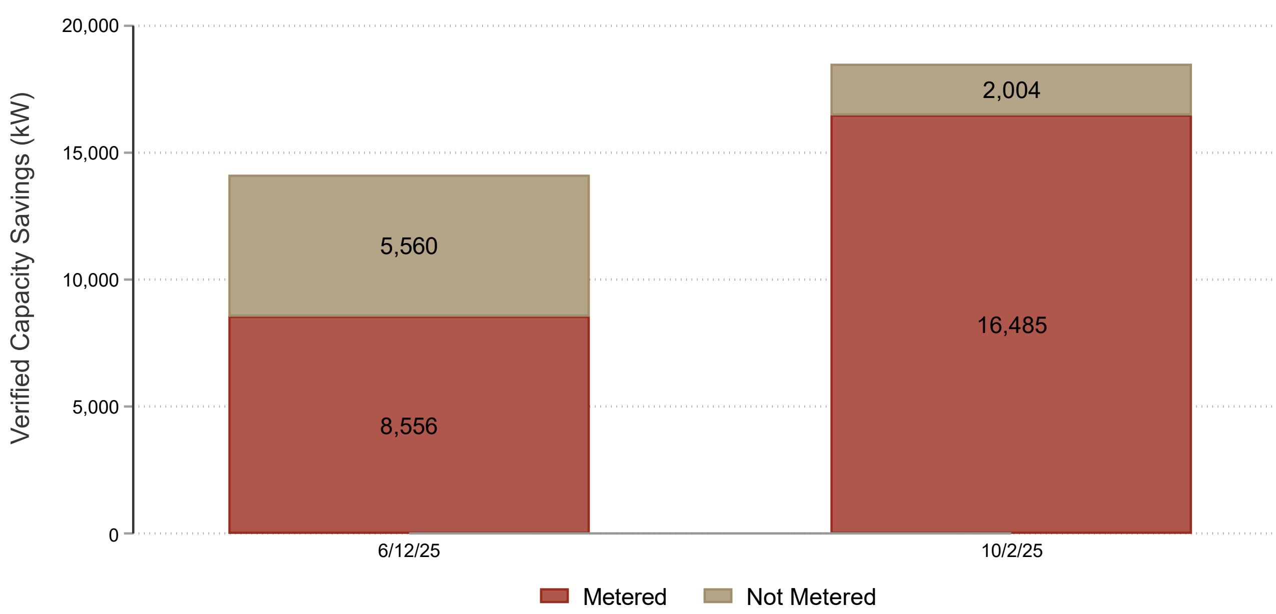


Figure 35 compares aggregated hourly loads and baselines by event date. Figure 36 mirrors Figure 35 but removes the three largest sites in terms of average demand. In the latter figure, baseline load tracks actual load well, there is a clear response to DR dispatch, and there is no evidence that participants shifted load from event hours to non-event hours. Additional notes on the largest sites and additional details on the relative performance of the contract CBL methodology are included in subsequent sections.

Figure 35: Aggregate Loads, Baselines, and Impacts for Sites with Metering Data

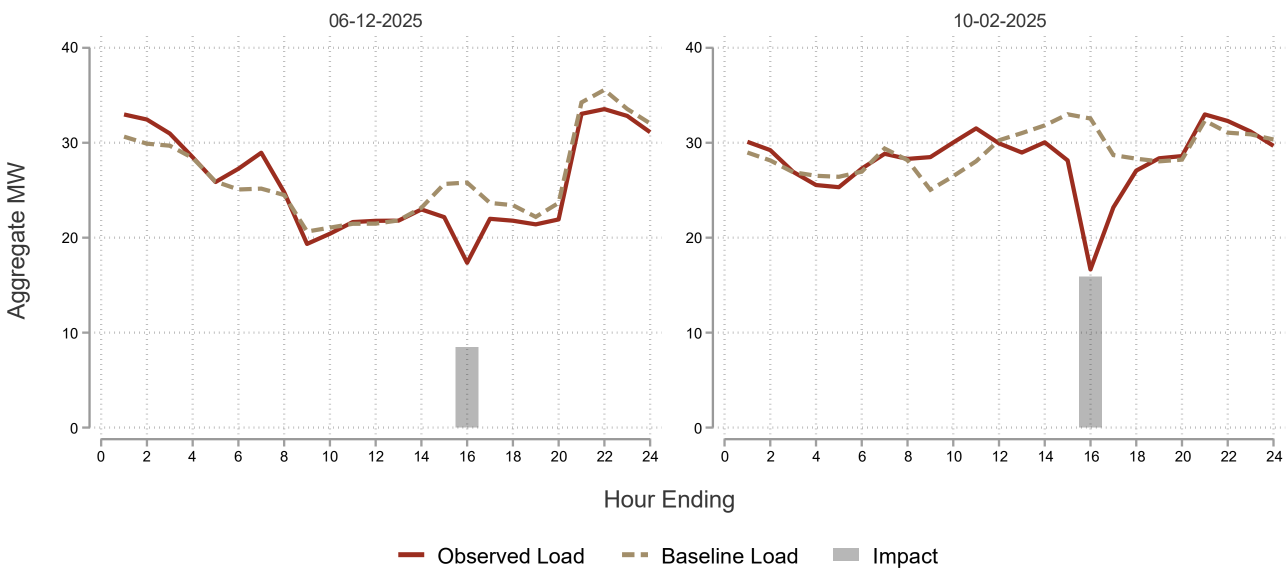
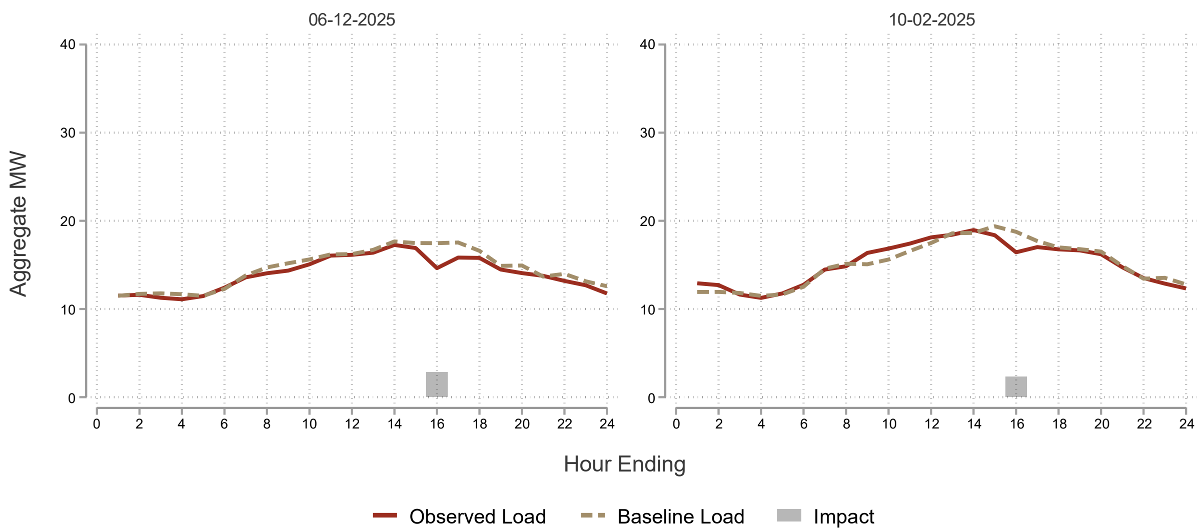
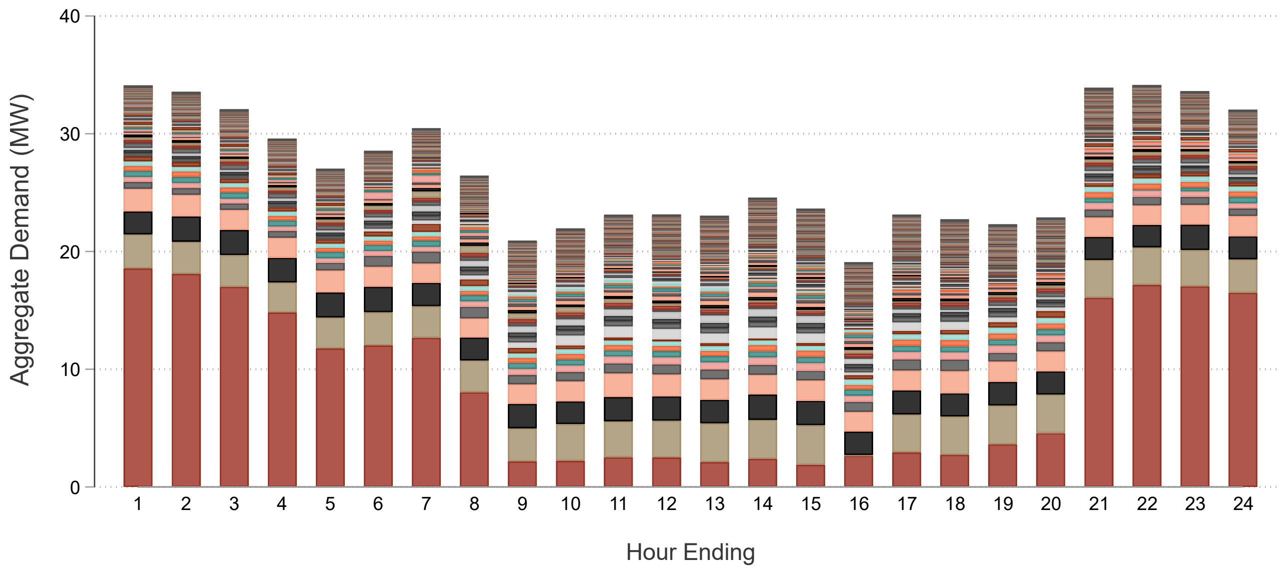


Figure 36: Aggregate Loads, Baselines, and Impacts for Sites with Metering Data – Three Biggest Sites Removed



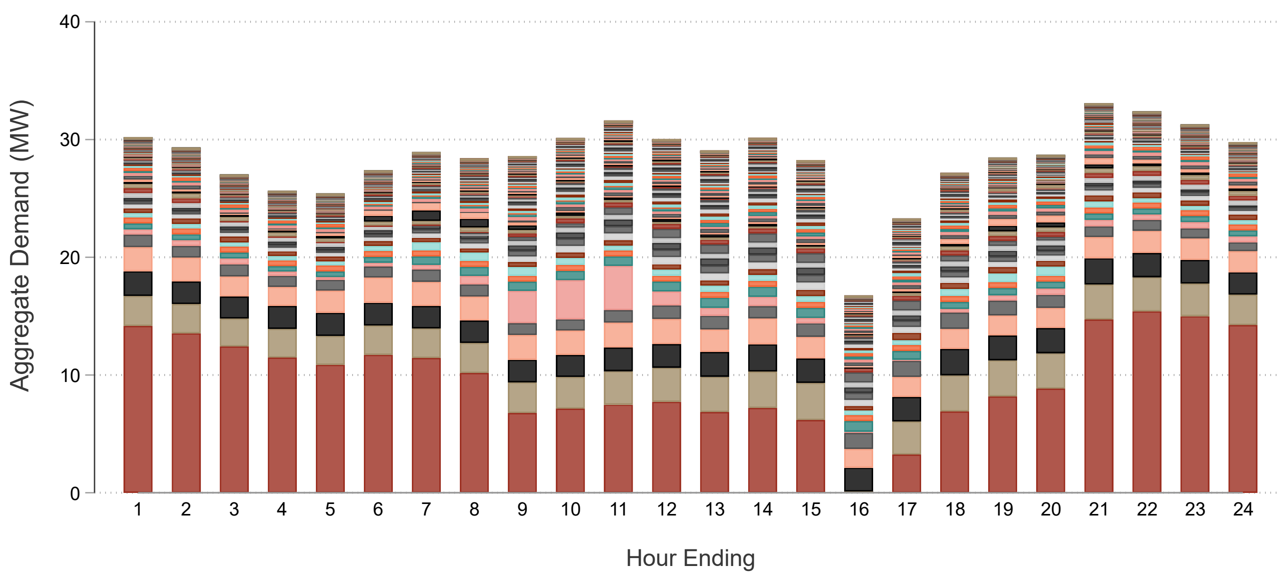
Verified capacity reductions were driven by a few large sites. Three participants accounted for 65% of the verified load reductions on 6/12 and 74% of the verified load reductions on 10/2. Figure 37and Figure 38 show aggregate participant load during the 6/12 and 10/2 test events respectively (note meter data was not available for one of the three sites during this event). Each color in the plot represents a different participant and the height of the stacked bars is equal to aggregate demand for the metered sites. One participant towers over the rest, and the total load for three other participants is comparable to the total load of the remaining metered participants.

Figure 37: Aggregate Participant Loads on 6/12



Each color represents a different meter.

Figure 38: Aggregate Participant Loads on 10/2



Each color represents a different meter.

Energy Impacts

Table 59 shows estimated energy impacts. Note energy impacts are only assessed at sites with metering data. For sites without metering data, the Evaluation team assumed the events were energy neutral (i.e., no energy impact).

Table 59: Energy Savings for Sites with Metering Data

Date	Metered Sites	Energy Impact (kWh)
6/12/25	156	8,556
10/2/25	79	16,485
Total	**201**	**25,040**

Additional Notes on the Largest Sites

Peak Saver is a top-heavy program – three participants accounted for 65% of the verified load reductions on 6/12 and 74% of the verified load reductions on 10/2. These sites have load reduction nominations of 7.0 MW, 3.4 MW, and 3.4 MW respectively. Note meter data was not available for one of these three sites for the June test event.

Figure 39 shows event day and baseline day loads for the largest site in terms of average demand. Verified load reductions for this site were 2.5 MW on 6/12 and 7.2 MW on 10/2. Load reduction is clear during the 10/2 event, but the 2.5 MW impact for the 6/12 event is difficult to visualize. Baseline day load jumps considerably between 3:00 and 4:00 PM on two of the 6/12 baseline days. This results in a CBL of approximately 5 MW during the lone event hour (hour ending 16) and also explains the jump in baseline load in Figure 35. Actual event day load is approximately 2.5 MW during the 6/12 event. The load reduction on 10/2 is consistent with the sites load reduction nomination of 7 MW.

Figure 39: Baseline Day and Event Day Loads for Largest Site

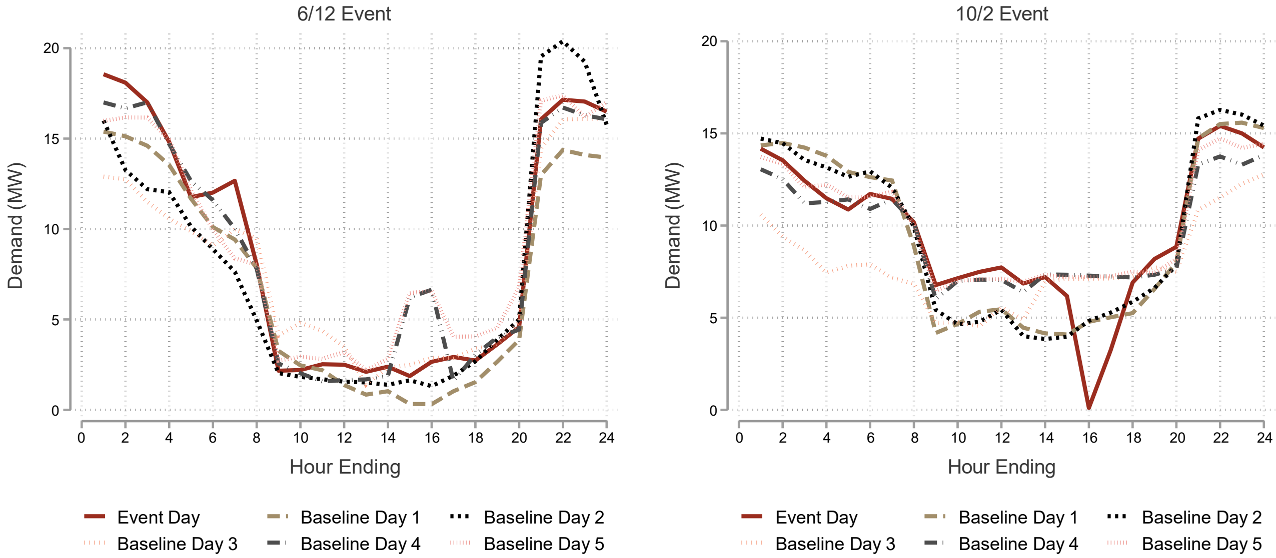


Figure 40 shows event day and baseline day loads for the second largest site. Verified load reduction estimates for this site were 3.3 MW on 6/12 and 3.2 MW on 10/2 – consistent with the load reduction nomination of 3.4 MW. Loads for this site are predictable and the kW nomination is reasonable.

Figure 40: Baseline Day and Event Day Loads for the Second Largest Site

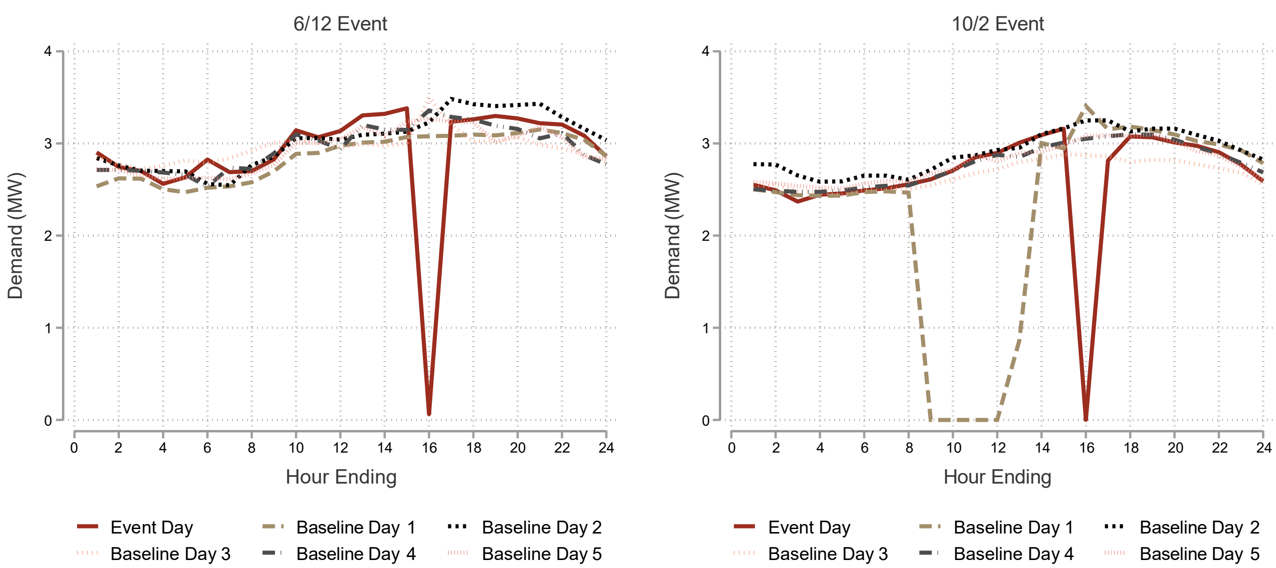
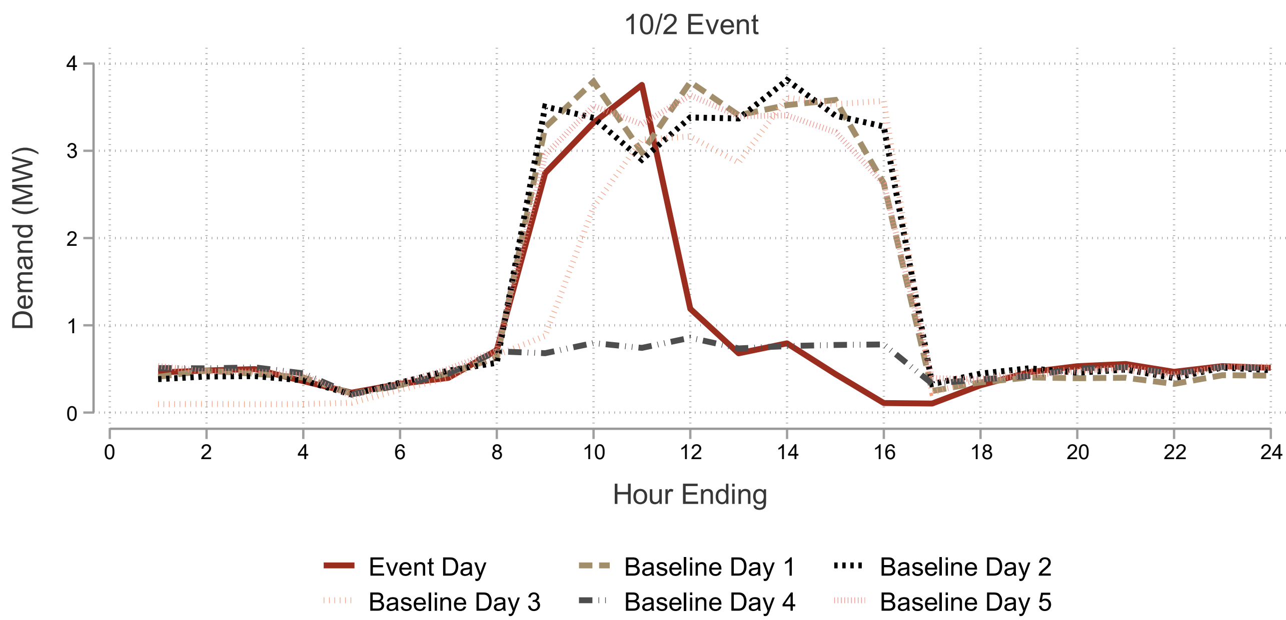


Figure 41 shows event day and baseline day loads for the third largest site. The verified load reduction estimate for this site was 3.3 MW on 10/2. Relative to the baseline days, load at this site dropped considerably around noon on 10/2 and no load was shifted to post-event hours. The load reduction nomination of 3.4 MW for this site is reasonable.

Figure 41: Baseline Day and Event Day Loads for the Third Largest Site



Historical Comparison

Table 60 shows a year-over-year comparison of the Peak Saver performance metrics for the years 2018 through 2025. The relevant performance metrics are:

- **10-Minute Participant Capacity Performance –** The difference between the CBL and the lowest actual electrical demand measured by a one-minute interval reading between eight and ten minutes after the start of an event.
- **Average Participant Capacity Performance –** The average difference between the CBL and the participant's actual electric demand beginning ten minutes after the initiation of the event.

- **Participant Event Capacity Performance –** Weighted average of 10-Minute Participant Capacity Performance (40% weight) and Average Participant Capacity Performance (60% weight).

Note the Peak Saver population has changed over time, and the results in any given year are a function of participant mix, event conditions, and event timing. The comparison loses some of its usefulness starting in 2024 since not all Peak Saver participants were metered in 2024-2025 and capacity estimates for some sites were based on historical performance. The program implementer also changed between 2023 and 2024.

Table 60: Historical Evaluated Performance, Summer Events

Year	Metered Participants	Summer Events	10-Minute Capacity Performance (kW)	Average Capacity Performance (kW)	Verified Capacity Performance (kW)
2018	86	12	17,558	13,655	15,216
2019	92	3	17,460	15,342	16,189
2020	130	10	13,433	12,528	12,890
2021	157	2	18,975	16,532	17,509
2022	159	3	17,659	13,975	15,449
2023	160	2	17,543	14,850	15,927
2024	28	2	9,291	10,512	10,023
2025	156	1	8,561	8,552	8,556

8.2.4 Bias Assessment

This section details the Evaluation team's review of the Itron contract CBL methodology (described in Section 8.2.1). Specifically, the team assesses the ability of the CBL methodology to predict load on non-event weekdays.

Assessing the accuracy of a baseline on an event day is not possible because the counterfactual is unknown. However, using the same algorithm to generate a baseline on non-event weekdays should reasonably predict the metered load. For these days, the true value of demand response is 0 kW, so non-zero impact estimates can be attributed to error. Individual errors are expected as the lookback window is not intended to be a perfect predictor of future load. That said, an unbiased baseline methodology should produce a distribution of errors which is centered around zero.

To evaluate the accuracy of the settlement CBL, the Evaluation team analyzed the central tendency of prediction errors by running a false experiment on non-event weekdays during the summer of 2025. Only sites with hourly usage data were included. Steps taken were as follows:

Figure 42: False Experiment Steps

1. Use the settlement CBL to predict hourly loads for each participant on each non-event, non-holiday weekday.
2. Sum the CBLs and metered load for all participants by date and hour.
3. Calculate error as aggregate CBL minus aggregate load.
4. Review the distribution of errors, specifically for hours in which DR has historically been dispatched.

Results for the settlement baseline, aggregated by month, are shown in Table 61. Note only hours 4:00 PM – 8:00 PM are included in the comparison. Though the settlement baseline does produce some upwards bias (+3.5%), the Evaluation team thinks the baseline method predicts load reasonably well on aggregate. Figure 43 shows the average aggregate load and the average aggregate CBL across all non-event, non-holiday weekdays, and Figure 44 shows the distribution of hourly errors during the 4:00 PM – 8:00 PM window.

Table 61: Bias Assessment Results

Month	Number of Placebo Events	Average Aggregate Load (MW)	Average Aggregate CBL (MW)	Average Error (MW)	Percent Error
June	18	23.7	24.2	0.5	2.0%
July	22	29.9	30.9	1.0	3.4%
August	21	34.7	35.7	1.0	2.8%
September	21	31.8	33.4	1.6	4.9%
Average	**82**	**30.9**	**32.0**	**1.1**	**3.5%**

Figure 43: Average Aggregate Demand and CBL on Non-Event Days

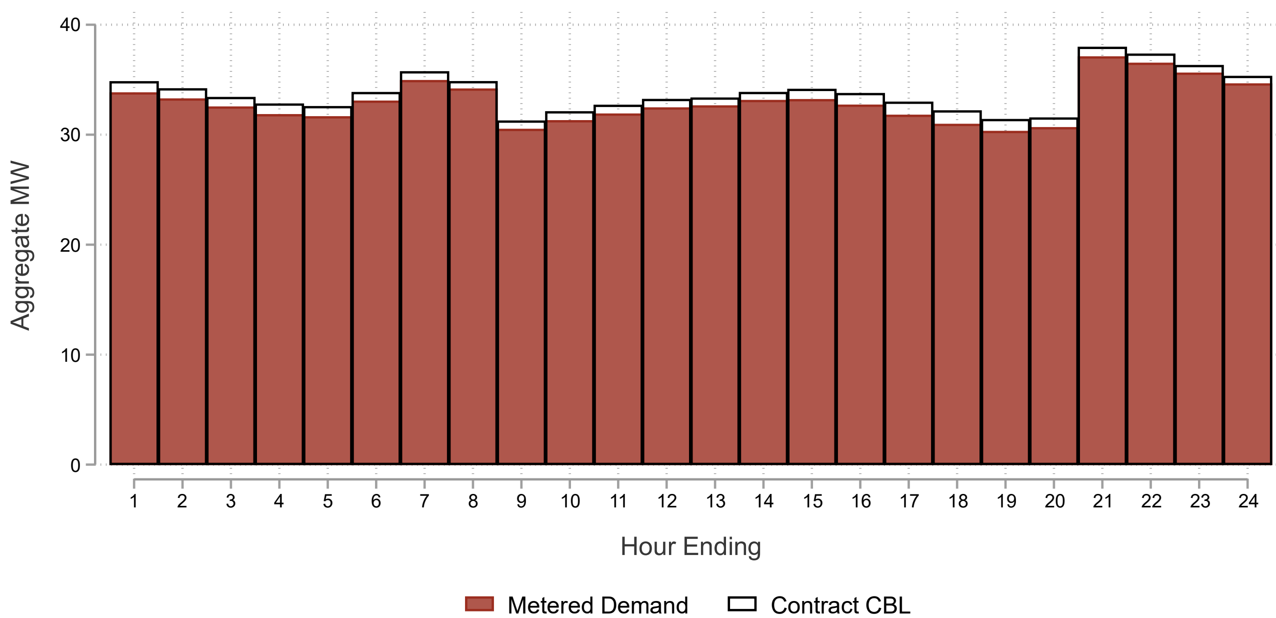
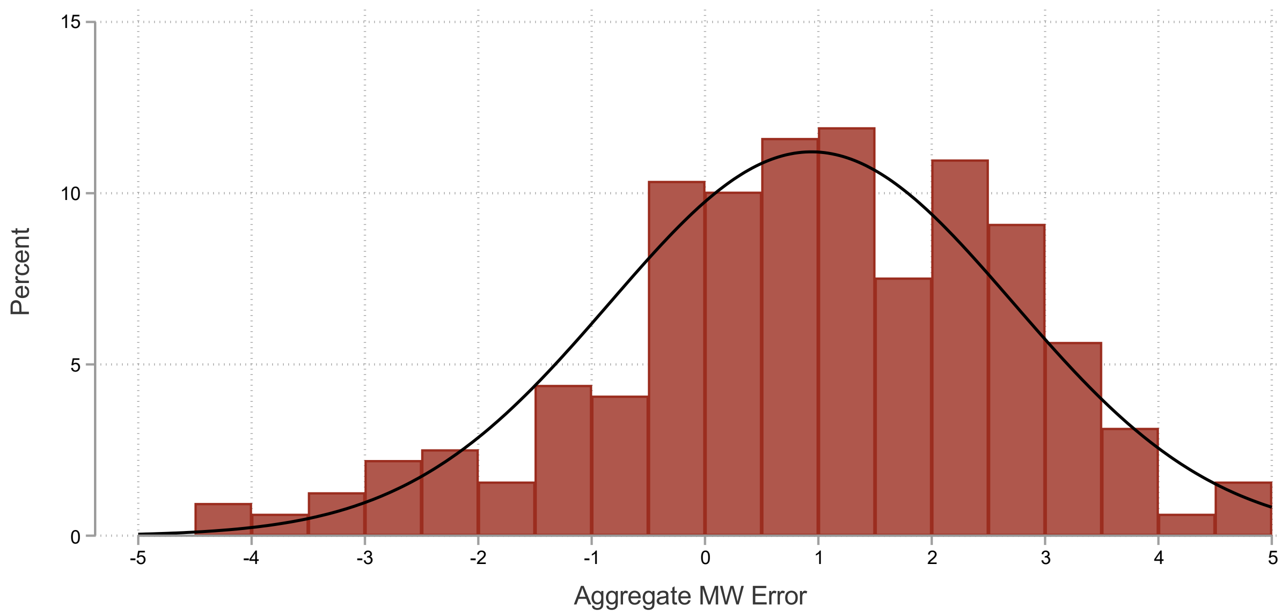


Figure 44: Distribution of Placebo Event Prediction Errors



In addition to the Itron-PNM contract CBL, the Evaluation team tested out two other CBL approaches in the bias assessment:

- No sites receive the weather-sensitive baseline adjustment.
- The R^2 filter from the weather sensitivity analysis is removed, which makes more sites eligible for the weather-sensitive baseline adjustment. Sites with solar remain ineligible for the weather-sensitive baseline adjustment.

Table 62 shows the average error produced by each of the alternative CBL approaches identified above. The results are similar across approaches. With an average aggregate error of 1.0 MW, the "Relaxed WSA Conditions" marginally outperforms the contract method.

Table 62: Bias Comparison – All Days

CBL Approach	Average Aggregate Error (MW)	Percent Error
Contract	1.09	3.5%
Relaxed WSA Conditions	0.99	3.2%
No WSAs	1.27	4.1%

Considering that DR events are typically dispatched on the hottest days of the summer, the Evaluation team isolated the ten warmest non-event, non-holiday weekdays and assessed error on this subset of days. Table 63 compares results across the three CBLs included in the comparison. As before, the results are similar across the three approaches with the "Relaxed WSA Conditions" approach performing best (with an average aggregate error of 0.13 MW).

Table 63: Bias Comparison – Top 10 Warmest Days

CBL Approach	Average Aggregate Error (MW)	Percent Error
Contract	-0.61	-1.9%
Relaxed WSA Conditions	0.13	0.4%
No WSAs	-0.87	-2.7%

Though all methods included in the bias assessment predict load well, the Evaluation team used the "Relaxed WSA" conditions for the verified savings analysis because this method slightly outperforms the other methods on event-like days.

8.2.5 Nominations

The following sections detail comparisons between monthly site-level DR kW commitments ("nominations"), average demand, and DR impacts. There are two central questions:

1. How do nominations compare to average demand?
2. How do nominations compare with verified DR performance?

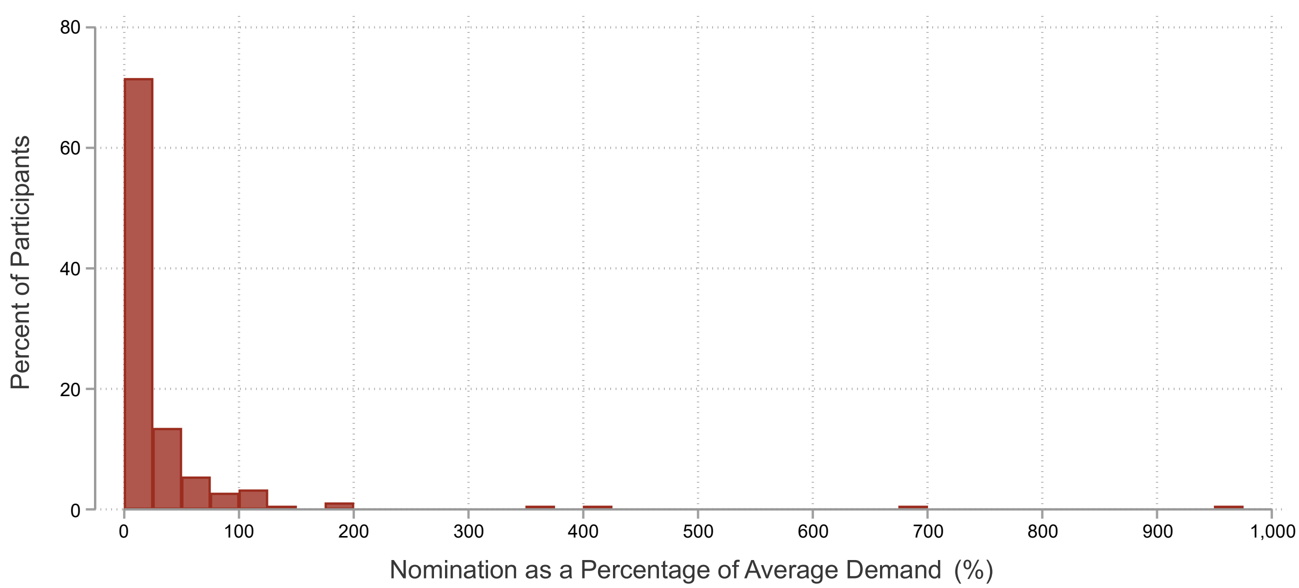
These comparisons are limited to sites with metering data (approximately 60% of participants).

Average Demand

How do nominations compare to average demand? To answer this question, the Evaluation team calculated the average hourly demand for each participant during afternoon hours (4:00 PM – 8:00 PM) on non-event, non-holiday weekdays. The team then compared these averages to the nomination for the site. Ratios were calculated as the nomination divided by average load (and multiplied by 100%).

Figure 45 shows the distribution of ratios. The ratio for each site should fall between 0% and 100%. A ratio greater than 100% implies the participant's nomination exceeds their average demand. For most participants, DR nominations make sense relative to their average hourly demand on non-event summer afternoons with average temperatures over 80°F. For some others, the ratio was considerably greater than 100%, meaning the site is pledging to reduce more load than they typically have available. The outlier in the right tail has a nomination of 3,400 kW. Loads at this site do often exceed 3,400 kW, but the daily peak for this participant typically occurs in the early afternoon. By 4:00 PM, loads are typically around 200-300 kW. A similar explanation applies to some other outliers, and some additional outliers with suspected bad meter data are not shown in the figure.

Figure 45: Nominations as a Percentage of Demand



A value over 100% implies the average nomination exceeds average demand at the site.

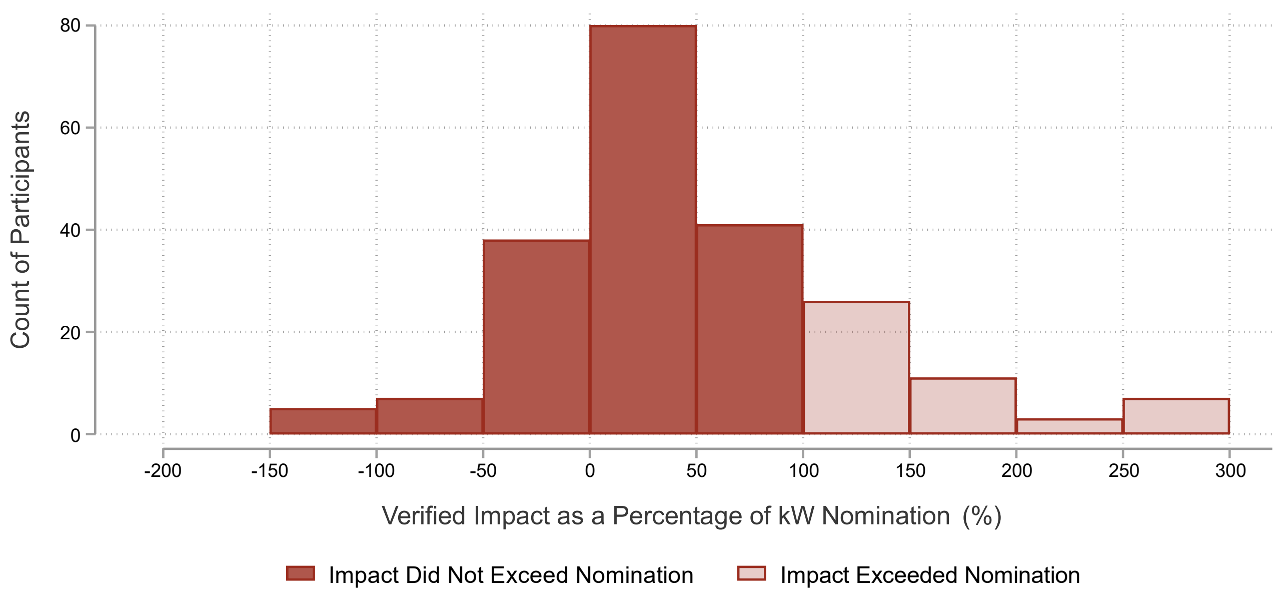
DR Performance

This section compares DR nominations with verified performance metrics (as calculated by the Evaluation team). The metric reviewed by the Evaluation team was the percentage of the nomination achieved, calculated as follows:

$$Percent\ of\ Nomination\ Achieved = 100\% * \frac{Verified\ Reduction}{Nominated\ Reduction}$$

Figure 46 shows the distribution of these percentages. For each participant, unique percentages were calculated for each event, using the nomination for the relevant month. Sites that did not participate in a certain event day are not included in this analysis. Instances where actual reductions do not exceed nominated reductions result in percentages that are less than 100 percent, and vice versa. Most of the distribution falls below 100 percent, implying that most sites did not achieve their nominated load reductions. An achievement percentage less than zero means the DR performance for the event was negative (meaning event day load exceeded baseline day load during the event window).

Figure 46: Comparison of Verified Impacts to Nominations



A value over 100% implies the average verified impacts exceeds the site's nominated kW value.

Table 64 groups participants based on how their verified reductions compared to their nominated reductions. Of the metered participants, 57 exceeded their nomination on average but accounted for only 1.2 MWs of demand reductions. Another 102 participants – accounting for about 90% of total nominations – did not exceed their nomination but did provide demand reductions. Finally, some sites did not produce any demand reductions. These sites accounted for approximately 1 MW of nominated reductions.

Table 64: Nomination Bins

Results	Frequency	Aggregate Nomination (kW)
Did Not Exceed Nomination	102	18,605
Exceeded Nomination	57	1,243
Negative Performance	42	962
Total	**201**	**20,810**

8.2.6 Conclusions and Recommendations

After reviewing of the 2025 Peak Saver program, the Evaluation team offers the following recommendations.

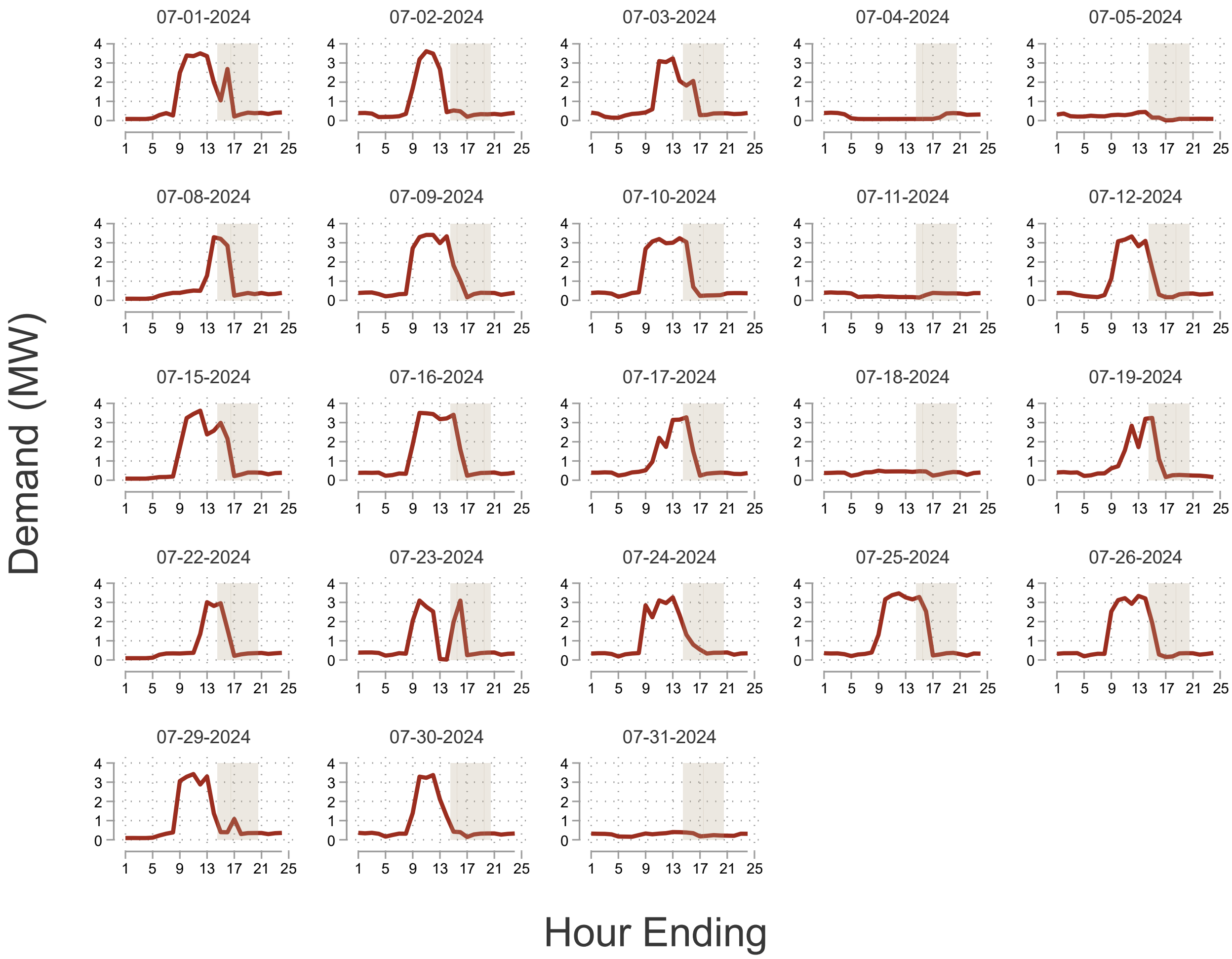
Table 65: Findings and Recommendations

Finding	Recommendation
1. The contract baseline works reasonably well. A bias assessment shows the contract baseline tends to overpredict load by about 3.5% across all summer weekdays and underpredict load by 1.9% on the ten warmest non-event days.	Run some tests on non-event days to determine if loosening the WSA-eligibility requirements improves the load predictions. Overall, however, the Evaluation team did not find any issues with the baseline used by the program implementation contractor.

Finding	Recommendation
2. Hourly usage data was available for only about 60% of participants in PY2025. For the remaining sites, reported DR impacts are based on site-level nominations. DR impacts should be based on measured performance rather than nominations and historical performance. In future program years, verified capacity reduction estimates will only reflect participants with hourly usage data.	Without visibility into electric demand at all participating facilities, PNM and Itron have no guarantee that all sites are responding. The program implementation contractor planned to have meters installed for at least 90% of participants by June 2025. If possible, the Evaluation team recommends Itron follow the Pareto principal when installing meters – target the sites that are expected to produce the greatest reductions. Several of the largest participants are already being metered.
3. Peak Saver is now a year-round program. To estimate winter reduction capability, a test event was run in early October. It is difficult to say whether the results from an October event when outdoor air temperatures were in the 80s are representative of what would occur on a cold winter day.	The team understands timing a test event in early October is necessary for Itron's settlement with customers and PNM. Still, running a test event on a very cold winter day would be useful for program planning purposes. Program performance is driven by three or four large C&I sites, and it's entirely possible that loads at these sites are not highly seasonal. Even a small degree of seasonality can move the needle for a top-heavy program. The Evaluation team also recommends that winter test events target a day when area public schools are in session given the prevalence of schools in the program.
4. The nominated demand reductions for some participants are too high. DR nominations exceed available load for some participants, meaning the site is pledging to reduce more load than they typically have available.	Periodically comparing nominations and afternoon demand for each premises. For premises where the nomination seems unrealistic, revise the nomination. The timing of DR events is relevant here. One site may be able to reduce their load by 3 MW at noon but only 0.3 MW in the late afternoon when the PNM system typically experiences constraint.

Finding	Recommendation
5. The program is top-heavy, and the largest sites may have variable operating schedules. A handful of sites will drive program performance for each event day. These large industrial sites sometimes have two distinct load patterns – one that is energy intensive and one that is not. While these sites can deliver significant load reductions, the variable operating profiles lead to CBLs and impact estimates with a wide margin of error.	Itron should review event-day load shapes for the largest sites to confirm the sites are reducing load in response to DR dispatch. See Figure 47 for example. There are two clear day types – one with low load and one with high load. Regardless of which day type the event is dispatched on, the baseline will invariably reflect the energy intensive day type. If an event is dispatched on a non-intensive day, the difference between intensive and non-intensive day types would be attributed to the program. A strategy the Evaluation team has seen in other jurisdictions is to request a production schedule from industrial participants that can be used to refine the CBL calculations and better forecast event performance. For example, if it is known that the site shown in Figure 47 is not running its energy intensive processes on a given day, PNM grid operators would know to expect less reduction from the Peak Saver program. Also note that while this site may have up to 3 MW of curtailable load in the afternoon, that load is offline by 5:00 PM.

Figure 47: Hourly Load Shapes during Weekdays in July 2024 for One Participant



9 LOAD MANAGEMENT AS A RESOURCE

On January 31, 2018, the New Mexico Public Regulation Commission (NMPRC) issued a final order in PNM's 2017 energy efficiency case that directs the independent program evaluator for PNM's energy efficiency and load management (LM) programs to do the following:

> *In PNM's future M&V reports, the independent evaluator shall verify that load reductions from deployment of PNM's LM programs avoided or offset the need for or use of additional peaking units or power purchases or shifted demand from peak to off peak period.*

The Evaluation team concludes that PNM’s load management programs served as a capacity resource that avoided the need for additional supply-side peaking capacity in 2025. While the summer of 2025 had fewer extremely hot days compared to prior years, gross demand was still high overall. PNM called a few test demand response events, but no non-test events were called in response to supply constraints. This report section explains how demand response programs play a key role in meeting resource adequacy requirements, drawing on various materials such as 2026’s IRP materials, the PNM Potential Study, and DSA’s Avoided Cost of Transmission and Distribution Capacity Study.

Reliability risk, also known as “loss load risk”, is the risk that demand may exceed supply and changes year-to-year due to environmental conditions and supply generation – the addition of renewables, especially solar, have shifted net demand (demand minus zero marginal cost renewables) away from summer afternoons and towards the summer evenings. PNM’s most recent Integrated Resource Plan (2023 IRP) predicts that the highest levels of loss load risk will be in the winter mornings by 2040.[18]

Moving forward, PNM forecasts the ongoing importance of Demand Responses programs to balancing supply and demand in both summer and winter. The 2025 Potential Study conducted for

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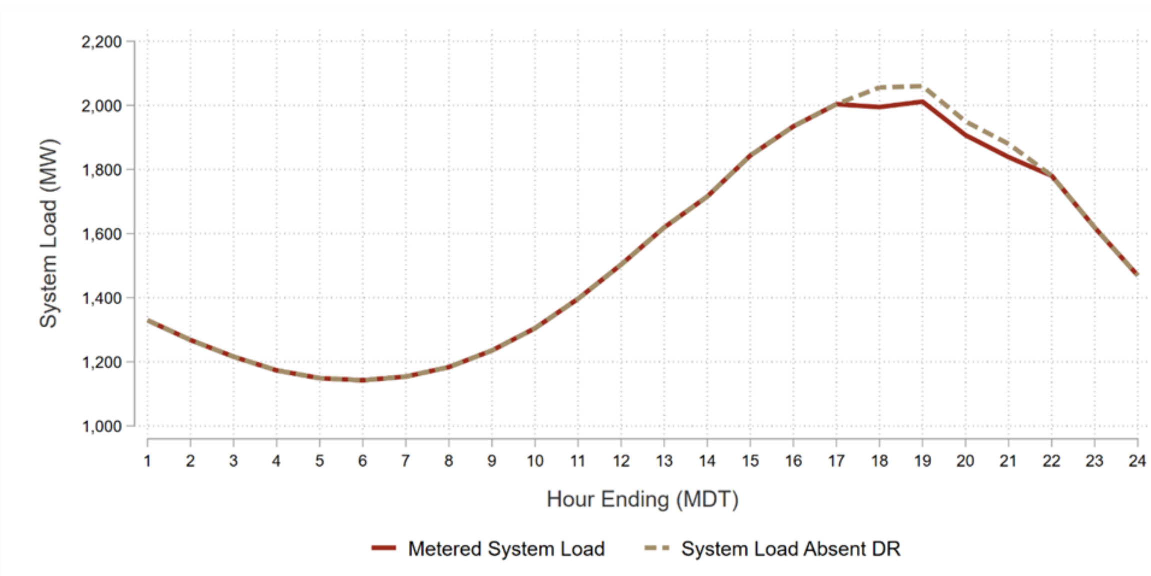
[18] 2023 Integrated Resource Plan, section 7.3.5 https://www.pnmforwardtogether.com/assets/uploads/PNM-2023-IRP-Report-corrected-2023-12-18.pdf

the IRP estimates that DR programs will provide just 1% relief in the winter and 3% in the summer of 2026.[19] But in the 2030s, DR potential represents approximately 5-6% of projected summer and winter peak demand. By 2045, the Potential Study estimates that PNM could generate 127 MW of demand reduction in the summer and 90 MW in the winter through DR.

Figure 48 illustrates the benefits of load management programs on system load using the only non-test event during the summer of 2024 (July 31st). On that day, the Evaluation team estimated that the demand response program provided roughly 48 MW of savings during the peak hour (7:00 PM MDT), or a 2.3% decrease in peak demand. The effect of load management programs is to flatten out the top of the post-solar evening peak on the highest load days of the year, which avoids acquiring expensive and emissions-intensive resources to balance the supply and demand. Data from 2024 is used to illustrate this point because only test events were called in 2025. Test events are meant to confirm that program implementation works as intended. Not calling events in a particular year does not diminish the capacity of the resource, but simply indicates that the resource was not needed that year due to variations in weather and other system factors.

Figure 48: PNM System Load July 31, 2024



[19] 2025 PNM Potential Study https://www.pnm.com/documents/d/pnm.com/pnm-2025-potential-study-report

9.1 The Difference between Energy Efficiency and Demand Response

PNM's demand side management portfolio includes both energy efficiency and demand response programs. While these two categories of programs both fall under the umbrella of demand side management, it is important to understand some key distinctions with respect to the nature of the resource provided. The primary objective of energy efficiency programs is to save energy. To the extent that the affected end-uses operate coincident with the system peak, energy efficiency measures will also provide capacity benefits. Demand response programs, on the other hand, are designed to provide capacity benefits. Their value lies in being able to reduce load quickly to balance the grid if needed. The two primary benefit streams from demand side management programs are:

- **Capacity (kW) –** Capacity is the ability to provide energy when needed and assures that there will be sufficient resources to meet peak loads. The 2026 IRP estimates the avoided cost of capacity for demand response is $147.14 per kW-year in 2025 and posits that the avoided cost will increase in value over the next 6 years, reaching an apex in 2032 at $229 per kW-year.
- **Energy (kWh) –** Energy is the generation of electrical power over a fixed time period. The avoided cost of energy is largely the cost of the fuel not burned in the marginal generating unit. In 2024, the avoided cost of energy is $0.026 per kWh.

Demand response events typically result in net energy savings because the increased consumption following an event does not totally offset the reduced usage during the event. However, the distribution of benefits across resources is dominated by capacity. Table 66 shows the energy and capacity benefits for the two demand response programs in 2025. Capacity benefits accounted for essentially 100% of the UCT benefits for Peak Saver and Power Saver. This differs from PNM's energy efficiency programs, where capacity accounts for less than two-thirds of UCT benefits. The distribution of PNM's energy and capacity benefits for energy efficiency programs is somewhat atypical in the industry due to its low avoided cost of energy assumptions and high avoided cost of capacity forecast.

Table 66: 2024 Demand Response Program Benefits

Program	Energy Benefit ($1,000)	Capacity Benefit ($1,000)	Percent Capacity
Power Saver	$0	$67,145	100%
Peak Saver	$6	$22,094	100%
Energy Efficiency Programs	$173,139	$262,829	60%

Unlike energy efficiency, demand response functions as a dispatchable resource. Energy efficiency measures passively reduce demand and energy over the lifetime of the equipment, whereas demand response programs such as Peak Saver and Power Saver are event-driven and can be actively deployed whenever the grid requires relief. Crucially, dispatchable demand response still delivers capacity benefits to the system even during seasons when no events are triggered. As a result, the frequency of dispatch and which generating units are displaced in the resource stack have little bearing on whether demand response programs are cost-effective. This means that despite no non-test events being called in 2025, Peak Saver and Power Saver still delivered capacity benefits to PNM.

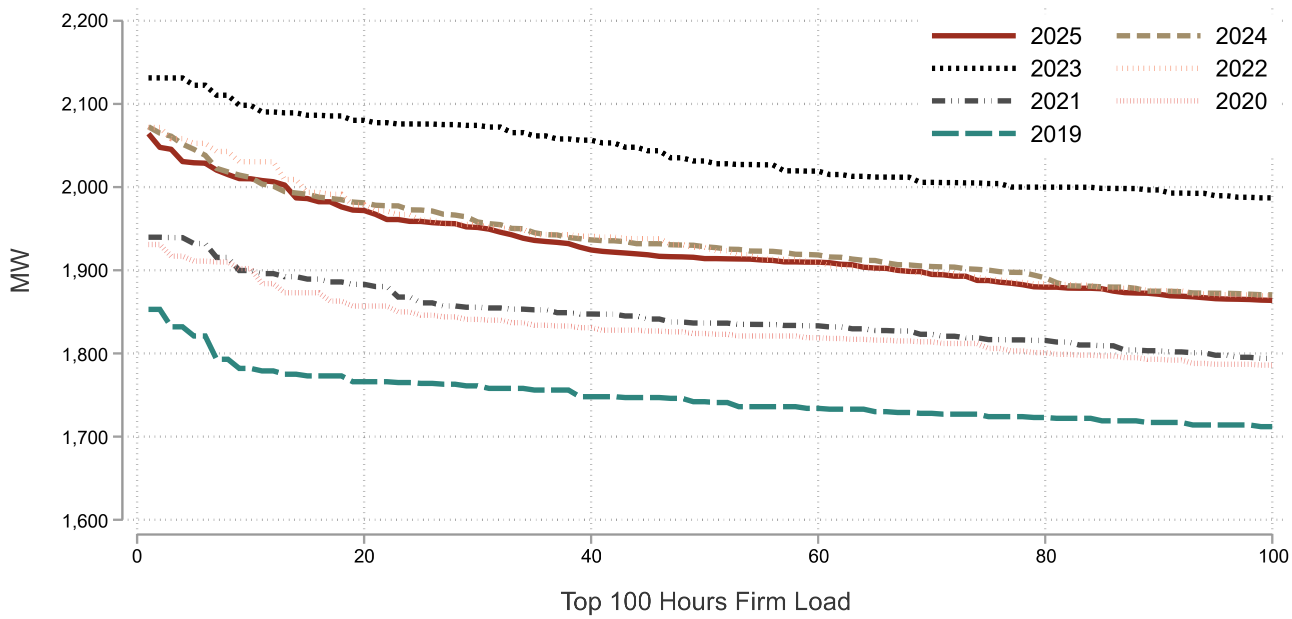
In addition to temporal flexibility, locational flexibility in dispatching resources is also valuable to transmission and distribution (T&D) systems. As the 2026 DSA-led T&D study concluded, the flexibility to target customers in “highly loaded” zones could be a fruitful avenue for cost savings. This is possible with demand response programs by calling events only for a subset of participating customers. This expands the benefits of DR-related capacity reduction beyond generation and into T&D. In areas where assets are highly loaded, the ability to call DR events can provide relief and help avoid or defer upgrades to T&D equipment. This is discussed further in Section 8.2.7.

9.2 Understanding the Timing of System Peaks

System peaks occur during a very small subset of overall hours, typically hot summer afternoons. Load curves for the top 100 hours of each year (2019-2025) are shown in Figure 49. Generally, the system load is increasing year over year, although 2023 was particularly high due to an extremely hot summer. The left side of the load curves have a steep downward slope, indicating that even within this narrow band of high-load hours, the top few hours are especially high. In 2025, there was a 54

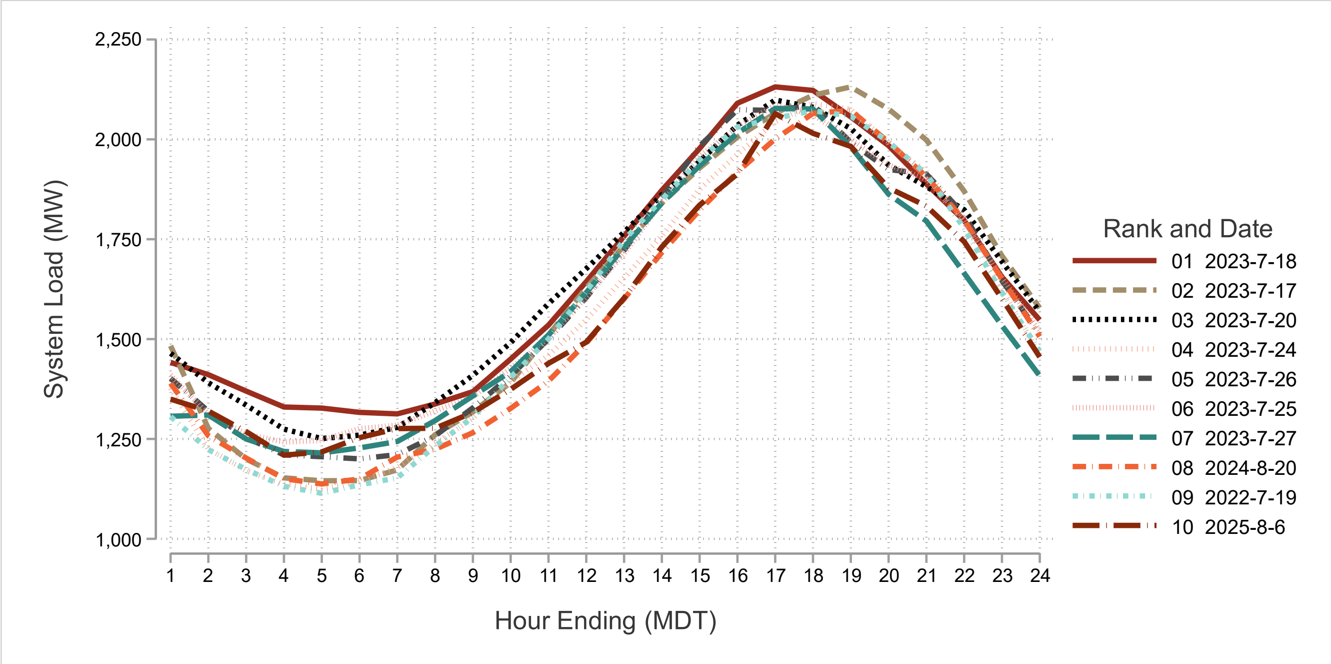
MW difference between the highest load hour and the tenth-highest load hour for the year. Focusing on lessening demand pressure in these specific hours will reap outsized monetary benefits to PNM.

Figure 49: Top 100 Hour Load Duration Curves 2019-2025



Capacity resources that are dispatchable in the summer, such as Peak Saver and Power Saver, align closely with PNM's system needs, as peak demand is concentrated in a narrow window of afternoon and early evening hours during the summer months and seldom persists beyond a few hours. Figure 50 presents hourly load profiles for the ten highest system load days PNM experienced over the last fourteen years. Each of these days occurred on a weekday in July or August, with seven falling in 2023 and the remaining three distributed across 2022, 2024, and 2025. Peak demand on these days most frequently coincides with hour ending 5:00 PM or 6:00 PM (MDT). In 2024, one day (July 31st) would have had the 11th highest peak in the previous fourteen years, but an event was dispatched which markedly dropped demand, according to last year's evaluation estimates. Instead, that day was the 21st highest peak.

Figure 50: Load Days from Top 10 System Peaks 2012-2025



Peak Saver and Power Saver are also aligned with PNM's environmental goals and can help avoid or defer costly capital investments to build new generation resources. The reserve margin requirement is above the forecasted top hour for all of the days in Figure 50.[20] A supply-side resource like a natural gas peaking plant built to satisfy peaks plus reserve margin would operate very infrequently, which is an ineffective way to operate a power plant. In contrast, DR resources work best when dispatched infrequently because it reduces fatigue of participants and limits the financial incentive the utility needs to provide. Beyond its economic drawbacks, a fossil fuel peaking resource would work against PNM's stated decarbonization goals to be carbon-free by 2040.

9.3 The Role of Renewables

The value in load management programs lies in being able to dispatch the resources when needed, and PNM staff are in the best position to determine when the assets are needed from an operational

[20] PNM planners maintain a reserve margin of resources above and beyond forecasted demand to ensure expected levels of reliability. In the 2023 IRP, PNM proposed a minimum reserve margin of 16 percent. This means that although peak demand was forecast at 2,018 MW in 2024, planners needed at least 2,381 MW of capacity to satisfy resource requirements.

standpoint. Ideally, load management programs operate like an additional peaker plant and are only deployed when the grid is under the most stress – when demand is highest and supply can barely meet demand. Prior to the installation of significant solar and wind production, the periods of highest grid stress predictably coincided with high afternoon temperatures. Now, solar supplies a dominant proportion of demand during these daytime hours, causing the net peak (demand minus renewable production) to shift later in the evening. Figure 51 compares system load with renewables (left panel) and without renewables (right panel), showcasing how consistent total demand is and how inconsistent renewable supply is in comparison. Wind patterns and cloud coverage can change quickly, making net demand peaks sharp. These considerations will only gain importance as PNM transitions to zero carbon resources. Already in 2026, 71% of PNM's resources are reported in the IRP to be zero carbon, and that fraction is forecasted to grow to 78% by 2028.

Figure 51: Five Highest Demand Days of 2025

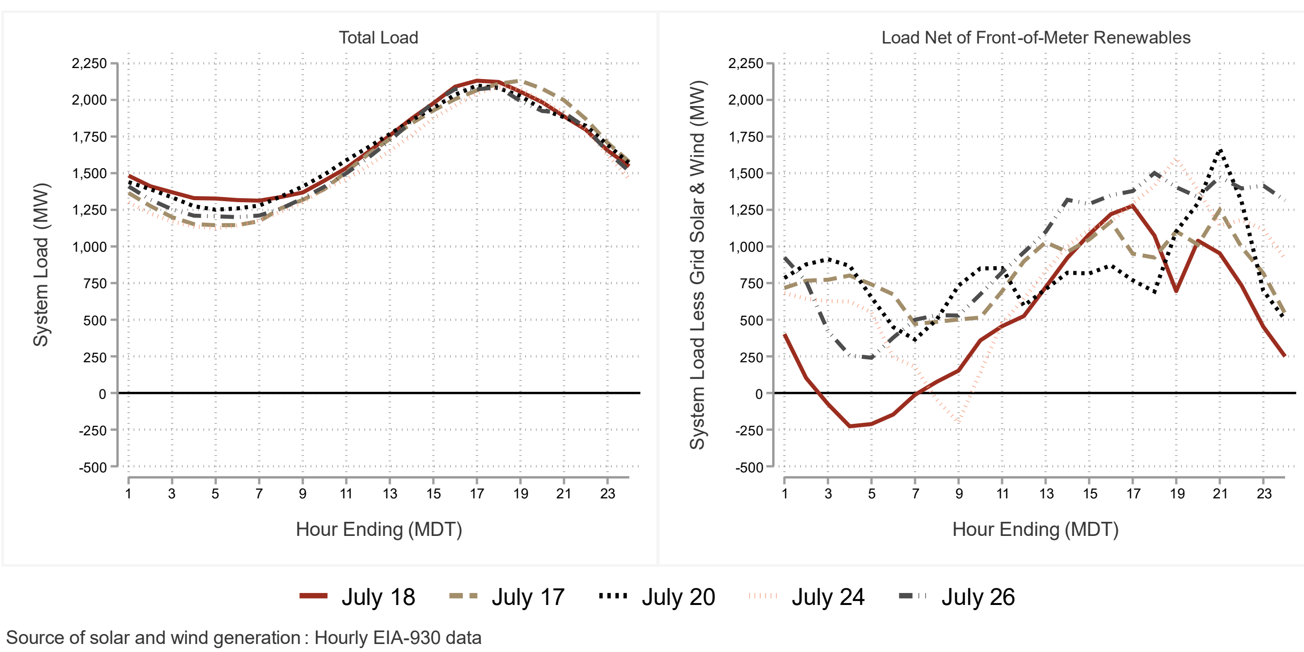
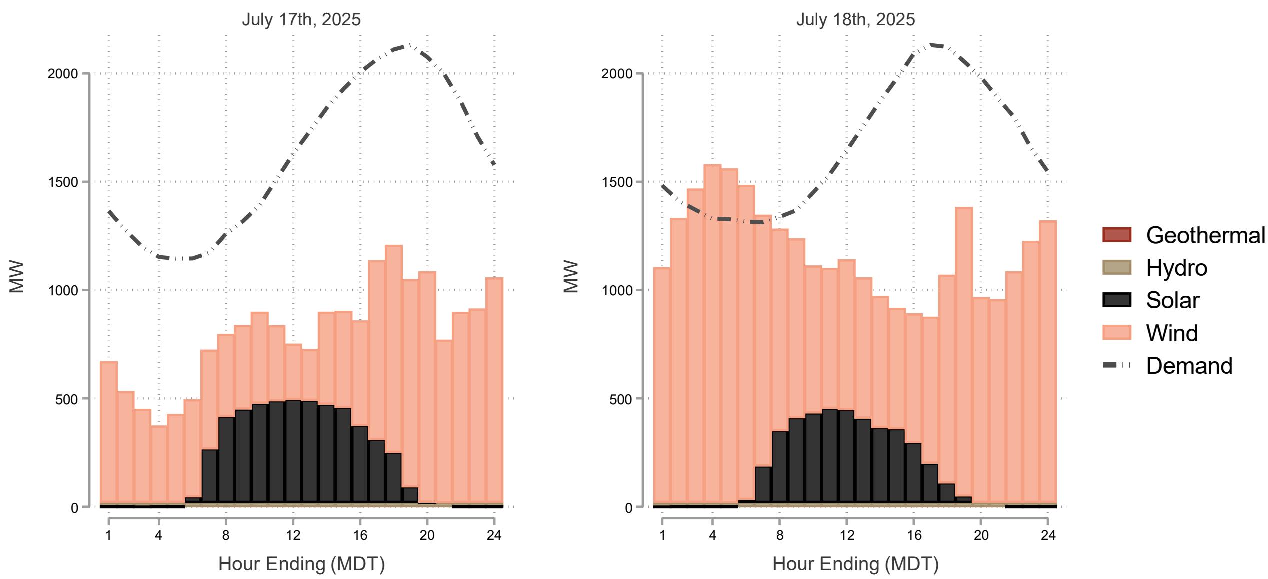


Figure 52 plots renewable production against demand on two of the highest demand days in 2025. These days were back-to-back and had nearly identical average temperatures, offering insight into how wind and solar generation can differ noticeably day-to-day in the same season. The left panel, July 17th, had higher solar production than on the following day (right panel), but the wind production was lower and followed a different schedule. The bars in the figure are stacked, in order to compare total renewable generation to the system load shown with the higher dotted line.

The introduction of weather-sensitivity to the balancing act of energy provision further increases the value of demand response programs, as they are flexibly dispatchable. The effect of dispatching these programs is to iron out these peaks, evening supply and demand.

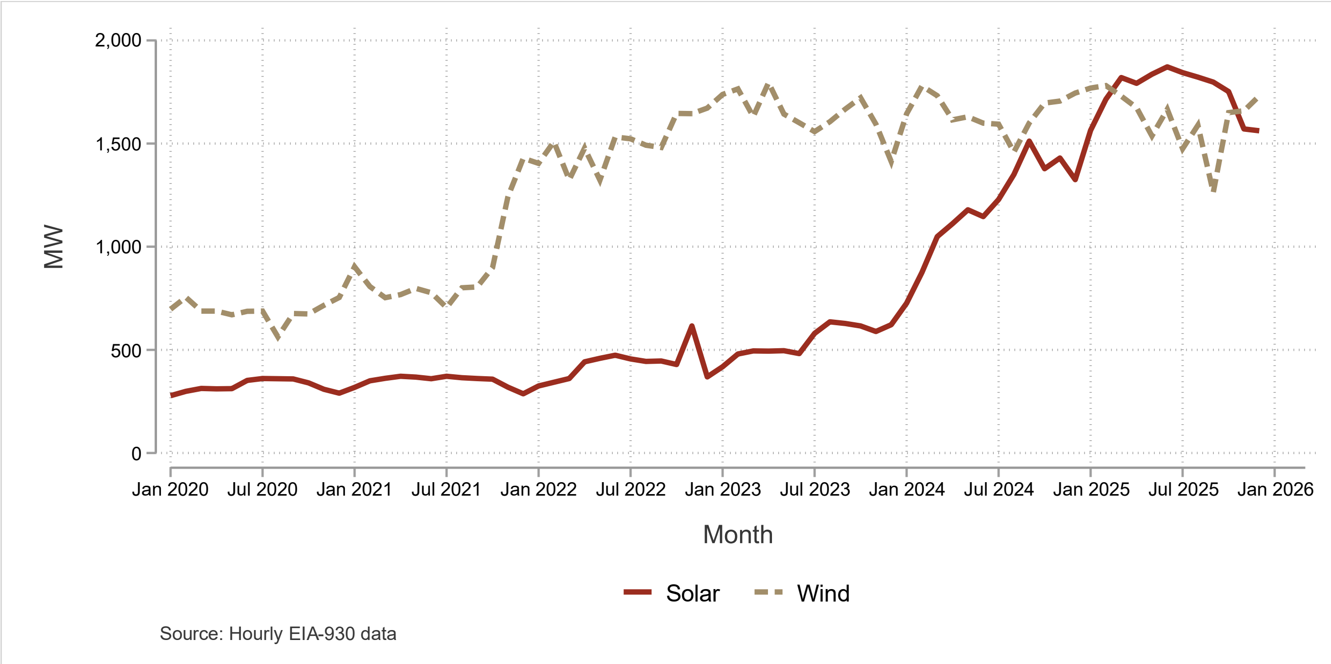
Figure 52: Daily Variation in Renewable Generation



Source of solar and wind generation : Hourly EIA-930 data

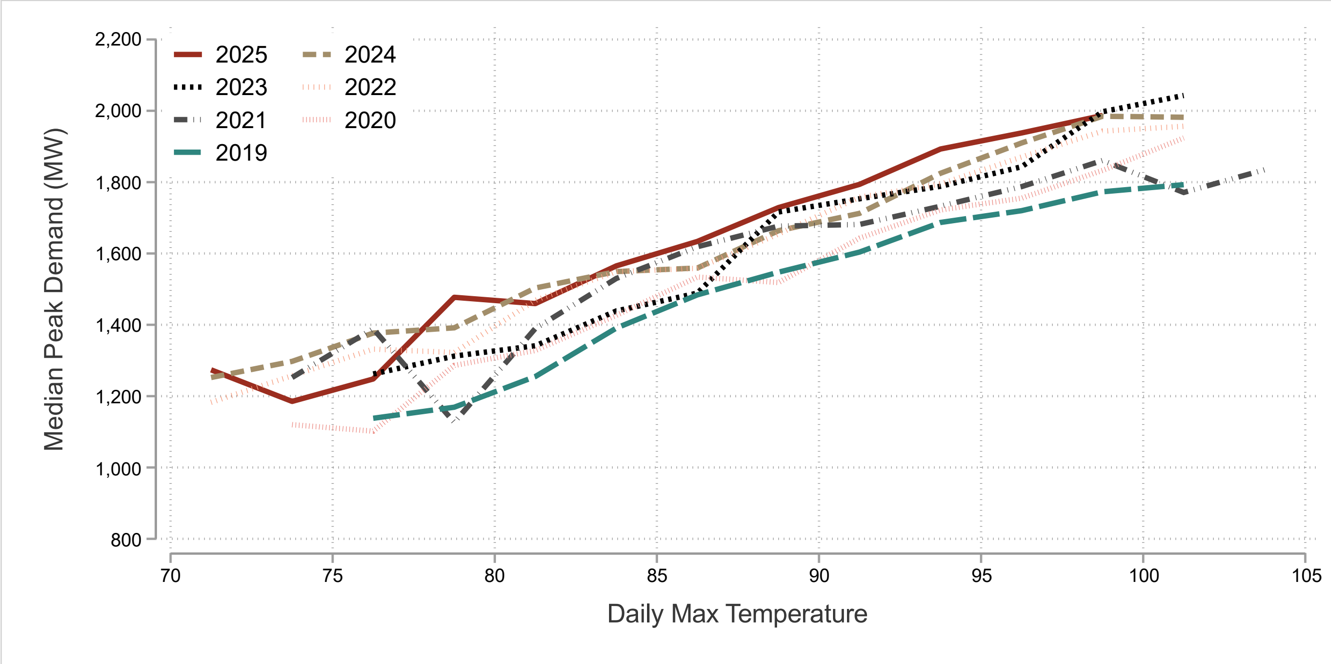
Increasingly, dispatched events may be tied to low renewable production rather than high gross loads. According to the 2023 IRP, Utility-Scale Solar PV Capacity rose from approximately 400 MW in 2022 to approximately 800 MW in 2023 to 1,500 MW in 2024 and 1,620 in 2025. EIA data graphed below confirms that this has indeed taken place (Figure 53) and may have exceeded projections. This is equivalent to a reduction in demand during the afternoon of spring and summer months of over 1,600 MW, showing that despite record gross demand, net demand was manageable even without deploying DR events. Events may continue to be called later into the evening hours and may not necessarily be called on the hottest days.

Figure 53: Monthly Max Grid Generation by PNM



Irrespective of changes to net demand and climate trends, gross demand is rising due to population increases and the electrification of appliances and transport. These changes are discussed further in Section 8.2.7, which summarizes the recent T&D analysis report. Figure 54 graphs the relationship between PNM system daily peaks (2019-2025 and the maximum daily temperature in Albuquerque (from KABQ's weather station) for the months of June through September. 2025 had zero days above 100 degrees, while 2023 had twelve. Despite the milder conditions, 2025 showed higher load maximum per unit of temperature, showing that demand is growing independently of temperature.

Figure 54: Median Daily Load Maximum by Daily Max Temp



DR events could be key to preventing both the addition of new generation capacity and old generation capacity being kept online past its retirement date. However, in 2025, resource constraints were not sufficiently strained to trigger a DR event. In 2024, only one non-test event was called. If renewables continue to be installed at the planned speed, this trend may continue and DR might only be used on rare days where renewables underdeliver, or non-renewable generation goes offline for maintenance. Conversely, it's possible that renewables do not keep pace with growing demand. Combined with more frequent extreme temperatures in the future, these conditions could necessitate more DR events. The Evaluation team expects that DR events will be:

- Dispatched later in the evening, targeting the net peak, and also later in the summer as solar production wanes
- Shorter in duration as net peaks tend to be sharper than gross peaks, although evening events may continue to last longer during nights with low wind
- Coincident with evenings with low amounts of wind generation

9.4 Winter Demand Response

For the first time in 2024, Peak Saver events were allowed to be called outside of the summer months of June-September. This coincides with a record level of renewable generation. The risk of winter peaks was pointed out in the 2023 IRP:

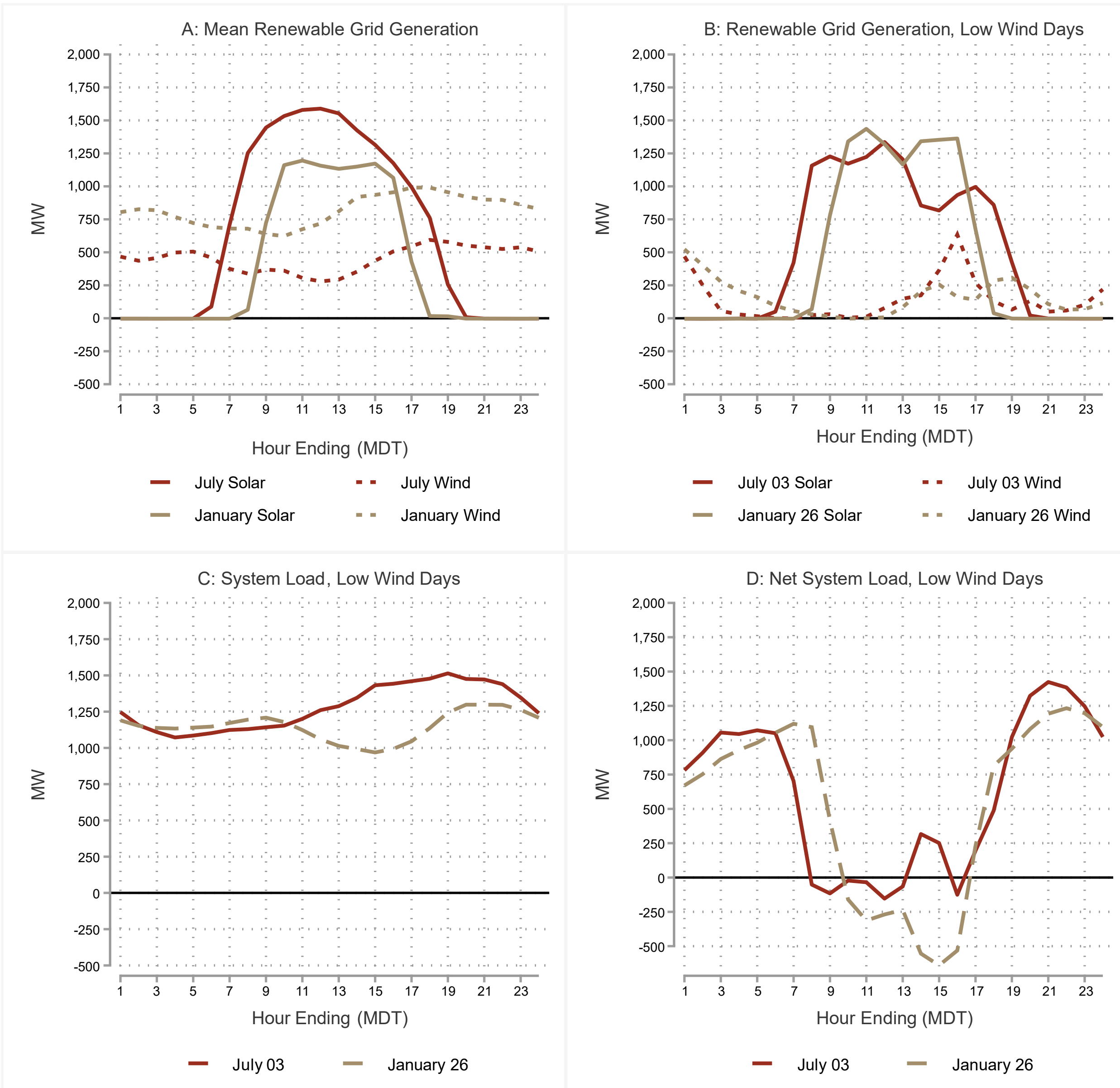
> *At high penetrations of wind and solar generation, the greatest reliability risks occur during sustained periods of low renewable production (possibly lasting days to weeks); these events tend to occur in winter months, even when demand for electricity may be lower.*

The prospect of system peaks occurring in the winter is due to several factors including the electrification of space heating, lower solar production in the winter, and variable wind production. Figure 55 examines how renewable generation and demand differ by season and its effect on net demand peaks:

- **Panel A** shows average hourly grid scale solar and wind generation for July 2025 and January 2025. Wind generation is much higher during the winter, while summer wind generation has a noticeable increase in the evening compared to the day. Solar power lasts for more hours per day in the summer.
- **Panel B** compares renewable generation on July 3rd (the lowest wind day in peak summer of 2025, July and August) and January 26th. Likewise, January 26th was the lowest wind day in peak winter of 2025, December and January.
- **Panel C** compares hourly system loads on July 3rd and January 26th. System loads look similar in the early morning, but winter demand does not rise in the late morning like it does in the summer. Instead, it dips slightly because electricity usage in winter is based on heating, which is not as necessary midday. As a result, winter days like January 26th exhibit a dual peak in the morning and a peak in the evening.
- **Panel D** shows system loads on July 3rd and January 26th with renewables subtracted out. The daily peaks are surrounded by steeper slopes, because the normal wind generation was missing on January 26th before and after the solar ramp-up and ramp-down. These sharp peaks offer good opportunities for DR events. Because the system load in the winter is flatter during the day, peaks are more likely to happen in the morning than in the summer. Because

the peak of the net demand on January 26th is still a couple hundred MWs below the net peak on July 3rd, winter events may not be as valuable in today's system, but as noted in the 2023 IRP, reliability risk will gradually shift to the winter season as renewable generation increases and customers electrify space heating and water heating end uses.

Figure 55: Summer vs. Winter, 2025



Source of Renewable Generation: Hourly EIA-930 data

In the future, the Evaluation team expects winter events to:

- Occur when renewable output is down due to cloud cover or a lack of wind
- Be called earlier in the evening than during the summer due to the sun setting earlier in the day
- Possibly be called in the morning

9.5 Expected Resource Capability

As capacity benefits are the dominant benefit stream for demand response programs, the primary research question for evaluation is “what kW reduction can each program be expected to provide if dispatched during system peak conditions?” Readers will note that the evaluation results in the Power Saver and Peak Saver impact results subchapters focused on inferences about expected capability, or ex ante, impacts at peaking conditions rather than simple averages of observed impacts during DR events. The Evaluation team analyzed Power Saver results from 2015 to 2025 to develop a time-temperature matrix and estimate the expected impact from 5:00 PM to 6:00 PM at 100 degrees Fahrenheit (F). The Evaluation team’s verified savings analysis of PNM’s load management program performance estimated approximately 57 MW (at meter) of load reduction capability across Power Saver and Peak Saver at the system level, or 61 MW at generation after a line loss factor of 1.0773 is applied. Even though events were not called in 2025, one should not assume that the value of the program has lessened, especially considering that the test events were called successfully.

The avoided cost of capacity value used to monetize capacity benefits from demand side management programs was $156/kW-year in 2025 (note this is a six-year levelized value). This value is consistent with projections the evaluation team has seen in other jurisdictions of the cost a new combined-cycle natural gas plant would need in order to recover its capital investment and fixed costs, given reasonable expectations about future cost recovery over its economic life. The underlying premise is that the availability of PNM’s demand response programs is allowing the utility to defer or avoid the construction or purchase of additional generation capacity. However, if very high demand days are more frequent with climate change, then more events will need to be called, or the demand response programs will no longer be able to avoid adding more capacity, and their value may erode.

Looking forward, the current load management programs set to expire after 2026 but were extended for another three years (through 2029). While the 2023 IRP counted DR programs as having an accredited capacity of 23 MW using the Effective Load Carrying Capacity (ELCC) convention, the 2026 IRP increased their value to 49 MW, which better reflects the estimated capacity from the non-test event in 2024 which produced between 41 and 61 MW of savings across its four hours. In short, assigning DR programs 49 MW capacity means that without DR PNM would have had to acquire 49 MW from other generation resources such as natural gas. Load management resources can prevent the need for building or maintaining expensive peaker plants that may only be needed twice a year.

9.6 Limitations of Load Management Programs

Load management programs do have limitations, as reflected in the 70% ELCC assigned to them in the PNM's 2023 IRP, and the Power Saver program can only be dispatched for several hours at a time and is limited to 100 total hours during non-holiday weekdays in the summer months to avoid customer fatigue. Peak Saver is now available year-round (including holidays, weekdays, and all seasons) for a total of 300 hours.

PNM, like most vertically integrated utilities, draws a clear operational distinction between energy efficiency and demand response. Because energy efficiency cannot be dispatched on command, incremental gains from these measures flow directly into reductions in the energy and demand forecast. Demand response, on the other hand, is treated more like a conventional power plant — it sits in the resource stack as an available tool to meet load and holds a defined position in the dispatch order alongside traditional supply-side generation. Although demand response programs have no fuel cost, there is a definite relationship between how often demand response participants are dispatched and the cost of the resource, given fixed administrative costs associated with customer outreach and coordination with the implementer.

9.7 Summary of Transmission and Distribution Study

Unrelated to the PY2025 evaluation of PNM's energy efficiency and load management portfolio, Evaluation team member Demand Side Analytics recently conducted a study to understand the deferral value of peak demand reductions on transmission and distribution investments. This distribution system analysis of PNM's service territory revealed several important findings that relate to peak demand curtailment. Underlying this discussion is an important premise: capital investments in T&D upgrades are driven by peak demand. As DR events lower peak demand, they can help to defer or avoid costly equipment upgrades. DR-related findings are summarized below.

- Load growth is highly location-dependent — some areas are experiencing increases while others are declining — meaning targeted T&D investments remain necessary even when system-wide demand is flat. The DSA team estimated granular growth rates. In PNM service territory, growth trends varied by location. As a result, location-specific growth-related T&D investments are required even when overall PNM loads are flat or declining.
- Avoided costs tend to concentrate in heavily loaded locations, since facilities operating closer to their limits offer greater value for load relief, while locations with ample spare capacity offer comparatively little. DR events could target customers in these highly loaded areas for maximum impact.
- Most individual feeders and substation transformers peak in either summer or winter but not both, so the avoidable T&D benefit for any given location is similarly season-specific. This has meaningful implications for resource valuation: an energy efficiency measure delivers different T&D benefits depending on whether its load reductions coincide with local peak conditions — an efficient air conditioner, for instance, provides relief on a summer-peaking substation but not a winter-peaking one. With respect to DR, PNM could call winter events in winter-peaking areas, and summer events in summer-peaking areas to optimize impact while limiting event hours used.

One of the main implications of the study is that avoided T&D costs estimates can be produced at a more granular level and differentiated by time and season. The added spatial and temporal granularity can help better target peak demand reductions in the locations, seasons, and hours where deferral value is highest. These finer estimates could be used to inform when and where to call DR events in the future. The DSA team recommended that PNM, the Commission, and stakeholders consider a more granular perspective on avoided T&D costs, as summarized below. The recommendations below may not be currently funded, and costs need to be considered alongside other research and program priorities.

1. Explore separate T&D avoided costs for different locations. For example, classify circuit feeders, transformers, terminals, and substations as winter or summer peaking and into one of three loading factor levels – low (<50%), medium (50-80%), and high (80% or more). Produce annual values by classification group and time-differentiate the value by hour and season. The approach would more accurately reflect where and when avoided T&D costs are concentrated while limiting the additional complexity.
2. Consider targeting energy efficiency and DR in highly loaded areas. The goal is to assess if these non-generation resources can cost-effectively help modify the load shapes, bend the growth, and defer upgrades.

10 HOME ENERGY REPORTS

The PNM Home Energy Reports (HER) program includes two distinct offerings: HERs and a Customer Energy Management Portal. This section provides an overview of the evaluation results for each offering.

10.1 Home Energy Reports

HERs provide customers with information on their energy consumption that includes a "neighbor comparison" with a matched set of similar households. This normative comparison is delivered via email or regular mail and motivates recipients to conserve energy. The HER messaging also includes tips on reducing energy consumption and details on end uses that drive energy consumption.

Nearly a third of PNM's residential accounts received HERs in PY2025. In total, four waves (or cohorts) of households were active and received HERs. Three of the four waves were delivered as randomized controlled trials (RCTs), in which the program implementer randomly assigned customers to either a treatment group (receives the HERs) or a control group (does not receive the HERs). The RCT framework facilitates the measurement of impacts. At a high level, consumption in the control group serves as a baseline for what consumption in the treatment group would be absent behavioral changes due to HER delivery. The 2023 Paper Expansion wave was a pseudo-RCT. This wave recycled some control group homes from prior waves, so the experimental cells are not entirely randomized. Note the 2024 Email wave re-randomized households from dissolved waves, meaning some participants in the control group were previously exposed to HER treatment, and some treatment participants were exposed to HER treatment before the 2024 Email wave launched.

The Evaluation team estimates that the HER program delivered 8,118 MWh of energy savings and 1.481 MW of peak demand savings in program year 2025. Table 67 shows the gross energy and peak demand savings for each wave. [21]

Table 67: PY2025 Gross Savings

Wave	Annual Energy Savings (MWh)		Peak Demand Savings (MW)	
	Reported	Verified	Reported	Verified
2021 Email	3,378	3,242	0.608	0.584
2021 Paper	3,594	3,450	0.809	0.777
2023 Paper Expansion	706	678	0.050	0.048
2024 Email Refill	779	748	0.076	0.073
Total	**8,457**	**8,118**	**1.542**	**1.481**

The PY2025 HER evaluation leaned on the results of the PY2023 and PY2024 HER evaluation results. For those evaluation cycles, the Evaluation team calculated gross energy impact realization rates of 91% and 100% respectively. Given that there have not been significant changes to the program and the reported and verified results were well-aligned in prior program years, the team's approach for the PY2025 evaluation cycle is to apply a 96% realization rate to the reported energy savings.

To estimate demand savings associated with HER exposure, the Evaluation team applied peak demand multiplier to the verified energy savings. This approach assumes that the HER effect is load-following (i.e., savings are higher when load is greater). The peak demand multiplier, which was originally calculated during the PY2023 evaluation cycle, is based on a New Mexico residential whole

[21] The program tracking data does not provide results by wave. Some HER-specific files do provide results by wave, but the HER-specific files aren't perfectly aligned with the savings numbers in the program tracking data. To create "reported" numbers by wave as presented in the table, the overall reported savings (per program tracking) were spread across the waves using ratios developed from HER-specific savings files. The total results presented in the table align with program tracking data, which are used to report final savings for the program.

house electric load shape from NREL's ResStock load shape library.[22] The demand savings calculation will be performed as follows:

$$Peak\ Demand\ Savings = \frac{Peak\ Months\ Energy\ Savings\ (MWh)}{2{,}208\ hours} * 1.519$$

In the equation above, "Peak Months Energy Savings" refers to the total verified energy savings between June and August, 2,208 represents the number of hours during the period between June and August, and 1.519 is the peak demand multiplier. The realization rate noted above (96%) was applied prior to applying the peak demand multiplier.

10.2 Customer Energy Management Portal

PNM will launch the Customer Energy Management Portal (CEMP) in early 2026. On an opt-out basis, CEMP will provide all residential PNM customers who have email addresses on file with monthly summary reports that include tips to help reduce their energy costs and better understand their energy usage. This type of messaging is similar to the messaging provided to customers who are part of PNM's HER cohorts, although the CEMP messaging will not include the neighbor comparison that is included in the HER reports. Given the similarity of the two interventions, there are questions about the efficacy of the HER program in a landscape where all accounts receive CEMP reports.

The Evaluation team initially proposed withholding approximately 50,000 HER recipients from CEMP messaging (see Appendix C. Home Energy Reports CEMP Memo) to enable comparisons of savings across HER homes that do and do not receive CEMP messaging. However, PNM ultimately decided that no customers would be excluded from CEMP messaging (other than those without an email address on file with PNM). The Evaluation team plans to evaluate the HER program again as part of the PY2026 evaluation cycle. If possible, the team will compare results across HER recipients that did and did not receive the CEMP messaging (i.e., those with and without an email address on file). Additionally, evaluation efforts will include a comparison of the PY2026 results and results from prior program years to understand any changes the introduction of CEMP may have caused.

[22] https://www.nrel.gov/buildings/end-use-load-profiles.html

11 COST EFFECTIVENESS

Cost-effectiveness is a critical metric for assessing the efficiency of investments, programs, or interventions by comparing the benefits achieved to the costs incurred. It helps decision-makers determine the most efficient allocation of resources by identifying options that maximize impact while minimizing expenditures. By quantifying costs relative to outcomes—whether in energy savings, emissions reductions, or customer benefits—cost-effectiveness ensures that programs and policies deliver value while meeting strategic objectives. This evaluation framework is essential for balancing economic feasibility with performance, driving informed decision-making in industries ranging from energy efficiency and healthcare to infrastructure and policy design.

11.1 Methodology

To calculate the UCT ratio, the evaluation team obtained the following from PNM:

- Avoided cost of energy for energy efficiency and demand response (costs per kWh over a 20+ year time horizon)
- Avoided cost of capacity for energy efficiency and demand response (estimated cost of adding a kW/year of generation, transmission, and distribution to the system)
- Avoided transmission and distribution losses
- Discount rate
- Line loss factors; and
- Program costs (all expenditures associated with program delivery) broken down into the following categories:
    - Administration
    - Promotion
    - Rebates
    - Third-party costs
    - Market transformation

Additional considerations for the UCT as applied to the PNM programs include:

- PNM does not quantify the avoided cost of transmission and distribution
- PNM provided a levelized avoided cost of capacity, to which the discount rate was not applied further
- The NMPRC allows for the benefits of low-income programs to be boosted by 20% to account for utility system economic benefits. PNM estimates the following percentages of low-income customers participate in their programs:
    - 100% of Low-Income Home Energy Checkup
    - 100% of Energy Smart
    - 85% of Residential Lighting
    - 53% of Easy Savings
    - 40% of Home Works
    - 22% of New Home Construction
    - 20% of Commercial Comprehensive – Multifamily
    - 5% of Residential Products
    - 5% of Residential Comprehensive – Refrigerator Recycling
    - 4% of Residential Behavioral HER

11.2 Results

PY2025 cost-effectiveness results for all programs are shown in Table 68.[23] Overall, the PY2025 portfolio was found to be cost-effective, with a UCT ratio of 1.38, indicating that the relative benefits of PNM's PY2025 energy efficiency and load management programs exceed the relative costs. The PY2025 result is slightly lower than the portfolio UCT ratio of 1.51 from PY2024. Relative to PY2024, program delivery costs were 9% higher in PY2025 while first-year net verified energy and demand reductions increased by 0.2% and 3.6%, respectively (and net verified lifetime kWh savings were

[23] Cost effectiveness results are based on net realized savings.

slightly lower in PY2025 compared to PY2024). Three of the programs with UCT ratios below 1 had UCT ratios greater than 1 in PY2024 (EnergySmart, Residential Behavioral HER, and Residential Comprehensive – Refrigerator Recycling). The decrease in the UCT ratio for these programs is due to a decrease in avoided cost of energy and capacity assumptions for the HER program, and a reduction in demand savings for Residential Comprehensive – Refrigerator Recycling and EnergySmart programs. Table 69 compares portfolio savings and costs between PY2024 and PY2025.

Table 68: PY2025 Cost Effectiveness Results

Program	UCT Ratio		
	PY2024	PY2025	Change
Cooling & Midstream	0.36	0.40	↑
Easy Savings	4.99	4.16	↓
Energy Smart (MFA)	2.41	0.70	↓
New Home Construction	0.84	1.02	↑
PNM Home Works	1.59	1.50	↓
Residential Behavioral HER	1.01	0.73	↓
Res Comp – HEC	1.29	2.96	↑
Res Comp – HEC LI	0.81	1.29	↑
Res Comp – Refrigerator Recycling	2.77	0.45	↓
Residential Lighting	1.81	1.71	↓
Residential Products	2.05	1.44	↓
Commercial Behavioral SEM	2.20	2.29	↑
Commercial Comp	1.78	1.55	↓
Commercial Comp – MF	0.79	1.03	↑
PNM Peak Saver	0.75	0.71	↓
PNM Power Saver	0.81	1.00	↑
Total	**1.51**	**1.38**	↓

Table 69: Portfolio Comparison with PY2024

Program	PY2024	PY2025	Change
Delivery Costs	$35,777,138	$39,053,358	$3,276,220
Net Verified kWh – First Year	86,590,600	86,784,834	194,234
Net Verified kWh – Lifetime	831,787,269	812,105,504	-19,681,765
Net Verified kW	72,392	74,975	2,583

11.3 Conclusions and Recommendations

Overall, PNM's PY2025 portfolio was found to be cost-effective with a UCT ratio of 1.38. The decrease in the portfolio's UCT ratio from 1.51 in PY2024 to 1.38 in PY2025 was driven by a 9% increase in program delivery costs and a 2% decrease in net verified lifetime kWh savings.

While cost-effectiveness remains a key metric for evaluating program performance, these findings highlight the need for continuous assessment and optimization to ensure that future programs maximize benefits while maintaining financial feasibility.

Appendices

A. Heat Pump and Heat Pump Water Heaters Survey Instrument

Hello, my name is (*YOUR NAME*) from Ecometric Consulting. I am calling on behalf of PNM. May I please speak with _______________?

A. (Once correct respondent is reached) Hello, my name is (*YOUR NAME*) from _________. I am calling on behalf of PNM.

I'm calling because our records show that you recently installed an energy efficient [MEASURE_TYPE1] and received a rebate from PNM. I'd like to ask a short set of questions about your experience with this rebate program. Your time will help us improve this program for other customers like you. Are you the best person to talk to about these energy efficiency upgrades and how heating and cooling are used in your home?

1. Yes
2. No (Ask, Who would be the best person to talk to about the energy efficiency upgrades and energy use in your home? (REPEAT INTRO WHEN CORRECT PERSON COMES ON LINE; ARRANGE CALLBACK IF NECESSARY)
3. Never installed *(VOLUNTEERED SKIP TO Q.4)*

(IF NEEDED) PNM would like to better understand how residential customers like you think about and manage their energy use. The PNM rebate program is designed to help customers save energy and money. Your input is very important to help PNM improve its energy rebate programs.

12.1 Measure Verification

1. (A 1) Just to confirm, our records show that you received a rebate from PNM when you installed a [MEASURE_TYPE1] at your home in approximately [MONTH, YEAR]. Is this correct?
   1. Yes
   2. No *(THANK AND TERMINATE—only if no other measures, otherwise move to next MEASURE_TYPE)*
   3. Don't know *(THANK AND TERMINATE—only if no other measures, otherwise move to*

next MEASURE_TYPE)

2. (A 2) Is the [MEASURE_TYPE1] still installed?

   1. Yes *(SKIP TO A4)*
   2. No *(CONTINUE TO A3)*
   3. Prefer not to answer *(SKIP TO A4)*
   4. Don’t know *(SKIP TO A4)*

3. (A 3) Was the [MEASURE_TYPE1] removed or never installed?

   01. Removed

   02 Never Installed

   03. Prefer not to answer *(SKIP TO B1)*

   99. Don't know *(SKIP TO B1)*

   Other *(SPECIFY)* ______________________________________*(SKIP TO B1)*

4. (A3a) Why was the [MEASURE_TYPE1] removed/never installed? *(OPEN VERBATIM)*

(SKIP TO B1)

POLLER NOTE: Was measure ever installed? (Yes to Q. 1)

1. Yes (CONTINUE TO A4)
2. No (THANK AND TERMINATE—*only if no other measures, otherwise move to next MEASURE_TYPE*)

5. (A 4) Is the [MEASURE_TYPE1] still functioning properly?

   1. Yes
   2. No
   3. Prefer not to answer *(DO NOT READ)*
   4. Don't know *(DO NOT READ)*

REPEAT FOR MEASURE_TYPE2 AND MEASURE_TYPE3 IF LISTED.

12.2 Heat Pumps

*If **has_heat_pump** = 1, ask questions in this section. If not, SKIP to Section C. If **multiple_heat_pumps** = 1, run through this section twice, once for each heat pump. First time through, for all "heat pump" references in questions below (in red) refer to the brand name **heat_pump_name1** so participants know which of their heat pumps you're asking about, and second time through for all "heat pump" references refer to **heat_pump_name2**.*

Read: Now, we have some more specific questions related to your heating system and heat pump specifically.

6. **(B1) Did your heat pump replace other heating equipment?**
    1. Yes
    2. No *(SKIP TO B2)*
    3. Prefer not to answer *(SKIP TO B2)*
    4. Don't know *(SKIP TO B2)*
7. **(B1a) What heating equipment did your heat pump replace?** *(don't read options, listen for the below, accept multiple)*
    1. Natural gas furnace (poller note: a heating system that burns natural gas to produce warm air)
    2. Electric furnace (poller note: uses electricity to generate heat)
    3. Boiler (poller note: heats water or steam, distributing it via radiators or underfloor systems to heat a space)
    4. Ductless mini-split heat pump (poller note: provides heating without ducts, using refrigerant to transfer heat between indoor and outdoor units)
    5. Baseboards (poller note: electric heaters installed along walls that radiate heat directly into the room)
    6. Wall heater(s) / wall furnace(s) (poller note: heaters mounted in/on a wall that provide localized heat)
    7. Radiant heating (floor or ceiling) (poller note: uses electric or water-based systems embedded in floors or ceilings to radiate heat)
    8. Wood or pellet stove

9. Natural gas fireplace
10. Wood burning fireplace / open hearth
11. Solar heating
12. Portable space heaters (poller note: compact heaters that can be moved and plugged in)
13. Other (specify): ________
14. Other existing heat pump
15. Prefer not to answer
16. Don't know

Min split put in back bedroom

8. (B 2) Other than your heat pump, do you currently have any other heating equipment in your home?

1. Yes (*CONTINUE TO B3)*
2. No (*SKIP TO B8)*

9. (B 3) What other heating equipment do you currently use for heating your home?

(don't read options, listen for the below, accept multiple)

1. Natural gas furnace (poller note: a heating system that burns natural gas to produce warm air)
2. Electric furnace (poller note: uses electricity to generate heat)
3. Boiler (poller note: heats water or steam, distributing it via radiators or underfloor systems to heat a space)
4. Ductless mini-split heat pump (poller note: provides heating without ducts, using refrigerant to transfer heat between indoor and outdoor units)
5. Baseboards (poller note: electric heaters installed along walls that radiate heat directly into the room)
6. Wall heater(s) / wall furnace(s) (poller note: heaters mounted in/on a wall that provide localized heat)
7. Radiant heating (floor or ceiling) (poller note: uses electric or water-based systems embedded in floors or ceilings to radiate heat)
8. Wood or pellet stove

9. Natural gas fireplace
10. Wood burning fireplace / open hearth
11. Solar heating
12. Portable space heaters (poller note: compact heaters that can be moved and plugged in)
13. Other (specify): ________
14. Prefer not to answer
15. Don't know

10. (B3a) [IF SELECTED Yes in B2] How often do you currently use this other heating equipment?

1. Only during very cold weather
2. Occasionally
3. Regularly
4. Rarely
5. Never
6. Prefer not to answer
7. Don't know

11. (B 4) [If any systems mentioned in B3] **Including your heat pump, which of your heating systems would you say is your primary heating system?** [Accept one answer from above list or "heat pump"]

12. (B 5) [If any systems mentioned in B3] **Is your heat pump currently or intended to be the only source of heat for your home?**

1. Yes *(SKIP TO B8)*
2. No (gas fired fire place and mini split)
3. Prefer not to answer
4. Don't know

13. (B 6) [If B2 = 1 (Yes)] **Are your supplementary/additional heating source(s) set up to automatically take over for your heat pump at a certain temperature?**

1. Yes

2. No
3. Prefer not to answer
4. Don't know

14. (B 7) [If B6 = 1 (Yes)] **At what temperature do your supplementary/additional heating source(s) take over for your heat pump, if you know?**

1._____ (record response, accept specific temperature in Fahrenheit, accept one value overall or one value per supplementary heating source, no ranges)

2. Prefer not to answer

3. Don't know

15. (B7a) During extremely cold days, which heating system do you primarily rely on?

1. Heat pump
2. Other heating system
3. A combination of both
4. Prefer not to answer
5. Don't know

16. (B 8) What challenges have you faced, if any, with either the installation of your heat pump or with using your heat pump since you've had it installed? (RECORD VERBATIM)

17. (B 9) Are you satisfied with your experience using the heat pump since you've had it installed? (RECORD VERBATIM)

POLLER NOTE: Remember to repeat this section above if multiple heat pumps

18. (B10) Do you expect your heat pump to remain your primary heating system over the next few years?

1. Yes
2. No
3. Not sure
4. Prefer not to answer

12.3 Role of Contractor/Retailer

If answered Section B questions, read: **Now, we have some questions related to your experience with the program more broadly, starting with questions about contractors and retailers.**

19. (C 1) Did you go through a contractor to purchase the efficient equipment or did you purchase it directly from a retailer?

1. Used a contractor
2. Purchased at retailer
3. Prefer not to answer *(DO NOT READ)*
4. Don't know *(DO NOT READ)*

20. (C 2) Did you use a contractor to install the equipment or did you do it yourself?

1. Contractor installed
2. Did it myself
3. Prefer not to answer *(DO NOT READ)*
4. Don't know *(DO NOT READ)*

12.4 Awareness and Motivations for Participation

21. (D 1) How did you first hear about PNM's rebates for energy efficient equipment?

(DO NOT READ CATEGORIES)

01. Bill insert

02. PNM website

03. Digital/web advertisement

(not on the PNM website)

04. Television advertisement

05. Radio advertisement

06. Contractor

07. Friend or family

08. Social media

09. PNM representative

98. Prefer not to answer

99. Don't know

Other *(SPECIFY)* ____

22. (D1a) Did your contractor mention or explain the PNM rebate as part of recommending the equipment?

1. Yes
2. No
3. Don't remember
4. Prefer not to answer

(D 2) Next I will read a list of reasons you may have considered when you decided to make the energy efficiency upgrade. For each one, please tell me if it was *not at all important, a little important, somewhat important, very important or extremely important*.

How important was...on your decision to make the upgrade?

Extremely Very Somewhat A little Not imp Don't Prefer not

(RANDOMIZE) *Important Important Important Important At All Know to answer N/A*

23. (D2a) Reducing environmental impact

of your home 5 4 3 2 1 6 7 8

24. **(D2b) Upgrading out-of-date equipment 5 4 3 2 1 6 7 8**

25. **(D2c) Replacing faulty or failed equipment 5 4 3 2 1 6 7 8**

26. **[If has_heat_pump = 1 OR measure_type1 or measure_type2 = Refrigerated Air Conditioner, ASK]**

(D2d) Improving comfort of your home 5 4 3 2 1 6 7 8

27. **[If has_heat_pump = 1 OR measure_type1 or measure_type2 = Refrigerated Air Conditioner, ASK]**

(D2e) Improving air quality5 4 3 2 1 6 7 8

28. **(D2f) Receiving financial incentive 5 4 3 2 1 6 7 8**

29. **(D2g) Reducing energy bill amounts5 4 3 2 1 6 7 8**

30. **[If Contractor=YES in C1, ASK]**

(D2h) The contractor recommendation 5 4 3 2 1 6 7 8

31. **[If Retailer=yes in C1 ASK]**

(D2i) The retailer recommendation 5 4 3 2 1 6 7 8

32. [If has_heat_pump = 1 OR measure_type1 or measure_type2 = Refrigerated Air Conditioner, ASK]

(D2j) Reducing use of fossil fuels in your home…5 4 3…. 2…….1……
6…….7 …….8

33. (D 3) Were there any other reasons that you installed the equipment that were more important than the ones we have mentioned?

01. Yes (Ask what those reasons were and record response)

____

____

____

97. No, none in particular
98. Prefer not to answer
99. Don't know

12.5 Customer Decision Making Process – Free Ridership

Next, I'm going to ask a few questions about your decision to participate in the PNM rebate program, and to make an efficiency upgrade at your home.

4. (E 1) Before participating in the PNM rebate program, do you recall receiving any other
rebates from PNM for making energy efficiency upgrades at your home?

1. Yes
2. No
3. Prefer not to answer
4. Don't know

(E 2) Next I will read a list of program aspects that may have been influential in your decision to make the efficiency upgrade. For each one, please tell me how

influential it was on a scale of 0 to 10 where 0 means ***not at all influential*** **and 10 means *extremely influential*.**

How influential was…on your decision to make the upgrade?

(RANDOMIZE)	*Extremely Influential*	*Not at all Influential*	*Don't Know*	*Prefer not to answer*	*N/A*

5. **(E2a) The dollar amount of the rebate 10…9…8…7…6…5…4…3…2…1…0 .. 97 .... 98 ..... 99**
6. **[IF Contractor=YES IN C1 ASK]**

   (E2b) The contractor recommendation 10…9…8…7…6…5…4…3…2…1…097 ..... 98 99
7. **[IF Retailer=YES IN C1 ASK]**

   (E2c) The retailer recommendation . 10…9…8…7…6…5…4…3…2…1…0 .. 97 .... 98 99
8. **(E2d) Information from PNM marketing**

   or promotional materials.................. 10…9…8…7…6…5…4…3…2…1…0 .. 97 .... 98 99
9. **(E2e) Previous participation**

   in a PNM program .... 10…9…8…7…6…5…4…3…2…1…0 .. 97 .... 98 99
10. **(E2f) Upgrade was required due to equipment failure**

    or emergency situation .... 10…9…8…7…6…5…4…3…2…1…0 .. 97 .... 98 99
11. **(E 3) Did you first learn about the PNM rebate program BEFORE or AFTER you decided how**

    energy efficient your equipment would be?

    1. Before
    2. After
    3. Prefer not to answer *(DO NOT READ)*
    4. Don't know *(DO NOT READ)*
12. **(E 4) Now I would like you to think about the efficiency level of the equipment upgrade. Using a scale from 0 to 10, where 0 means *not at all likely* and 10 means *extremely***

***likely*, please rate the likelihood that you would have purchased the exact same efficiency level of equipment if the PNM rebate program was NOT available.**

Extremely *Not at all*

DK/

Likely *Likely* *WS*

10 ....09 ...... 08....... 07...... 06....... 05 .... 04........ 03.........02 .... 01...........00 11

Unknown response – TBD

13. (E 5) Now I would like you to think about the timing of the equipment purchase. Using a scale from 0 to 10, where 0 means *not at all likely* and 10 means *extremely likely*, please rate the likelihood that you would have installed equipment, of any efficiency level, within 12 months of when you actually did if the PNM rebate program was NOT available.

Extremely *Not at all*

DK/

Likely *Likely* *WS*

10 ....09 ...... 08....... 07...... 06....... 05 .... 04........ 03.........02 .... 01...........00 11

14. (E 6) In your own words, how would you describe the influence the PNM rebate program had on your decision to install the new equipment?

(RECORD VERBATIM)

12.6 Program Implementation and Delivery

Now I have a question about the program processes.

4. (F 1) About how long did it take to receive your rebate after the equipment was

installed?

(DO NOT READ CATEGORIES)

1. 1 week or less (it was removed off the cost of the unit)
2. More than a week, but less than 1 month
3. About 1 month
4. Between 1 and 2 months
5. About 2 months
6. More than 2 months
7. Have not received rebate yet
8. Prefer not to answer
9. Don't know

12.7 Program Satisfaction

Now I have some questions about your satisfaction with various aspects of the program.

(G 1a-h). For each of the following, please tell me if you were very dissatisfied, somewhat dissatisfied, neither satisfied nor dissatisfied, somewhat satisfied or very satisfied.

4. (G1a) PNM as an energy provider

1. Very Dissatisfied
2. Somewhat Dissatisfied
3. Neither Satisfied Nor Dissatisfied *(SKIP TO Q.G1b)*
4. Somewhat Satisfied *(SKIP TO G1b)*
5. Very Satisfied *(SKIP TO G1b)*
6. Not applicable *(SKIP TO G1b)*
7. Prefer not to answer *(SKIP TO G1b)*
8. Don't know *(SKIP TO G1b)*

5. Can you tell me why you gave that rating? *(RECORD VERBATIM)*

____

____

____

6. (G1b) The rebate program overall

1. Very Dissatisfied
2. Somewhat Dissatisfied
3. Neither Satisfied Nor Dissatisfied *(SKIP TO G1c)*
4. Somewhat Satisfied *(SKIP TO G1c)*
5. Very Satisfied *(SKIP TO G1c)*
6. Not applicable *(SKIP TO G1c)*
7. Prefer not to answer *(SKIP TO G1c)*
8. Don't know *(SKIP TO G1c)*

7. Can you tell me why you gave that rating? *(RECORD VERBATIM)*

____

____

8. (G1c) The equipment that was rebated through the program

1. Very Dissatisfied
2. Somewhat Dissatisfied
3. Neither Satisfied Nor Dissatisfied *(SKIP TO G1d)*
4. Somewhat Satisfied *(SKIP TO G1d)*
5. Very Satisfied *(SKIP TO G1d)*
6. Not applicable *(SKIP TO G1d)*
7. Prefer not to answer *(SKIP TO G1d)*
8. Don't know *(SKIP TO G1d)*

9. Can you tell me why you gave that rating? *(RECORD VERBATIM)*

____

____

10. [IF Contractor=YES in C1, ASK] (G1d) The contractor who installed the equipment

1. Very Dissatisfied
2. Somewhat Dissatisfied
3. Neither Satisfied Nor Dissatisfied *(SKIP TO G1e)*
4. Somewhat Satisfied *(SKIP TO G1e)*
5. Very Satisfied *(SKIP TO G1e)*
6. Not applicable *(SKIP TO G1e)*

7. Prefer not to answer *(SKIP TO G1e)*

8. Don't know *(SKIP TO G1e)*

11. Can you tell me why you gave that rating? *(RECORD VERBATIM)*

12. (G1e) The amount of time it took to receive your rebate

1. Very Dissatisfied
2. Somewhat Dissatisfied
3. Neither Satisfied Nor Dissatisfied *(SKIP TO G1f)*
4. Somewhat Satisfied *(SKIP TO G1f)*
5. Very Satisfied *(SKIP TO G1f)*
6. Not applicable *(SKIP TO G1f)*
7. Prefer not to answer *(SKIP TO G1f)*
8. Don't know *(SKIP TO G1f)*

13. Can you tell me why you gave that rating? *(RECORD VERBATIM)*

14. (G1f) Interactions with PNM regarding this project

1. Very Dissatisfied
2. Somewhat Dissatisfied
3. Neither Satisfied Nor Dissatisfied *(SKIP TO G1g)*
4. Somewhat Satisfied *(SKIP TO G1g)*
5. Very Satisfied *(SKIP TO G1g)*
6. Not applicable *(SKIP TO G1g)*
7. Prefer not to answer *(SKIP TO G1g)*
8. Don't know *(SKIP TO G1g)*

15. Can you tell me why you gave that rating? *(RECORD VERBATIM)*

16. (G1g) The overall value of the equipment you received for the price you paid

1. Very Dissatisfied
2. Somewhat Dissatisfied
3. Neither Satisfied Nor Dissatisfied *(SKIP TO G2)*
4. Somewhat Satisfied *(SKIP TO G2)*
5. Very Satisfied *(SKIP TO G2)*
6. Not applicable *(SKIP TO G2)*
7. Prefer not to answer *(SKIP TO G2)*
8. Don't know (SKIP TO G2)

17. Can you tell me why you gave that rating? *(RECORD VERBATIM)*

18. (G2) Do you have any recommendations for improving the PNM program?

01. Yes *(RECORD VERBATIM)*

97. No
98 Prefer not to answer
99. Don't know

12.8 General Characteristics and Demographics

34. (Gen 1) Finally, I have a few questions about your household for classification purposes only. Do you own or rent your home where the equipment was installed?

01. Own *(SKIP TO Gen2)*
02. Rent
03. Prefer not to answer
99. Don't know

Other *(SPECIFY)* ______________________________

35. (Gen1a) Do you pay your PNM bill, or does someone else (e.g., a landlord)?

1. Pay own
2. Someone else pays
3. Prefer not to answer
4. Don't know

36. (Gen2) Is your home a single-family home or part of a multifamily building with more than one unit?

1. Single-family home *(SKIP TO Gen3)*
2. More than one residence in building
3. Prefer not to answer *(SKIP TO Gen3)*
99. Don't know *(SKIP TO Gen3)*

37. (Gen2a) How many units are in the structure? (Record number)

_______ _____ _______

499. Prefer not to answer
500. Don't know

38. (Gen3) Approximately what is the total square footage of your home?

(READ CATEGORIES IF NEEDED)

1. Less than 1,000 square feet
2. 1,000 to 1,499 square feet
3. 1,500 to 1,999 square feet
4. 2,000 to 2,499 square feet
5. 2,500 to 2,999 square feet
6. 3,000 to 3,999 square feet
7. 4,000 or more square feet
8. Prefer not to answer *(DO NOT READ)*
9. Don't know *(DO NOT READ)*

39. (Gen4) Approximately what year was your home built? *(READ CATEGORIES IF NEEDED)*

01. 1939 or earlier
02. 1940 to 1949
03. 1950 to 1959
04. 1960 to 1969
05. 1970 to 1979
06. 1980 to 1989
07. 1990 to 1999
08. 2000 to 2009
09. 2010 to 2019
10. 2020 to 2024
11. Prefer not to answer *(DO NOT READ)*
12. Don't know *(DO NOT READ)*

40. (Gen5) How many people live in your household? (Record number) (2)

______ _____

499. Prefer not to answer
500. Don't know

41. (Gen6) How long have you lived in this home?

1. Less than 6 years
2. 6 to 10 years
3. 11 to 15 years
4. 16 to 20 years
5. 21 to 25 years
6. 26 to 30 years
7. More than 30 years
8. Prefer not to answer
9. Don't know

THIS CONCLUDES OUR SURVEY. THANK YOU FOR YOUR TIME. HAVE A GOOD DAY.

Unique ID #:____ ____ ____ ____

Respondent's Phone Number:________________________________

Interviewer's Name:____

Interviewer's Code:____

B. Easy Savings Survey Instrument

The Evaluation team will survey New Mexico Easy Savings Energy Savers Program participants via an online survey. The evaluation team will administer this survey to recipients of Energy Savers kits. The key objectives of this survey are to:

- Estimate free-ridership (FR) for each eligible measure included in the Energy Savers kits
- Measure program awareness and participant satisfaction

The evaluation team plans to field this survey online, with a survey link sent via email to Energy Savers kit recipients during the evaluation period. Survey results will be used to estimate free ridership, ISR, program awareness, and participant satisfaction for the NM Easy Savings Energy Savers Program.

Table 70: Survey Characteristics

Characteristics	Description
Statement of purpose	This survey will assess free ridership for each weatherization measure included in the NM Easy Savings, Energy Savers kits and collect ISR results for each measure. It will also assess program awareness and participant satisfaction.
Qualified respondent	
Target number of completes	
Estimated survey length	
Survey timeline	
Survey mode	

Table 71: Research Objectives

Research Objective	Survey Questions
Confirm participation	
Measure installation verification	
Program awareness	
Assess free ridership	
Assess program satisfaction	
Demographics	
Survey closing	

Table 72: Survey Variables

Survey Variables	Description	Source
[customer name]	Participant's name	
[email]	Participant's email address	
[date]	Date participant takes survey	
[kit type]	Type of kit participant received	

13.1 Landing Page

Thank you for taking a few minutes to answer questions about the Energy Savers kit you received through the NM Easy Savings Program. Your feedback will help us understand how the products are used and improve future energy efficiency programs. Your responses will remain confidential and will be reported only in summary form.

13.2 Screening Questions

First, we would like to confirm your participation in the NM Easy Savings Energy Savers Program.

S1. Do you remember receiving a free Energy Savers kit from Public Service Company of New Mexico (PNM)?

1. Yes
2. No
3. Not sure / Don't know

[IF S1 = 2 OR 3, TERMINATE]

Terminate message:

Unfortunately, you do not qualify to participate in this survey. Thank you for your time.

S2: What type of fuel does your home use for water heating?

1. Electricity
2. Natural Gas

S3: Based on the list below, is this the Energy Savers kit you received?

1. Yes
2. No
3. Not sure / Don't know

[PROGRAMMER NOTE: IF Electricity, Display Kit 1 measures; IF Natural Gas, Display Kit 2 measures]

Category	Measure: KIT 1
Advanced Power Strip	Advanced Power Strip
Lighting	LED Light Bulbs (A19)
Lighting	LED Night Light
Insulation / Weatherization	Door Draft Stopper
Insulation / Weatherization	Window Shrink & Seal Kit
Insulation / Weatherization	Silicone/Rubber Weatherstripping
Insulation / Weatherization	Foam Tape (Windows & Doors)
Insulation / Weatherization	Foam Outlet & Switch Gaskets
Insulation / Weatherization	Pipe Insulation
Insulation / Weatherization	Plumber's Tape
Water Heating Equipment	Fixed Showerhead
Water Heating Equipment	Bathroom Aerator
Water Heating Equipment	Kitchen Aerator

Category	Measure: KIT 2
Advanced Power Strip	Advanced Power Strip

Category	Measure: KIT 2
Lighting	LED Light Bulbs (A19)
Lighting	LED Night Light
Insulation / Weatherization	Door Draft Stopper
Insulation / Weatherization	Window Shrink & Seal Kit
Insulation / Weatherization	Silicone/Rubber Weatherstripping
Insulation / Weatherization	Foam Tape (Windows & Doors)
Insulation / Weatherization	Foam Outlet & Switch Gaskets
Insulation / Weatherization	Pipe Insulation
Insulation / Weatherization	Plumber's Tape
Water Heating Equipment	Fixed Showerhead
Water Heating Equipment	Bathroom Aerator
Water Heating Equipment	Kitchen Aerator

[Ask S3a and S3b, If S3=2 or 3]

S3a. You indicated the list does not match your kit. What was different? Please select all that apply.

1. I received additional items not shown
2. I received fewer items than shown
3. I received a different set of items
4. Other (please specify): [Open end]

S3b. Please list any items you remember were included in your kit. [Open end]

13.3 Program Awareness

PA1.Before you received the Energy Savers kit, did you know the NM Easy Savings Program existed?

1. Yes
2. No

PA 2. Before receiving the Energy Savers kit, were you aware of this type of energy-saving product?

Measure	Familiar with this measure before receiving kit (Yes/No)
A. Advanced Power Strip	

Measure	Familiar with this measure before receiving kit (Yes/No)
B. LED Light Bulbs (A19)	
C. LED Night Light	
D. Door Draft Stopper	
E. Window Shrink & Seal Kit	
F. Silicone/Rubber Weatherstripping	
G. Foam Tape (Windows & Doors)	
H. Foam Outlet & Switch Gaskets	
I. Pipe Insulation	
J. Plumber's Tape	
K. Fixed Showerhead	
L. Bathroom Aerator	
M. Kitchen Aerator	
N. Plumber's Tape	

[ASK PA3 IF PA1=1]

PA3. How did you first hear about the NM Easy Savings Program's Energy Savers kits?

[SINGLE RESPONSE, ROTATE 1-97]

1. A utility representative
2. Utility website
3. An email, newsletter, bill, door hanger, or other material from Utility
4. An advertisement from the internet, social media, TV, radio, newspaper, billboard, or retail store
5. A family member, friend, neighbor, and/or colleague
6. A contractor
7. Community Event
8. An internet search on Google, Yahoo, Bing, or some other search site

97. Other (please specify): **[OPEN END]**
98. Don't know **[EXCLUSIVE]**

13.4 Free Ridership

13.4.1 Program Influence Score

PI1. Before receiving the **Energy Savers kit through the NM Easy Savings Program**, had you already purchased or installed any of the following measures?

1. Yes
2. No
3. DK

Measure	Category	Yes/No/DK
Advanced Power Strip	Advanced Power Strip	
LED Light Bulbs (A19)	Lighting	
LED Night Light		
Candelabra Bulb (B10)		
Door Draft Stopper	Insulation/Weatherization	
Window Shrink & Seal Kit		
Silicone/Rubber Weatherstripping		
Foam Tape (Windows & Doors)		
Foam Outlet & Switch Gaskets		
Pipe Insulation		
Plumber's Tape		
Fixed Showerhead	Water Heating Equipment	
Bathroom Aerator		
Kitchen Aerator		

13.4.2 No Program Influence Score

NP1. On a scale of 0 to 10, where 0 is 'Not at all Likely' and 10 is 'Extremely Likely', what is the likelihood you would have purchased the following measures**,** if the NM Easy Savings Program did not exist and you had not received the Energy Savers kit?

[THIS QUESTION WILL BE PRESENTED AS A 0-10 SLIDING WIDGET, WITH 0 AND 10 DEFINED AS BELOW.]

Measure	Category	0-10 Sliding Widget
Advanced Power Strip	Advanced Power Strip	
LED Light Bulbs (A19)	Lighting	
LED Night Light		
Candelabra Bulb (B10)		
Door Draft Stopper	Insulation/Weatherization	
Window Shrink & Seal Kit		
Silicone/Rubber Weatherstripping		
Foam Tape (Windows & Doors)		
Foam Outlet & Switch Gaskets		
Pipe Insulation		
Plumber's Tape		
Fixed Showerhead	Water Heating Equipment	
Bathroom Aerator		
Kitchen Aerator		

NP2. If the NM Easy Savings Program did not exist, what would most likely have happened?

Option list:

1. I would have installed the same type of product anyway
2. I would have installed it, but at a later time
3. I would have installed a different type of product
4. I would not have installed anything
5. Not sure

Measure	Category	Options List
Advanced Power Strip	Advanced Power Strip	
LED Light Bulbs (A19)	Lighting	
LED Night Light		

Measure	Category	Options List
Candelabra Bulb (B10)		
Door Draft Stopper	Insulation/Weatherization	
Window Shrink & Seal Kit		
Silicone/Rubber Weatherstripping		
Foam Tape (Windows & Doors)		
Foam Outlet & Switch Gaskets		
Pipe Insulation		
Plumber's Tape		
Fixed Showerhead	Water Heating Equipment	
Bathroom Aerator		
Kitchen Aerator		

13.4.3 Consistency Check

CC1. In your own words, please describe what products, if any, you would have likely purchased and installed if the NM Easy Savings Program had not been available? **[OPEN END]**

13.5 Satisfaction

SA1**.** How satisfied or dissatisfied are you with the following? **[0-10 SCALE WHERE 0 IS "NOT AT ALL SATISFIED" AND 10 IS "VERY SATISFIED"**

Product	0-10 Scale
a. The products included in the [KIT TYPE]	
b. The instructions on how to install the products	
c. Information included in the kit about how each product can save your home energy	
d. The NM Easy Savings Profram overall	
e. The utility in general	

[ASK IF S1a - S1e>=6]

SA2. Why were you satisfied?

[OPEN END]

[ASK IF S1a - S1e <=4]

SA3. Why were you not satisfied?

[OPEN END]

13.6 Demographics

We're almost finished. The last few questions are about your household to make sure we're talking with a representative sample of NM Easy Savings participants.

DA1. Do you own or rent your home?

1. Own
2. Rent
3. Other

DA2. What type of home do you live in?

4. Single-family detached home
5. Single-family attached home such as townhouse or row house
6. Apartment or condominium
7. Mobile home

97. Other, please specify: **[OPEN END]**

13.7 Survey Closing

CA1. End. Thank you for your time to complete this survey! As a thank you, you will receive a $25 gift card, which will be emailed to you within the next three weeks. To send the gift card, please confirm your contact information below.

Your information:

E1. Name **[open end]**

E2. Email Address **[Open end]**

End of Survey Message: We appreciate your feedback and will use this information to improve the program to better serve customers like yourself. Thank you!

C. Home Energy Reports CEMP Memo

We understand that PNM will launch the Customer Energy Management Portal (CEMP) in late 2025 or early 2026. On an opt-out basis, CEMP will provide all residential PNM customers who have email addresses on file with monthly summary reports that include tips to help reduce their energy costs and better understand their energy usage. This type of messaging is similar to the messaging provided to customers who are part of one of PNM's four Home Energy Report (HER) cohorts. PNM claims savings from the HER program as part of its Energy Efficiency and Load Management portfolio but does not plan to claim savings or recover the costs of CEMP through Energy Efficiency funding. Given the similarity of the two interventions, there are questions about the efficacy of the HER program in a landscape where all accounts receive CEMP reports. This memo outlines the evaluation team's proposed approach for determining whether the HER messaging continues to produce energy savings after CEMP is launched.

14.1 Proposed Approach

Table 73 shows the number of treatment and control group homes included in each of the four HER cohorts as of October 2024. The 2021 Email cohort is the largest of the four, and premise-level impacts (kWh saved per premise per day) have historically been largest in the 2021 Paper cohort. The 2024 Email Refill cohort was launched in program year 2024 (PY2024) and is the smallest of the four cohorts. Note that very few of the homes in the two paper cohorts (2021 Paper and 2023 Paper Expansion) have email addresses on file with PNM, so we'd expect these cohorts will be mostly unaffected by the CEMP messaging.

Table 73: HER Customer Counts as of October 2024

Cohort	Count of Treatment Homes	Count of Control Homes	PY2024 Aggregate Energy Savings (MWh)
2021 Email	93,349	10,479	2,451
2021 Paper	25,468	11,001	4,058
2023 Paper Extension	23,246	7,621	668
2024 Email Refill	17,178	5,725	202

To determine whether CEMP messaging affects the savings produced by HER messaging, we propose holding out some of the 2021 Email cohort customers from the monthly CEMP messaging. We propose focusing on the 2021 Email cohort because (1) very few of the homes in the paper cohorts have email addresses on file with PNM, (2) the 2021 Email cohort is the largest and one of the most mature cohorts, and (3) the 2024 Email Refill cohort is new, small, and produced the least savings in PY2024 (on a per-premise basis). Table 74 shows proposed hold-out percentages by HER wave and experimental cell (treatment or control). We understand that any customer who is initially held out of the CEMP monthly summaries can self-select into the CEMP messaging.

Table 74: Proposed Hold-Out Percentages

Cohort	Treatment Group		Control Group	
	% Withheld	% Opted In	% Withheld	% Opted In
2021 Email	50%	50%	50%	50%
2021 Paper	0%	100%	0%	100%
2023 Paper Extension	0%	100%	0%	100%
2024 Email Refill	0%	100%	0%	100%

Ideally, the homes withheld from CEMP messaging would be selected randomly from the active customers in the HER customer assignment file, and pre-HER consumption patterns for the withheld and opted-in groups would be assessed for equivalence (separately for the treatment and control groups). This equivalence check is identical to the check evaluators perform to assess the randomization of a randomized controlled trial. If PNM has concerns about withholding ~50,000 customers from the CEMP monthly messaging, the hold-out percentage for the 2021 Email treatment group can be reduced.

For the 2026 evaluation cycle, the Evaluation team will perform the typical regression-based evaluation of all four HER cohorts in full. The Evaluation team will compare results for the two paper cohorts with historical results for those cohorts to assess whether there are any major directional shifts. As noted, we'd expect these cohorts to be mostly unaffected by the CEMP messaging due to the lack of on-file email addresses within these cells.

In addition to the typical evaluation work, we will use an identical regression-based framework to compare electric usage across four subgroups of interest from the 2021 Email cohort. These comparisons are outlined in Table 75.

Table 75: Directional Expectations for Subgroup Analysis

Comparison	Subgroups	Directional Expectations
Comparison 1	Control-withheld & Control-opted in	**If the CEMP messaging produces energy savings**, we'd expect consumption to be lower in the control-opted-in subgroup. **If not**, we'd expect consumption to be similar across the subgroups.
Comparison 2	Treatment-withheld & Treatment opted-in	**If the CEMP messaging produces energy savings incremental to the HER messaging**, we'd expect consumption to be lower in the treatment-opted-in subgroup. **If not**, we'd expect consumption to be similar across the subgroups.
Comparison 3	Treatment-withheld & Control-withheld	We'd expect this comparison to mirror historical HER evaluation findings (subject to sampling error) as Home Energy Reports are the lone intervention for this comparison.

Comparison	Subgroups	Directional Expectations
Comparison 4	Treatment-opted in & Control-opted in	**If the HER messaging continues to produce energy savings after CEMP is launched**, we'd expect to see similar impacts for Comparison 3 and Comparison 4. **If not**, we'd expect consumption to be similar across the subgroups.

Given the sizes of the subgroups and historical evaluation results, we do not expect any of the comparisons noted above to produce statistically significant results. Rather, they will provide directional results that can help answer the key research question (does CEMP customer messaging affect the savings messaging from HERs?) and inform the future direction of the HER program. We will include findings and recommendations from this subgroup analysis in our PY2026 evaluation report.

D. Project-Level Desk Review Results

Project ID	21070	21099
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Direct Install	Direct Install
Project Description	Lighting Retrofit	Lighting Retrofit
Measure Type	Retrofit Lighting	Retrofit Lighting
Building Type	Warehouse	Retail/Service
Other Building Type	-	-
Reported Annual Savings (kWh)	94,378.35	9,468.73
Reported Peak Demand Savings (kW)	11	2
Verified Annual Savings (kWh)	93,842.11	9,468.73
Verified Peak Demand Savings (kW)	10.98	1.65
GRR: Energy Savings (%)	99%	100%
GRR: Peak Demand Savings (%)	99%	100%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	Ex-ante calculation used workpaper for calculation. Baseline fixture wattage was selected using workpaper. Interactive factors and C.F was selected according to building type from NM TRM. HOU were custom value.	Ex-ante calculation used workpaper for calculation. Baseline fixture wattage was selected using workpaper. Interactive factors and C.F was selected according to building type Retail. HOU were custom value.
Ex-post Calculation Assessment	Ex-ante assumption used for selecting base wattages (458 W) was unclear for given fixtures, whereas the ex-post analysis referred to the PNM workpaper to determine the accurate base fixture wattage (i.e.456 W).	The evaluation team used NM TRM 2025 to calculate the savings. The HOU is used as per project documentation. The interactive factors and C.F. were selected according to building type Retail from TRM.

Project ID	21108	21123
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Direct Install	Direct Install
Project Description	Lighting Retrofit	Lighting Retrofit
Measure Type	Retrofit Lighting	Retrofit Lighting
Building Type	Miscellaneous	Convention Center
Other Building Type	-	-
Reported Annual Savings (kWh)	37,197.89	76,878.00
Reported Peak Demand Savings (kW)	0	14
Verified Annual Savings (kWh)	37,197.89	76,877.00
Verified Peak Demand Savings (kW)	0.00	13.27
GRR: Energy Savings (%)	100%	100%
GRR: Peak Demand Savings (%)	0%	95%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	Ex-ante calculation used workpaper for calculation. Baseline fixture wattage was selected using workpaper. Interactive factors and C.F was selected according to building type from NM TRM. HOU were custom value.	Ex-ante calculation used workpaper for calculation. Baseline fixture wattage was selected using workpaper. Interactive factors and C.F was selected according to building type from NM TRM. HOU were custom value. The evaluation team was unable to recreate the ex-ante as the provided details of baseline fixtures and spec sheets seems to be insufficient. The evaluation team assumed the Wattages as per back calculations and spec sheets.
Ex-post Calculation Assessment	The RR variation is due to the ex-post analysis using HOU values from the NM TRM 2025 according to Miscellaneous-exterior, whereas the ex-ante analysis used custom values for these parameters according to application sheet	Interactive factors and C.F was selected according to building type from NM TRM. HOU were custom value. The evaluation team assumed the fixture wattages as per back calculations and spec sheets.

Project ID	21126	21154
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Direct Install	Direct Install
Project Description	Lighting Retrofit	Lighting Retrofit
Measure Type	Retrofit Lighting	Retrofit Lighting
Building Type	Restaurant	Retail-small
Other Building Type	-	-
Reported Annual Savings (kWh)	12,832.48	6,510.88
Reported Peak Demand Savings (kW)	2	2
Verified Annual Savings (kWh)	12,832.48	7,804.72
Verified Peak Demand Savings (kW)	2.42	2.00
GRR: Energy Savings (%)	100%	120%
GRR: Peak Demand Savings (%)	100%	121%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	Ex-ante calculation used workpaper for calculation. Baseline fixture wattage was selected using workpaper. Interactive factors and C.F was selected according to building type from NM TRM. HOU were custom value.	The ex-ante calculation was performed using the workpaper and the baseline fixture wattage was selected from the workpaper. Interactive factors and CF were selected according to the building type from the NM TRM and HOU were treated as custom values. However, the basis for the selected base case fixture wattage is not clear.
Ex-post Calculation Assessment	The RR variation is due to the ex-post analysis using HOU and C.F values from the NM TRM 2025 according to Restaurant building type, whereas the ex-ante analysis used custom values for these parameters from application sheet.	The ex-ante calculation appears to have been performed using a retail building type. The assumptions used in the ex-ante analysis for selecting base wattages were unclear for all fixtures. The ex-post analysis referred to the PNM workpaper to determine the base fixture wattages based on provided descriptions in project documentation which is the reason for RR<>1.

Project ID	21157	21168
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Direct Install	Direct Install
Project Description	Lighting Retrofit	Lighting Retrofit
Measure Type	Direct Install	Retrofit Lighting
Building Type	Miscellaneous	Retail/Service
Other Building Type	-	-
Reported Annual Savings (kWh)	19,681.99	7,034.85
Reported Peak Demand Savings (kW)	5	2
Verified Annual Savings (kWh)	19,475.74	9,362.09
Verified Peak Demand Savings (kW)	5.19	2.54
GRR: Energy Savings (%)	99%	133%
GRR: Peak Demand Savings (%)	100%	135%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	"- Ex Ante used HVAC interactive factors and CF value corresponding to ""Miscellaneous"" building type from NM TRM.	Ex-ante calculation used workpaper for calculation. The evaluation team was unable to find the baseline fixture wattages so they were selected using back calculations (Refer Sheet1). Interactive factors and C.F was selected according to building type Retail from Workpaper. HOU were custom value.
Ex-post Calculation Assessment	- Ex Ante used custom HOU from project documentation.	The evaluation team used baseline wattages as per the fixture types provided in project documentations. The interactive factors and C.F. were selected according to building type Retail from NM TRM 2025. HOU were calculated as per project documentation.

Project ID	21179	21251
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Direct Install	Direct Install
Project Description	Lighting Retrofit	Lighting Retrofit
Measure Type	Retrofit Lighting	Direct Install
Building Type	Non-Profit organization	Restaurant
Other Building Type	-	-
Reported Annual Savings (kWh)	14,128.56	23,106.94
Reported Peak Demand Savings (kW)	2	0
Verified Annual Savings (kWh)	17,566.89	23,106.94
Verified Peak Demand Savings (kW)	2.98	0.30
GRR: Energy Savings (%)	124%	100%
GRR: Peak Demand Savings (%)	138%	100%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	The ex-ante calculation was performed using the workpaper and the baseline fixture wattage was selected on the basis of the workpaper. However, the exact building type considered for the calculation is not clearly documented, so the ex-ante results could not be recreated.	Ex-ante calculation used workpaper for calculation. Baseline fixture wattage was selected using workpaper. Interactive factors was selected according to building type from NM TRM. C.F and HOU were custom value.
Ex-post Calculation Assessment	"The provided document indicates the building type as a non-profit organization; however, the specific interactive factors used in the ex-ante calculation are not clearly documented. Based on Google information, the building appears to operate similar to a restaurant, so the ex-post analysis has been performed using the corresponding HVAC Energy Factor, HVAC Demand Factor and CF.	The RR variation is due to the ex-post analysis using HOU and C.F values from the NM TRM 2025 according to Restaurant-Fast food, whereas the ex-ante analysis used custom values for these parameters.

Project ID	21215	PRJ-34617-2023
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Direct Install	Retrofit
Project Description	Lighting Retrofit	Installing EC motors for walk in Low temp refrigeration unit
Measure Type	Retrofit Lighting	Retrofit Other
Building Type	Retail – Small	Restaurant – Fast-Food
Other Building Type	Automotive Service/Repair	-
Reported Annual Savings (kWh)	14,833.00	118,530.00
Reported Peak Demand Savings (kW)	2	14
Verified Annual Savings (kWh)	11,443.83	118,530.00
Verified Peak Demand Savings (kW)	1.46	14.21
GRR: Energy Savings (%)	77%	100%
GRR: Peak Demand Savings (%)	81%	100%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	The ex-ante calculation was performed using the workpaper. Interactive factors and CF were selected according to the building type of Retail-Small from the NM TRM and HOU were treated as custom values from the project application. However, the basis for the selected baseline fixture wattage is not clear, so the evaluation team used back calculated values for the analysis.	- Ex Ante used NM TRM 2023 for savings calculations using deemed values. - Ex Ante rounded the kW savings number.
Ex-post Calculation Assessment	The ex-ante calculation appears to have been performed using a retail building type. The assumptions used in the ex-ante analysis for selecting baseline wattages were unclear for all fixtures. The ex-post analysis referred to the NM TRM for savings algorithms and to the PNM workpaper to determine the baseline fixture wattages based on provided descriptions in project documentation which is the reason for RR<1.	- Ex Post used NM TRM 2025 for savings calculations (deemed values are same) - Ex Post used actual number kW savings.

Project ID	PRJ-37021-2025	PRJ-37922-2024
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	New Construction	New Construction
Project Description	New Construction Lighting, AC, VFD Air Compressor, Refrigerated Compressed Air Dryers, Compressed Air Tank Receiver	Installing new efficient food appliances and lighting
Measure Type	New Construction Lighting	New Construction Lighting
Building Type	Retail	Grocery
Other Building Type	-	-
Reported Annual Savings (kWh)	95,960.70	215,149.48
Reported Peak Demand Savings (kW)	16	38
Verified Annual Savings (kWh)	100,936.43	207,991.56
Verified Peak Demand Savings (kW)	19.58	39.73
GRR: Energy Savings (%)	105%	97%
GRR: Peak Demand Savings (%)	119%	104%
Ex Ante Calculation Methodology	Other:	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	NC Lighting: The Ex-Ante calculation was performed using the NM TRM 2021. The WHFe, WHFd, and CF values for the Retail and Exterior Space types are selected . The sources used for savings estimation— including allowable wattage per square foot and LPD values for Retail and Exterior spaces—were taken from the Lighting Compliance Certificate. The total sales area is reported as 215,991 sq ft; however, the Application Report indicates that only uncovered parking lots and drives were considered. Based on the values available in the Application Report and the Exterior Lighting Compliance Certificate, the area for this space was back-calculated as 68305 sq. ft .for the evaluation. The efficient fixture wattages were selected for use in the	NC Lighting- '- Ex Ante used LPD values from 2024 workpapers/ NM TRM 2021. - Ex Ante rounded up the numbers for "kW reduced" calculations. - Ex Ante used averaged HOU for interior fixtures. (coming from workpaper) - Ex Ante used HVAC interactive factors from workpapers which are matching the TRM. - There is a discrepancy in qty of fixtures and ComCheck document. - Ex Ante used Zone 3 exterior lighting LPD values whereas ComCheck included Zone 2 values.

	savings calculation Based on the available information, the evaluation team was not able to recreate Ex Ante savings. AC: The facility installed 13 packaged AC units. Ex-ante used the bonus savings approach as per the NM workpapers for the analysis. The baseline equipment efficiency ratings used for ex-ante savings align with the latest workpapers for the facility type 'Assembly'. The efficiency ratings for the upgraded equipment are referenced from the equipment specification sheets. A coincidence factor (CF) of 0.34, applicable to Commercial-General settings, is used for the ex-ante calculations. VSD Air Compressor: The VSD air compressor evaluation followed the PNM 2024 workpaper algorithm consistent with IL TRMv13, with the compressor horsepower (HP) taken directly from the project specification spreadsheet. Refrigerated Compressed Air Dryer: The refrigerated compressed air dryer evaluation followed the PNM 2024 workpaper algorithm, with the CFM rating of the air dryer taken from the project specification spreadsheet. The coincidence factor (CF) for the Manufacturing facility type, as specified in the NM workpaper, was applied to evaluate the coincident kW savings Refrigerated Compressed Air Dryers: The refrigerated compressed air dryer evaluation followed the PNM 2024 workpaper algorithm consistent with IL TRM v13, with the CFM rating of the air dryer taken from the project specification spreadsheet. The coincidence factor (CF) for the Manufacturing facility type (0.89), as specified in the NM	Hot Food Cabinet- - Ex Ante used deemed values for savings calculations. - Ex Ante considered CF twice in calculations. - Qty could not be verified from an invoice. Steam Cooker- - Ex Ante used deemed values for savings calculations. - Ex Ante considered CF twice in calculations Ice Machine - Ex Ante could not be fully recreated. - PNM Workpapers only contains deemed values for batch type ICE machines. - There is a probable typo error in NM TRM 2025 regarding table reference.

	workpaper, was applied to evaluate the coincident kW savings Compressed Air Tank Receiver: Compressed Air Tank Receiver evaluation followed the PNM 2024 workpaper algorithm consistent with IL TRM v13, with the compressor horsepower (HP) taken directly from the project specification spreadsheet. The coincidence factor (CF) for the "Manufacturing facility" type (0.89), as specified in the NM workpaper, was applied to evaluate the coincident kW savings.	
Ex-post Calculation Assessment	NC lighting: The Ex-Post calculation was performed using the NM TRM 2025. The WHFe, WHFd, HOU and CF values for the "Retail and Exterior spaces were selected in accordance with NM TRM 2023 requirements. The sources used for savings estimation— including allowable wattage per square foot and LPD values for Retail and Exterior spaces—were taken from the Lighting Compliance Certificate. The DLC tested fixture wattages were selected for use in the savings calculation. The total sales area is reported as 215,991 sq ft; however, the Application Report indicates that only uncovered parking lots and drives were considered. Based on the values available in the Application Report and the Exterior Lighting Compliance Certificate, the area for this space was back-calculated as 68305 sq. ft .for the evaluation. AC: Ex Post savings were calculated using the algorithms and assumptions specified in the 2025 NM TRM. The evaluation team considered 12 installed units, based on the post-inspection report, whereas the final application workbook and application summary indicate 13 units.	NC Lighting- - Ex Post used NM TRM 2025 for savings calculations. -Ex Post used ComCheck Document for baseline LPD values and areas. - For exterior lights (Building Façade -length), the linear foot details are not provided in the TRM. The evaluation team used IECC 2018 equivalent value and assumed 25 feet as facility height. All other values are taken from NM TRM 2025. - The DLC tested/reported wattages are used wherever applicable. - The qty of fixtures are taken as per LPD calculation sheet as the lighting invoice is not present. Hot Food Cabinet - Ex Post used algorithm from NM TRM 2025 to calculate savings; used Enegy star certificate. Steam Cooker - Ex Post used deemed values from NM TRM 2025. Ice Machine

	The Ex Post analysis applied the same methodology for the VSD air compressor, refrigerated compressed air dryers, and compressed air tank receiver, as no changes were identified in the input parameters based on the specification spreadsheets and other project documentation. The coincidence factor (CF) corresponding to the appropriate facility type, "Retail," (0.83) as specified in the NM TRM 2025, was used to evaluate the savings, which resulted in the observed RR variation.	- Ex Post used algorithm from NM TRM 2025 to calculate savings; used Energy star certificate.

Project ID	PRJ-38442-2024	PRJ-38443-2024
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	New Construction	Retrofit
Project Description	New Construction HVAC	Chiller replacement
Measure Type	0	Retrofit HVAC
Building Type	0	Office – Large
Other Building Type	Building	-
Reported Annual Savings (kWh)	9,344.27	28,964.76
Reported Peak Demand Savings (kW)	1	10
Verified Annual Savings (kWh)	10,032.48	28,966.71
Verified Peak Demand Savings (kW)	1.29	10.10
GRR: Energy Savings (%)	107%	100%
GRR: Peak Demand Savings (%)	107%	100%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	Ex-ante used the PNM workpapers to calculate the savings. it referred the deemed savings of 22.25 kWh Savings per Unit and 0.00317 kW per unit for the installed Dehumidifier.	The ex ante analysis used Workpaper to calculate the savings. The interactive factors used are as per building type Office - Large.
Ex-post Calculation Assessment	The evaluation team also used the Workpaper to calculate the savings. The spec sheet is used to determine actual values. The evaluator used the algorithms provided in the workpaper which deviate from the deemed values presented, leading to RR <>1.	The ex post analysis used NM TRM 2025 to calculate the savings. The interactive factors used are as per building type Office - Large.

Project ID	PRJ-38462-2024	PRJ-38479-2024
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Retrofit	Retrofit
Project Description	Lighting retrofit	Lighting Retrofit
Measure Type	Retrofit Lighting	Retrofit Lighting
Building Type	Grocery	Grocery
Other Building Type	-	-
Reported Annual Savings (kWh)	5,475.00	5,062.00
Reported Peak Demand Savings (kW)	1	1
Verified Annual Savings (kWh)	5,657.78	5,089.80
Verified Peak Demand Savings (kW)	0.95	0.85
GRR: Energy Savings (%)	103%	101%
GRR: Peak Demand Savings (%)	103%	100%
Ex Ante Calculation Methodology	Custom Calculation	Custom Calculation
Ex-ante Calculation Assessment	Ex-ante savings were calculated using the NM TRM algorithm, with all factors sourced from the PNM workbook except for HOU (4931) which used a custom value.	Ex-ante calculations are based on the TRM. Annual operating hours are based on information in the project documentation instead of TRM estimates. The HVAC interactive factor for energy used appears to be for Albuquerque region instead of Las Cruces region where this project is located.
Ex-post Calculation Assessment	The RR variation is due to ex ante utilizing 9W instead of the 8.9W per DLC for LED fixture	A slight variation in the kWh value is observed due to differences in the HVAC energy factor used based on location type. The ex-ante analysis applied the HVAC_e value for Albuquerque, whereas the ex-post analysis used the value for Las Cruces in accordance with the actual project location.

Project ID	PRJ-38634-2025	PRJ-38782-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Retrofit Rebate	New Construction
Project Description	Installation of high efficiency LED lights	New Construction Lighting
Measure Type	Retrofit Lighting	New Construction Lighting
Building Type	Assembly	Retail
Other Building Type	-	-
Reported Annual Savings (kWh)	28,317.00	41,437.82
Reported Peak Demand Savings (kW)	8	3
Verified Annual Savings (kWh)	28,967.30	43,157.39
Verified Peak Demand Savings (kW)	8.36	2.63
GRR: Energy Savings (%)	102%	104%
GRR: Peak Demand Savings (%)	102%	77%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	Interior lighting fixtures were installed at the facility, and no controls were included as part of the project. The evaluation team was unable to exactly recreate the Ex-Ante savings; however, a very close estimate of the reported savings was obtained using the interactive factors and hours of use (HOU) for the Commercial – General facility type (3175 hrs), along with the CF of (0.86) for the Lodging – Hotel/Motel space type as specified in the NM TRM 2025. Baseline wattages are selected as per updated OA (online application) provided by the customer whereas efficient wattages are considered as per DLC certificates and Energy Star Certificates.	NC Lighting _interior: The ex-ante calculations referred the LPD Calculator sheet from project documents for LPD and CF, WHF_e, and HOU factor are taken as per NM TRM 2021 or utility workpapers for facility type "Retail -Single Story Large" . Interior installations include fixtures in the Retail areas. All fixtures were either DLC/EnergyStar certified. Efficient wattages were used for the calculations. NC Lighting_exterior: The ex-ante calculations referred the LPD Calculator sheet from project documents for LPD and CF, WHF_e, and HOU factor are taken as per NM TRM 2021 or utility workpapers for facility type "Exterior" . Exterior installations include fixtures in the Entry- Canopies and overhangs, Building façade - Length, Sales canopy - Free standing and Uncovered parking lots and drives attached and

		areas. All fixtures were either DLC/EnergyStar certified. Efficient wattages were used for calculations. The canopy and overhang areas were considered in the evaluation because they exhibited negative savings. However, the evaluation team did not include these areas when calculating the facility's final savings. AC: Ex Ante calculations referred PNM workpapers 2024 for evaluation. The facility installed 3 packaged AC units. The baseline equipment efficiency ratings used for ex-ante savings align with the latest workpapers for the facility type 'Retail'. The efficiency ratings for the upgraded equipment are referenced from the equipment specification sheets. A coincidence factor (CF) of 0.83, applicable to Retail settings, is used for the ex-ante calculations. Deemed kWh savings values for the Santa Fe region were applied, as Las Vegas is the closest applicable location. In addition, bonus savings were included for installing equipment with a higher SEER rating compared to the base SEER rating. However evaluation team was not able to create Ex Ante savings using this.
Ex-post Calculation Assessment	The ex-post savings were calculated using an approach consistent with the ex-ante analysis. Interactive factors, coincidence factors (CF), and hours of use (HOU) for the "Assembly" facility type (as indicated in the tracking data) were applied in accordance with the NM TRM 2025. Additionally, the wattage guide does not include an option for 75W MH lamps, and 70W lamps do not reflect true input wattage due to ballast effects. Therefore, it was assumed that the naming was inconsistent and that the baseline	NC Lighting _interior: The ex-post calculations referred the LPD Calculator sheet from project documents for LPD and CF, WHF_e, and HOU factor are taken as per NM TRM 2025 for facility type "Retail -Single Story Large ". Interior installations include fixtures in the Retail areas. All fixtures were either DLC/EnergyStar certified. DLC tested wattages were used for the calculations. NC Lighting_exterior: The ex-post calculations referred the LPD Calculator sheet from project documents for LPD and CF,

	fixtures correspond to 70W MH lamps. An adjusted wattage of 79W was used to account for the electronic ballast.	WHF_e, and HOU factor are taken as per NM TRM 2025 for facility type "Exterior" . Exterior installations include fixtures in the Entry- Canopies and overhangs, Building façade - Length, Sales canopy - Free standing and Uncovered parking lots and drives attached and areas. All fixtures were either DLC/EnergyStar certified. DLC tested wattages were used for calculations. AC: The ex post analysis used the NM TRM 2025 algorithm to evaluate savings. Cooling capacities and efficient SSER and EER values were taken from equipment specification sheets, while baseline SEER, IEER, and EER values were applied in accordance with NM TRM 2025.Since the model YS102A(3,4,W)**(L,M,H)***0 is discontinued on 08-04-2023, base values are considered before 1/1/2023 as per TRM. For the **YS102A(3,4,W)(L,M,H)***0 AC unit, the EERpost is 11.0, which is below the baseline code requirement of 11.2 EER. This indicates that the installed unit does not meet the minimum efficiency standard. As a result, peak demand savings are negative, since EERpost is lower than EERbase, demonstrating that the installed equipment is less efficient than the baseline efficiency defined by the applicable code requirements.

Project ID	PRJ-38912-2025	PRJ-38974-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Retrofit	New Construction
Project Description	Installation of new high efficiency rooftop units	New Construction Lighting
Measure Type	Retrofit HVAC	New Construction Lighting
Building Type	Office – Small	Dining: Cafeteria/Fast Food
Other Building Type	-	-
Reported Annual Savings (kWh)	577.65	3,617.04
Reported Peak Demand Savings (kW)	0	1
Verified Annual Savings (kWh)	597.54	3,594.50
Verified Peak Demand Savings (kW)	0.25	0.60
GRR: Energy Savings (%)	103%	99%
GRR: Peak Demand Savings (%)	170%	100%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	1) Air Conditioner: The ex ante used workpaper to calculate the savings. The interactive factor used are selected as per building type Office Small. 2) Heat Pump: The ex ante used workpaper to calculate the savings. The interactive factor used are selected as per building type Office Small. The evaluation team was unable to recreate the kWh for this measure as the algorithms and workpapers used to calculate the savings is not specified.	NC Lighting _interior: The ex-ante calculations leveraged LPD from NM 2023 TRM for a Dining: Cafeteria/Fast Food building type. CF, WHF_e, WHF_d for "Restaurant" facility type and HOU for facility type "Restaurant – Fast-Food" were also leveraged from the NM TRM 2023 . Interior installations include fixtures in the Dining/Cafeteria areas. All fixtures were either DLC/EnergyStar certified. Ice machine: A single EnergyStar certified ice machine Manitowoc-Indigo IYT0750A-261 of ice making head (IMH) type was installed. The ice production capacity of the installed equipment, 575 lbs/24 hours, was considered based on the manufacturer’s specification sheet and the ENERGY STAR certificate. However the evaluation team was not able to recreate Ex Ante savings.

Ex-post Calculation Assessment	1) Air Conditioner: The evaluation used NM TRM 2025 to calculate the savings. The interactive factor used are selected as per building type Office Small. 2) Heat Pump: The evaluation team used NM TRM 2025 to calculate the savings. The interactive factor used are selected as per building type Office Small.	NC Lighting _interior: 100% RR - No finding Ice machine: A single EnergyStar certified ice machine Manitowoc-Indigo IYT0750A-261 of ice making head (IMH) type was installed. The evaluation team leveraged the ES certificate for the ice production capacity of the installed equipment which is 575lbs/24hrs and a 5.12 UseRateEff. The New Mexico TRM 2023 algorithm was followed to calculate the savings.

Project ID	PRJ-39168-2025	PRJ-39462-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Retrofit	Retrofit
Project Description	Retrofitting new exterior lighting	Installation of new high efficiency rooftop units
Measure Type	Retrofit Lighting	Retrofit HVAC
Building Type	Restaurant – Fast-Food	Education – Secondary School
Other Building Type	-	-
Reported Annual Savings (kWh)	12,072.96	7,760.59
Reported Peak Demand Savings (kW)	0	6
Verified Annual Savings (kWh)	12,156.80	3,581.30
Verified Peak Demand Savings (kW)	0.00	4.10
GRR: Energy Savings (%)	101%	46%
GRR: Peak Demand Savings (%)	0%	72%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	- Ex Ante used workpapers for savings calculation. - Ex Ante used baseline wattage from fixture list from PNM Workpaper 2024. - Ex Ante rounded the efficient wattage.	It appears that ex ante used the Workpaper to calculate savings however we could not recreate the savings with either workpaper methodology or TRM methodology. Further ex ante appears to be using older baseline estimates for the 7 Tons, 10 Tons and 8 Tons units as applying the baseline per TRM (after 1/1/2023) shows that these units do not meet the 14.8 baseline requirement
Ex-post Calculation Assessment	- Ex Post used baseline wattage from site photos and used actual number of reported wattage from DLC certificate.	The ex post used NM TRM 2025 to calculate the savings. The evaluation team was unable to recreate the ex ante (as it did not match the workpaper or the TRM methodology). Three sizes of cooling units (7 Tons, 10 Tons and 8 Tons) have an IEER 14.6 while the baseline for them is 14.8 per the NM TRM. This resulted in negative savings for those models. Only positive savings have been considered from ex post calculations. All these reasons contribute to the RR being less than 1

Project ID	PRJ-39617-2025	PRJ-39629-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Multifamily Retrofit LMI	Multifamily Retrofit LMI
Project Description	Energy star Dishwasher	Installation of Energy star Refrigerator
Measure Type	Multifamily	0
Building Type	Multifamily	Multifamily
Other Building Type	-	-
Reported Annual Savings (kWh)	111.00	791.00
Reported Peak Demand Savings (kW)	0	0
Verified Annual Savings (kWh)	201.00	777.37
Verified Peak Demand Savings (kW)	0.01	0.12
GRR: Energy Savings (%)	181%	98%
GRR: Peak Demand Savings (%)	#DIV/0!	100%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	Ex ante used 2024 workpapers to calculate the savings for energy star Dish washer.	Ex ante used 2024 workpapers to calculate the savings for Energy star Refrigerator measure.
Ex-post Calculation Assessment	Dishwasher: Ex ante savings used deemed savings value of 37 kWh per dishwasher based on the 2024 workpaper which is consistent with the IL v10 TRM. The evaluation team used the deemed savings value of 67 kWh consistent with the IL v13 TRM. The program tracking data reported 0 kW savings for the Dishwasher measure. The evaluation team calculated total	Ex ante calculations used a rounded value of Deemed savings of 46.8 kWh/cu.ft. to calculate savings. The evaluation team used Deemed savings of 46.83 kWh/cu.ft. to calculate verified savings.

	peak kW savings using deemed peak kW savings of 0.0147 kW per dishwasher consistent with the IL V13 TRM.	

Project ID	PRJ-39637-2025	PRJ-39638-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Multifamily Retrofit LMI	Multifamily Retrofit LMI
Project Description	Energy star Dishwasher and Refrigerator	0
Measure Type	0	Retrofit Other
Building Type	Multifamily	Multi family
Other Building Type	-	-
Reported Annual Savings (kWh)	828.00	160.07
Reported Peak Demand Savings (kW)	0	0
Verified Annual Savings (kWh)	844.37	160.07
Verified Peak Demand Savings (kW)	0.12	0.04
GRR: Energy Savings (%)	102%	100%
GRR: Peak Demand Savings (%)	104%	100%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	Ex ante used 2024 workpapers to calculate the savings for energy star Dish washer and Energy star Refrigerator	Ex-ante used NM 2025 TRM algorithm for savings calculation. Washer capacity was taken from spec sheet and type for dryer was verified from energy star certificate
Ex-post Calculation Assessment	Refrigerator: Ex ante calculations used a rounded value of Deemed savings of 46.8 kWh/cu.ft. to calculate savings. The evaluation team used Deemed savings of 46.83 kWh/cu.ft. to calculate verified savings. Dishwasher: Ex ante savings used deemed savings value of 37 kWh per dishwasher based on the 2024 workpaper which is consistent with the IL v10 TRM. The evaluation team used the deemed savings value of 67 kWh consistent with the IL v13 TRM.	0.00

	The program tracking data reported 0 kW savings for the Dishwasher measure. The evaluation team calculated total peak kW savings using deemed peak kW savings of 0.0049 kW per dishwasher consistent with the IL V13 TRM.	

Project ID	PRJ-39659-2025	PRJ-39852-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Multifamily Retrofit LMI	New Construction
Project Description	Installation of Energy star Dishwasher and Refrigerator and washing machine	New Construction Lighting
Measure Type	0	New Construction Lighting
Building Type	Multifamily	0
Other Building Type	-	-
Reported Annual Savings (kWh)	1,713.82	10,975.69
Reported Peak Demand Savings (kW)	0	0
Verified Annual Savings (kWh)	1,962.66	11,118.05
Verified Peak Demand Savings (kW)	0.33	0.32
GRR: Energy Savings (%)	115%	101%
GRR: Peak Demand Savings (%)	138%	80%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	Ex ante used 2024 workpapers to calculate the savings for energy star Dish washer and Energy star Refrigerator and washing machine	The ex-ante calculations referred the workpapers for LPD, CF, WHF_e, and HOU factor. Interior installations include fixtures in the Workshop and exterior fixtures include fixtures in Building Façade. All fixtures were DLC certified. The evaluation team was not able to recreate the ex-ante for fixtures in Workshop area as it is uncertain which baseline values ex-ante has used to calculate the savings.
Ex-post Calculation Assessment	Refrigerator: Ex ante calculations used a rounded value of Deemed savings of 46.8 kWh/cu.ft. to calculate savings. The evaluation team used Deemed savings of 46.83 kWh/cu.ft. to calculate verified savings. Dishwasher: Ex ante savings used deemed savings value of	The evaluation used NM TRM 2025 to calculate the savings of interior lightings. For exterior lights (Building Façade -length), the linear foot details are not provided in the TRM. The evaluation team used Utility Workpaper to select the LPD values.

	37 kWh per dishwasher based on the 2024 workpaper. The evaluation team used the deemed savings value of 67 kWh consistent with the IL v13 TRM. The program tracking data reported 0 kW savings for the Dishwasher measure. The evaluation team calculated total peak kW savings using deemed peak kW savings of 0.0049 kW per dishwasher consistent with the IL V13 TRM. Clothes washer: ex-ante analysis considered a front-load machine and applied the corresponding deemed values. The savings were calculated by the evaluation team based on a top-load machine, as indicated in the ENERGY STAR certificate.	

Project ID	PRJ-39952-2025	PRJ-40148-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Retrofit Rebate	Retrofit
Project Description	LED Grow Lights	Replacing Old Inefficient Transformers with New High Efficiency Transformers
Measure Type	Retrofit Lighting	Retrofit Other
Building Type	0	Education – University
Other Building Type	-	-
Reported Annual Savings (kWh)	430,700.00	72,497.00
Reported Peak Demand Savings (kW)	66	6
Verified Annual Savings (kWh)	268,806.86	80,469.46
Verified Peak Demand Savings (kW)	39.49	9.59
GRR: Energy Savings (%)	62%	111%
GRR: Peak Demand Savings (%)	60%	152%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Custom Calculation
Ex-ante Calculation Assessment	The evaluation team was unable to exactly recreate the Ex Ante savings; however, the recreated savings are within 10% of the reported values. The ex-ante analysis used the NM TRM values. Both 2023 and 2025 versions provide the same inputs. Calculations seem to be on a general level as opposed to calculating information space by space. Specifically, the inputs used follow the primary assumption that all fixtures were installed to propagation spaces. This is unlikely the case as the facility includes three rooms, each expected to be for a different stage of growth. Since the TRM provides growth stage values, those should be used to determine savings.	Ex ante workbook calculates savings for the transformer replacement project as the difference in no load and full load losses between pre-existing and installed transformers at different loading depending on occupied and unoccupied hours. Installed transformers range from 45, 75, 112.5, and 500 kVa. Spec sheet were provided to support no load and full load loss values (W) for all installed transformers. The savings also include HVAC impacts based on the reduction in cooling load for each unit. All installed units meet the DOE requirement per 10 CFM 431 for units installed after 1/1/16. The workbook includes baseline no load and full load losses, as well as expected loading for occupied and unoccupied hours. It is not clear if this information was modeled based on pre-

		existing units, or if it is based on historical data for similar sized units. The model also assumes a linear relationship between no load and full load losses. The HVAC impacts are calculated assuming an equipment efficiency of .75 kW/ton which is unsupported in the provided documentation.
Ex-post Calculation Assessment	The ex-post analysis refers to the NM TRM. The primary deviation is that the analysis was split to determine savings for each area/stage growth (flowering, vegetative, and propagation). This captures more accurate energy impacts as each stage has varying hours of use, and required photon flux to promote plant growth. Based on the post inspection photos, we assumed the two largest areas were for flowering and vegetative stages while the smallest is for propagation. The appropriate TRM values have been used accordingly. Notable deviations are for hours of use, waste heat factors, and baseline PPF. Findings: The implementor appears to have calculated savings on a general level, as engineering inputs indicate all fixtures were installed to the propagation area. This is not the case as fixtures were installed for flowering and vegetative spaces, which have different operating conditions and photo flux requirements. Recommendation: For all cannabis lighting measures, ensure energy impacts are calculated using a space by space approach, as each growth stage has different requirements and operating conditions impacting overall savings estimates.	The primary deviations are associated with the loss curve. The provided spec sheets show losses for different loading. When modeled, losses increase exponentially with loading, not linearly. Furthermore, baseline is not modeled appropriately, as the equation is not linear. The expost applied a linear equation based on the baseline no load and full load losses, and modeled the installed losses using exponential curves.

Project ID	PRJ-40160-2025	PRJ-40280-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Retrofit	Multifamily Retrofit
Project Description	Replacement of aging standard efficiency transformer	Installation of E-start Window
Measure Type	Retrofit Custom	Retrofit Other
Building Type	Education – University	Multi-Family
Other Building Type	-	-
Reported Annual Savings (kWh)	15,859.00	3,019.42
Reported Peak Demand Savings (kW)	1	0
Verified Annual Savings (kWh)	15,858.50	3,031.10
Verified Peak Demand Savings (kW)	1.45	2.79
GRR: Energy Savings (%)	100%	100%
GRR: Peak Demand Savings (%)	105%	1002%
Ex Ante Calculation Methodology	Custom Calculation	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	For the ex-ante analysis, transformer kW losses were calculated using the standard transformer loss equation: P_loss= no-load (core) losses + per-unit load^2*copper losses at full load Annual transformer energy losses (kWh) were then determined as: transformer losses during operating hours (kW)×Operating hours per year+transformer losses during non-operating hours×Non-operating hours per year This accounts for different loss levels during operating and non-operating hours, reflecting variations in transformer	Ex-ante used NM TRM algorithm for calculation. Deemed value were used from workpaper.

	loading throughout the year. Also to calculate the peak demand savings they are using C.F of 0.76	
Ex-post Calculation Assessment	The ex-post analysis applied the same transformer loss methodology as the ex-ante calculation. Because we were unable to independently verify the project's %on, %off, and baseline inputs, we adopted the values supplied in the project documentation. The small deviation in the RR is due to rounding differences only.	The ex-post analysis used the TRM methodology for savings calculation. For kWh, the cooling source was taken as Refrigerated Air and heating as Heat Pump, with a deemed value of 4.46 kWh/sq.ft. For kW, the cooling type was Refrigerated Air with a deemed value of 0.0041 kW/sq.ft. The ex-ante analysis, however, used the workpaper, which reported an incorrect deemed kW value due to a misplaced decimal point, resulting in a smaller deemed savings. For example, in the TRM for Albuquerque, the deemed kW for Refrigerated Air is 0.00474, whereas the workpaper used 0.000474.

Project ID	PRJ-40281-2025	PRJ-40401-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Retrofit Rebate	Retrofit
Project Description	Installation of new high-efficiency LEDs	HVAC Retrofit - equipment replacement
Measure Type	Retrofit Lighting	Retrofit HVAC
Building Type	0	Elementary School
Other Building Type	-	-
Reported Annual Savings (kWh)	10,241.06	5,291.00
Reported Peak Demand Savings (kW)	0	4
Verified Annual Savings (kWh)	10,238.12	3,363.08
Verified Peak Demand Savings (kW)	0.00	5.60
GRR: Energy Savings (%)	100%	64%
GRR: Peak Demand Savings (%)	0%	144%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Other:
Ex-ante Calculation Assessment	Exterior lighting fixtures were installed at the facility, with the ex-ante analysis using HOU from the the NM TRM 2025. The Coincidence Factor (CF) and HVAC interactive factors were referenced from the NM TRM 2025. No controls were included in the project. To replicate the ex ante savings, the evaluation applied a rated system input wattage of 465 W for fixtures nominally identified as 400 W HPS, consistent with the New York Device Codes and Rated Lighting System Wattage tables, which specify total connected input power for lighting systems.	The ex ante calculations used the NM TRM 2025 methodology. The SEER/IEER values were used instead of the SEER2/IEER2 values. These SEER2/IEER2 values were found in the AHRI certificates. For Item #3, the EER_base value was set to the 2023 TRM value of 11.2 for units between 65000-135000 btuh. The 2025 TRM did not have a EER_base value for this size category.
Ex-post Calculation Assessment	The Ex Post analysis followed a methodology similar to the Ex Ante approach. Additionally, the efficient wattages and the DLC-tested wattages for the installed fixtures are identical in both analyses; therefore, no variation arises from these values	The evaluation used NM TRM 2025 to calculate the ex post savings. The cooling capacity, SEER2/EER2, and location were all determined by AHRI certificates and project documentation.

		The SEER and IEER values were replaced by the appropriate SEER2 and IEER2 values.

Project ID	PRJ-40463-2025	PRJ-40496-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	New Construction	New Construction
Project Description	Installing new efficient ASHP	New Construction Lighting
Measure Type	New Construction Lighting	New Construction Lighting
Building Type	Storage – Unconditioned	Warehouse
Other Building Type	-	-
Reported Annual Savings (kWh)	7,058.70	9,728.94
Reported Peak Demand Savings (kW)	1	2
Verified Annual Savings (kWh)	3,939.81	2,835.25
Verified Peak Demand Savings (kW)	0.65	0.75
GRR: Energy Savings (%)	56%	29%
GRR: Peak Demand Savings (%)	51%	37%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	- Ex Ante used LPD values from 2024 workpapers/ NM TRM 2021. - Ex Ante rounded up the numbers for "kW reduced" calculations. - Ex Ante used averaged HOU for interior fixtures. (coming from workpaper) - Ex Ante used HVAC interactive factors from workpapers which are matching the TRM. - All interior fixtures are DLC certified while one of the exterior fixture is non certified. Ex Ante considered non DLC fixture wattage in installed wattages for exterior lighting. - There is a discrepancy in qty of exterior fixtures and ComCheck document.	The Ex-Ante calculation was performed using the NM TRM 2023. The WHFe, WHFd, and CF values for the office and warehouse spaces were selected in accordance with NM TRM 2023 specifications. The documentation included the lighting Comcheck, but there is misalignment between what was specified vs what was used to determine savings. For example, the comcheck specified the space by space LPD values per IECC 2021, while the ex-ante savings refer to building weighted averages per IECC 2018, as specified in the NM TRM version 2023. Lighting wattages refer to DLC tested wattage. Hours of use values were taken from the NM TRM 2023 version for office and storage spaces. The evaluator was unable to recreate tracked savings exactly, but using the inputs mentioned yield 96.5% of the result.

Ex-post Calculation Assessment	- Ex Post used NM TRM 2025 for savings calculations. - Ex Post used ComCheck Document for baseline LPD values and areas which are verified from drawings. - For exterior lights (Building Façade -length), the linear foot details are not provided in the TRM. The evaluation team used zone 2 LPD value as per ComCheck in W/ft2 and assumed height of 30ft. Ex Post did not consider the savings for exterior lighting as the savings are going negative and also there is a methodology difference between Ex Ante and ComCheck. - The DLC tested/reported wattages are used wherever applicable. - The qty of fixtures are taken as per LPD calculation sheet as no invoice is present to verify.	The Ex-Post calculation was performed using the NM TRM 2025. The WHFe, WHFd, and CF values for the office and warehouse spaces were selected in accordance with NM TRM 2025 requirements, which are equal to NM 2023 TRM values. The sources used for savings estimation— including allowable wattage per square foot and LPD values for office and warehouse spaces—were taken from the Lighting Compliance Certificate, which is based on IECC 2021 code requirements using the space by space table. HOU were also taken from the 2025 TRM. Installed fixtures wattages were reported based on DLC tested wattages. Findings: There is misalignment between the Comcheck and inputs used in the ex-ante estimates, notably LPD. There is also misalignment in the appropriate use of the TRM. The ex-ante calculations utilize inputs from the 2023 version, when the 2025 version was most applicable. Recommendation: For New construction projects, implementors should ensure there isn't a misalignment between LPDs specified on the Comcheck document vs. what is used within energy savings calculations. This will enforce the use of the applicable code requirements for the project. Furthermore, the appropriate TRM should be used.

Project ID	PRJ-40497-2025	PRJ-40872-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	Multifamily Retrofit LMI	New Construction
Project Description	Installation of Exterior lighting and Energy star rated Refrigerator	Installing new efficient ASHP
Measure Type	0	Retrofit HVAC
Building Type	Multifamily	Multifamily Dwelling
Other Building Type	-	-
Reported Annual Savings (kWh)	155,975.40	43,451.43
Reported Peak Demand Savings (kW)	24	7
Verified Annual Savings (kWh)	158,232.70	34,852.08
Verified Peak Demand Savings (kW)	24.09	8.90
GRR: Energy Savings (%)	101%	80%
GRR: Peak Demand Savings (%)	101%	126%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	Ex ante used 2024 workpapers to calculate the savings.	Ex Ante could not be fully recreated. The source of SEER/EER/ HSPF values typed additionally on the AHRI certificates are not known. By using workpaper 2024, only kW savings could be replicated.
Ex-post Calculation Assessment	Refrigerator: Ex ante used the rounded off volume capacity (16.9) and deemed savings value of 791 kWh per refrigerator from 2024 workpapers to calculate the savings for Energy star Refrigerator measure. whereas ex post analysis used the actual capacity (17.5) and actual deemed savings value of 800.92 kWh to calculate verified savings by doing interpolation calculation method.	- Ex Post used NM TRM 2025 for savings calculations. - Ex Post used AHRI certificate for SEER2/EER2/HSPF2 values.

Project ID	PRJ-41240-2025	PRJ-41260-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	New Construction	Retrofit
Project Description	HVAC and Lighting Replacement	Installation of VSDs
Measure Type	New Construction Lighting	Retrofit HVAC
Building Type	University	Office – Large
Other Building Type	-	-
Reported Annual Savings (kWh)	95,742.94	4,065,226.00
Reported Peak Demand Savings (kW)	29	402
Verified Annual Savings (kWh)	75,822.34	3,215,575.85
Verified Peak Demand Savings (kW)	23.31	551.16
GRR: Energy Savings (%)	79%	79%
GRR: Peak Demand Savings (%)	80%	137%
Ex Ante Calculation Methodology	Other:	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	HVAC - Ex Ante calculations could not be recreated with NM TRM 2025. - The source of SEER/EER/ HSPF values for heat pump typed additionally on the AHRI certificates are not known. NC Lighting - LPD, wattage, and square footage were determined by project documentation. - The HOU value is determined using the workbook. - There is a discrepancy in ComCheck document and Ex Ante sheet. - Ex Ante rounded up the numbers for "kW reduced" calculations. - No final lighting invoice is provided.	Ex-ante applied the NM TRM 2025 algorithm for the custom chiller savings calculation. For the VSD measures on Supply Fans, Cooling Water Pumps, and Cooling Tower Fans, the kWh per motor HP and kW per motor HP deemed values were sourced from the PNM 2024 workpaper. However, the evaluation team was unable to replicate the reported kW savings using the deemed value of 0.185 kW per HP for the cooling water pumps.

Ex-post Calculation Assessment	HVAC- - Ex Post used NM TRM 2025 for savings calculations. - Ex Post used building type as "Education - University" and used EFLH/CF values accordingly. As the TRM does not have heating EFLH for "Education - University", the values for "Education - Secondary School" were used. - Ex Post used Capacities/SEER2/EER2/HSPF2 values from AHRI Certificate and spec sheet. 'NC Lighting- - Ex Post used NM TRM 2025 for savings calculations. - Ex Post used IECC 2018 values as per ComCheck document. - Ex Post used zone 3 LPD value for exterior lighting as per Ex Ante. - Ex Post considered total installed wattage as per qty from LPD calculation;not comCheck.	For the custom chiller savings calculation, Ex Post followed the same methodology as Ex Ante, as the NM TRM 2025 algorithm was used for the evaluation. For the VSD measures on Supply Fans, Cooling Water Pumps, and Cooling Tower Fans, the kWh per motor HP and kW per motor HP deemed values were sourced from the NM TRM 2025.

Project ID	PRJ-41319-2025	PRJ-41605-2025
Utility	PNM	PNM
Program	Commercial Comprehensive	Commercial Comprehensive
Subprogram	New Construction	Retrofit Rebate
Project Description	Installing new efficient ASHP/ AC/ Lighting	Installation of new high-efficiency LEDs
Measure Type	New Construction Lighting	Retrofit Lighting
Building Type	Office – Small	Office-Small
Other Building Type	-	-
Reported Annual Savings (kWh)	7,495.81	3,410.00
Reported Peak Demand Savings (kW)	2	1
Verified Annual Savings (kWh)	1,690.16	3,032.75
Verified Peak Demand Savings (kW)	0.13	1.04
GRR: Energy Savings (%)	23%	89%
GRR: Peak Demand Savings (%)	6%	101%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	NC Lighting- - Ex Ante used zone 3 LPD values. - Ex Ante rounded up the numbers for "kW reduced" calculations. Further, those calculations are done on basis of qualifying fixture % on DLC criteria. - There is a discrepancy in qty of fixtures and ComCheck document. Further, only uncovered parking area is considered for reported calculations whereas ComCheck includes several other interior and exterior fixtures. The reason of this is not known. HVAC - The Ex Ante could be recreated with PNM Workpaper 2024 with some minor tweaks, but the workpaper methodology is not correct. Further using NM TRM, only kWh values are	Interior lighting fixtures were installed in the facility, with the ex-ante analysis using the NM TRM 2025. The Coincidence Factor (CF) and HVAC interactive factors were referenced from the NM TRM 2025. No controls were included in the project. Ex ante used NM TRM 2025 for saving calculations but appears to have used interactive factor for Albuquerque instead of Santa Fe.

	getting close. - The source of SEER/EER/ HSPF values for heat pump typed additionally on the AHRI certificates are not known. - Ex Ante used 0.34 CF value irrespective of building type.	
Ex-post Calculation Assessment	NC Lighting- - Ex Post used NM TRM 2025 for savings calculations. - Ex Post used zone 2 LPD value and total parking area. as per ComCheck. - Ex Post considered total installed wattage as per qty from LPD calculation;not comCheck. - Ex Post did not consider the negative savings arising due to change in LPD value, HVAC- - Ex Post used NM TRM 2025 algorithm and values. - Ex Post did not consider negative kW savings value arrising due to EER values.	Ex post used Santa Fe interactive factor which resulted in a variation in RR.

Project ID	PRJ-41633-2025
Utility	PNM
Program	Commercial Comprehensive
Subprogram	Retrofit
Project Description	Multifamily Retrofit
Measure Type	Multifamily
Building Type	Multifamily Dwelling
Other Building Type	-
Reported Annual Savings (kWh)	44,442.62
Reported Peak Demand Savings (kW)	4
Verified Annual Savings (kWh)	45,011.64
Verified Peak Demand Savings (kW)	2.38
GRR: Energy Savings (%)	101%
GRR: Peak Demand Savings (%)	55%
Ex Ante Calculation Methodology	Prescriptive (TRM, Workpaper)
Ex-ante Calculation Assessment	i) Cloth Washer and Dryer :Ex-ante used NM 2025 TRM algorithm for savings calculation. Cloth Washer capacity was taken from spec sheet and type for Cloth dryer was verified from energy star certificate. ii) Dishwasher: Ex Ante used NM workpaper values to evaluate the Dishwasher savings. iii) Air Source Heat Pump: Ex Ante could not be fully recreated. The source of SEER/EER/ HSPF values was calculated using Conversions formula in NM TRM. By using workpaper 2024, kW and kWhsavings could be replicated. iv) Low Faucet Aerator – Ex Ante used the average savings value of 30.26 kWh for the Albuquerque, Las Cruces, and Santa Fe regions, based on the NM Workpaper, for a

	proposed flow rate of 1.5 gpm compared to the baseline flow rate of 2.2 gpm. v) Low Flow Showerheads – Ex Ante used an average savings value of 219.23 kWh, derived from the NM Workpaper as the average of the Albuquerque, Las Cruces, and Santa Fe regional values, for a proposed flow rate of 1.75 GPM compared to a baseline flow rate of 2.5 GPM. vi) Exhaust Fans - Ex Ante used NM workpaper deemed values to evaluate the exhaust fans savings. vii) Refrigerators -Ex Ante calculations applied a rounded deemed savings value of 22 kWh per cubic foot for the evaluation, in accordance with the methodology outlined in the NM Workpaper. viii) Smart T-Stat Custom - Ex Ante calculated both heating (kWh) and cooling (kWh) savings for the Smart Thermostat measure, which directly controls the operation of the entire heat pump system. The savings were estimated using a custom algorithm in which the SEER and HSPF values from the AHRI Certificate were multiplied by adjustment factors of 1.05 and 1.18, respectively; however, the basis for these factors is unknown.
Ex-post Calculation Assessment	i) Cloth Washer and Dryer :Ex Post used NM 2025 TRM algorithm for savings calculation. Cloth Washer capacity was taken from spec sheet and type for Cloth dryer was verified from energy star certificate. ii) Dishwasher: Ex Post used NM TRM 2025 values to evaluate the Dishwasher savings which are consistent with IL TRM v13. iii) Air Source Heat Pump: Ex Post used NM TRM 2025 for savings calculations. - The EFLH and CF values are taken from Residential measure as the building type is Multifamily.

	- Ex Post used AHRI certificate for SEER2/EER2/HSPF2 values. iv) Low Faucet Aerator – Ex Post applied an average savings value of 30.76 kWh for the Albuquerque region, based on the NM TRM 2025, assuming a proposed flow rate of 1.5 gpm and a baseline flow rate of 2.2 gpm. v) Low Flow Showerheads – Ex Post used a savings value of 222.1 kWh, as specified in the NM TRM 2025 for the Albuquerque region under the Multifamily facility type, for a proposed flow rate of 1.75 GPM compared to a baseline flow rate of 2.5 GPM. vi) Exhaust Fans - Ex Post used NM TRM 2025 deemed values to evaluate the exhaust fans savings. vii) Refrigerators -Ex Post calculations applied exact value of 22.3 kWh per cubic foot for the evaluation, in accordance with the methodology outlined in the NM TRM 2025. viii) Smart T-Stat Custom - Ex Post followed the same methodology used in the Ex Ante savings calculation.

E. Residential Products Predicted Average Monthly Sales and NTG Ratio by Price

To further show the relationship between the price of a product, monthly sales, and associated NTG ratio, the evaluation team plotted predicted monthly sales and NTG ratio by the price per unit paid by the customer, for all measures. Results for nightlights and advanced power strips are included in Section 4.2.1 and figures for all other measures are below. This includes: air purifier, big gap filler, ceiling fan, cinch door seal (bottom), cinch door seal (top), ENERGY STAR bath vent fan, ENERGY STAR water cooler, pleated air filter, room air conditioner, and window film roll measures.

Figure 56: Air Purifier Predicted Average Monthly Sales and NTG Ratio by Price

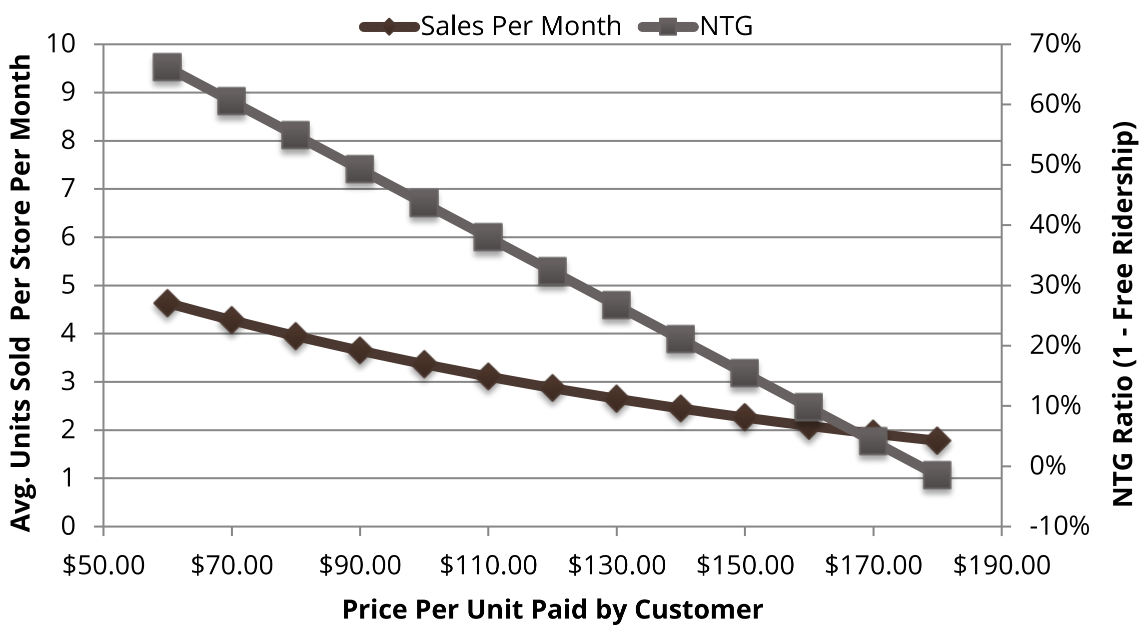


Figure 57: Big Gap Filler Predicted Average Monthly Sales and NTG Ratio by Price

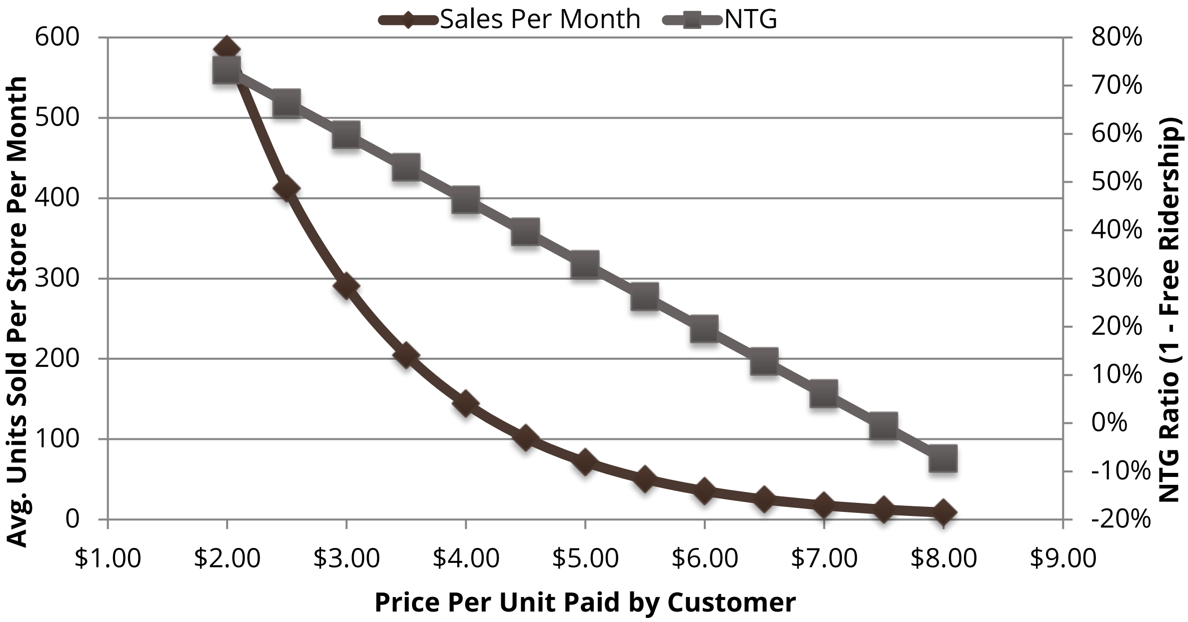


Figure 58: Ceiling Fan Predicted Average Monthly Sales and NTG Ratio by Price

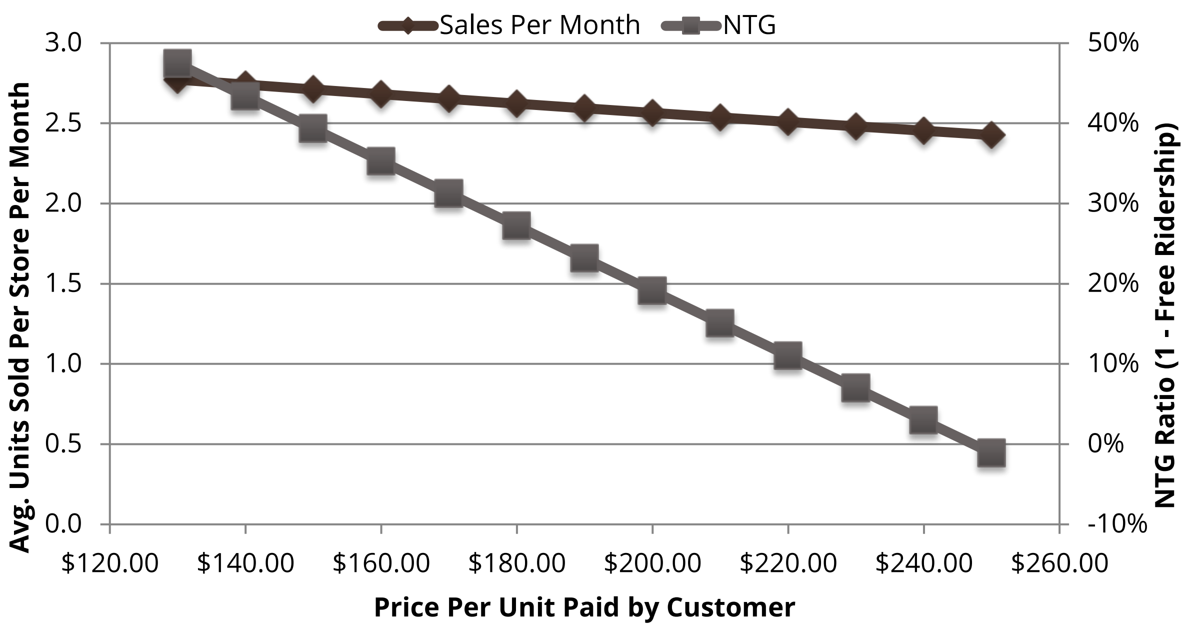


Figure 59: Cinch Door Seal (Bottom) Predicted Average Monthly Sales and NTG Ratio by Price

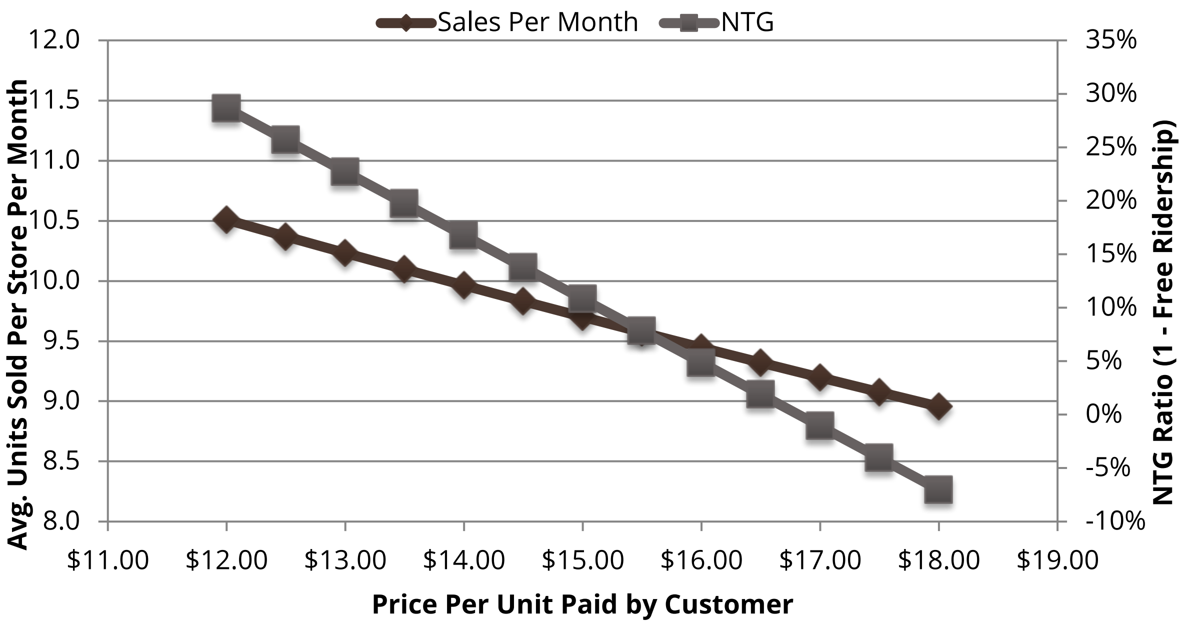


Figure 60: Cinch Door Seal (Top) Predicted Average Monthly Sales and NTG Ratio by Price

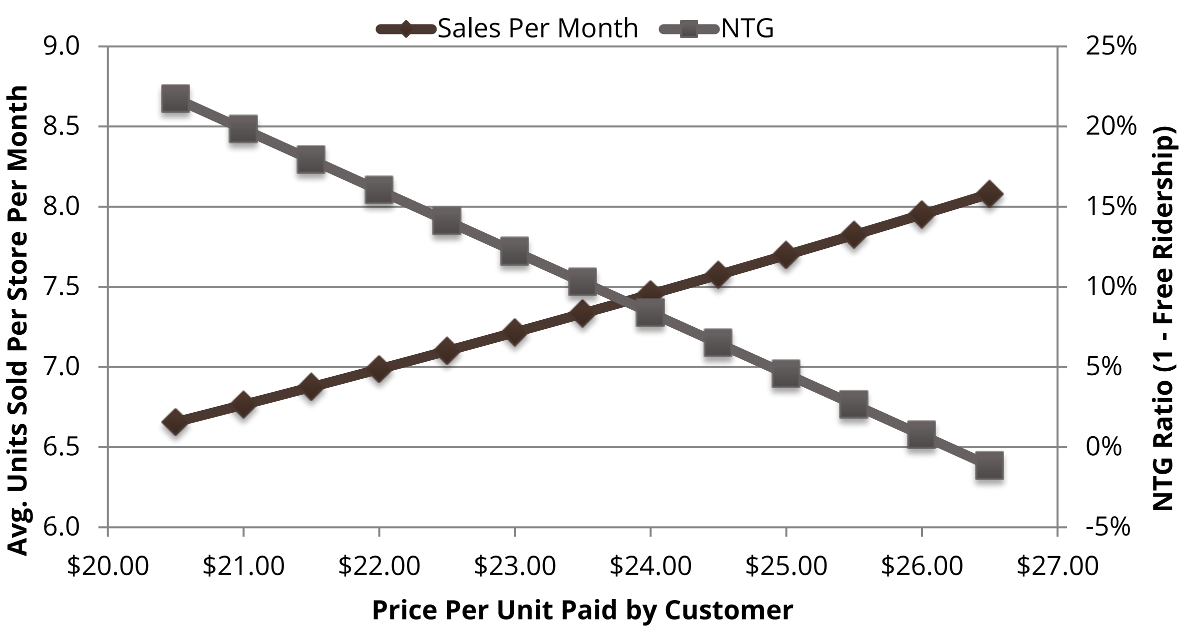


Figure 61: ENERGY STAR Bath Vent Fan Predicted Average Monthly Sales and NTG Ratio by Price

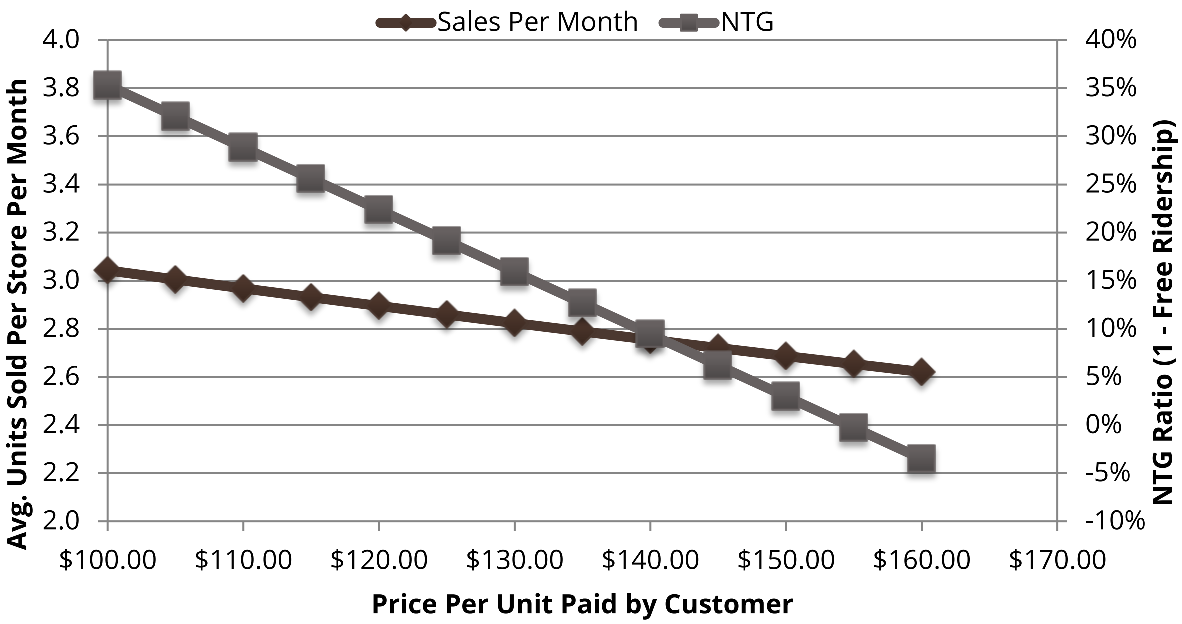


Figure 62: ENERGY STAR Water Cooler Predicted Average Monthly Sales and NTG Ratio by Price

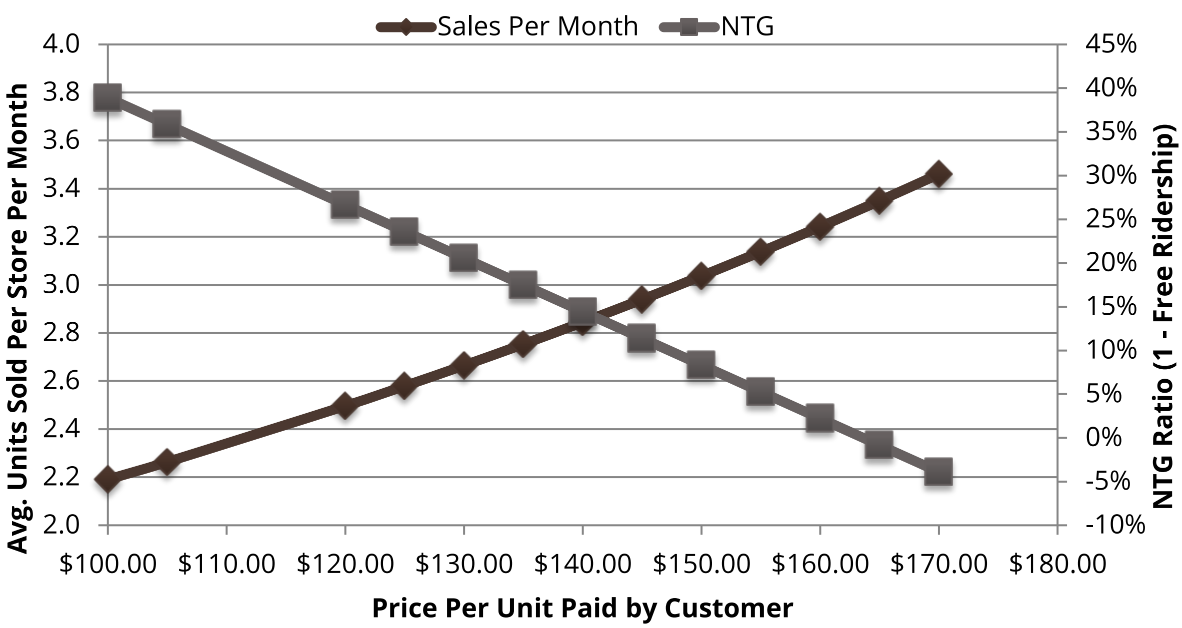


Figure 63: Pleated Air Filter Predicted Average Monthly Sales and NTG Ratio by Price

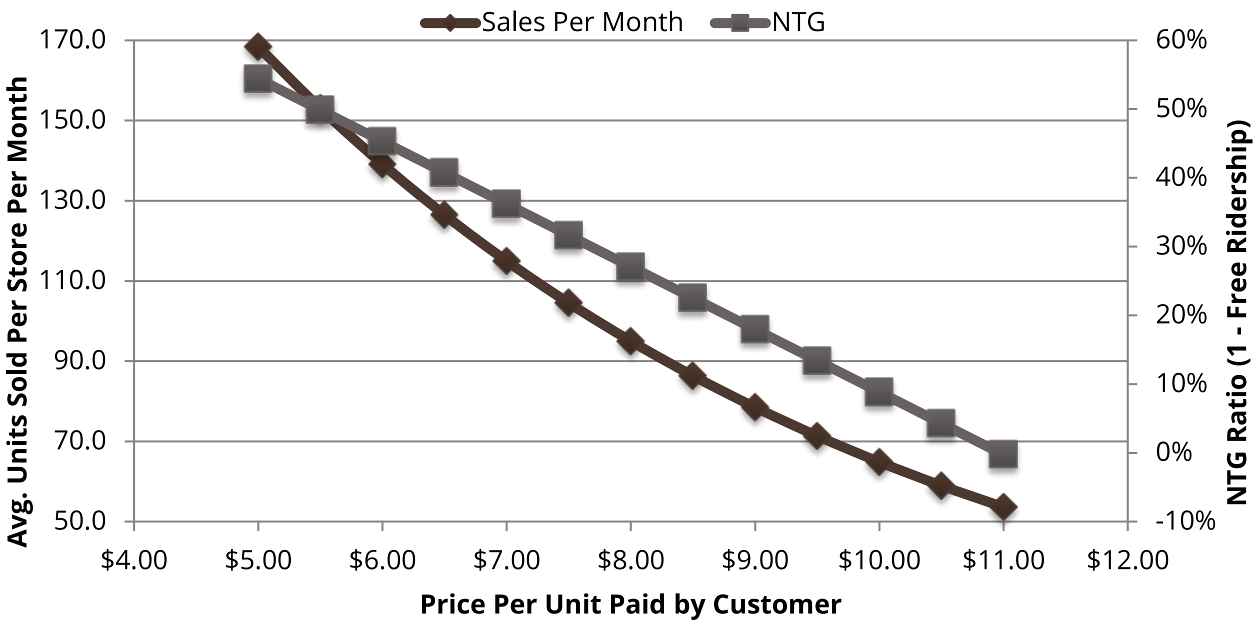


Figure 64: Room Air Conditioner Predicted Average Monthly Sales and NTG Ratio by Price

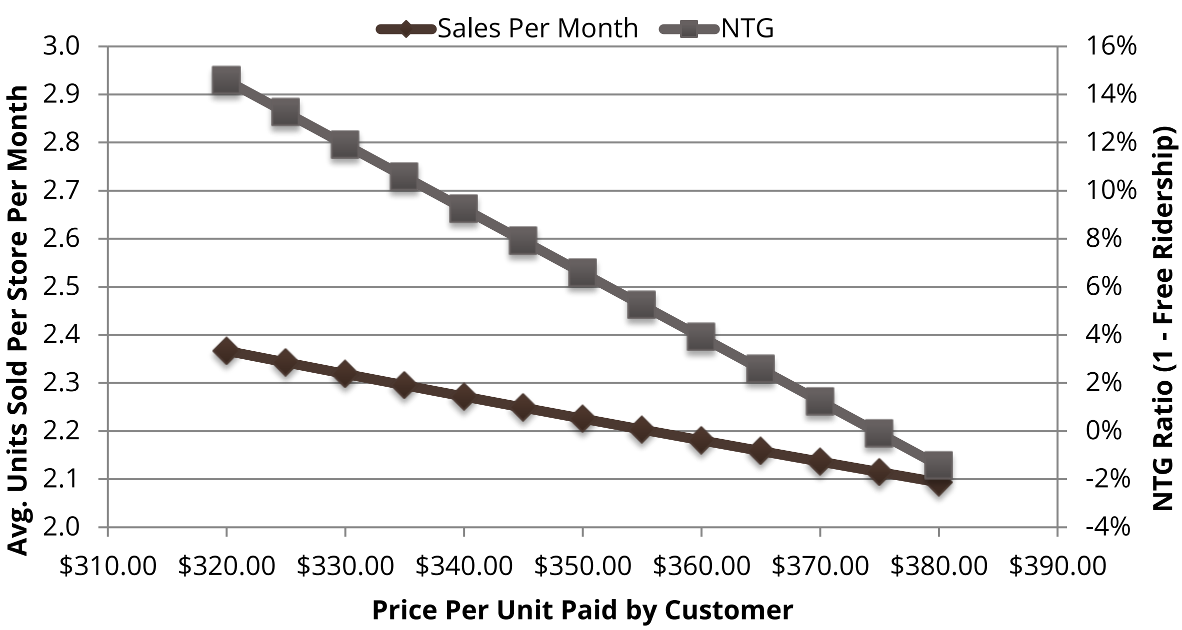


Figure 65: Window Film Roll Predicted Average Monthly Sales and NTG Ratio by Price