



Nicor Gas Proposed Portfolio PY7-PY10

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Agenda

- Nicor Gas portfolio structure
- Portfolio design objectives
- Proposed
 - Portfolio results
 - Portfolio results as compared to previous filing
- Business program
- Residential program
- Income Qualified program
- ETP and MT Programs
- Next Steps



Nicor Gas Portfolio Structure



The proposed energy efficiency portfolio structure closely follow overall Marketing and Outreach strategy by grouping offerings into assessment, rebates and free products.

energySMART
A Nicor Gas program

Your home | Your business | Community

Home > Your home

- Assessments
- Rebates
- Free products
- Loans
- Free weatherization

energySMART
A Nicor Gas program

Your home | **Your business** | Comm

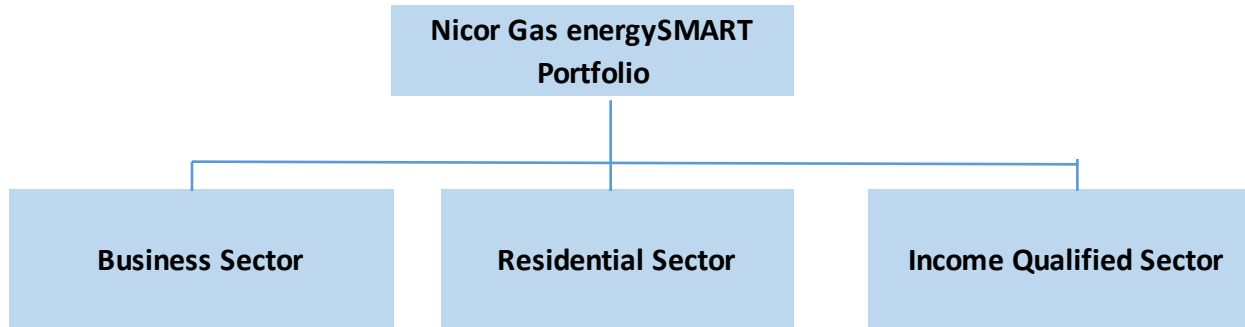
Home > Your business

- Assessments
- Rebates
- Free products
- Loans
- Custom incentives

Nicor Gas Portfolio Structure Cont'd.



The offerings are further grouped to serve Business (commercial, industrial, public sector), Residential, and Income Qualified customers



Business Programs and Offerings



Business Sector				
Strategic Energy Management Program (SEM)	Small Business Program (SB)	Prescriptive Rebates Program (BEER)	Custom Incentive Program	New Construction Track
Process & Operational Optimization	Technical assistance and audits with DI	Technical assistance and audits with DI	Mid and Large Customized projects	Beyond code commercial new construction rebates
	Space and Water heating rebates	Space and Water heating rebates	RCx projects	
	Commercial Kitchen, Laundromat	Commercial Kitchen (Including mid-stream)	CHP	
	Steam traps and Pipe insulation	Steam Traps		
		HVAC controls, Modulating dryer controls		

Sector
Program
Key Measures

Residential Programs and Offerings



Residential Sector				
Energy Education and Outreach Program	Prescriptive Rebates Program (HEER)	Weatherization Program (HES)	Multifamily Program (MF)	New Construction Program (RNC)
Home Energy Reports	Space heating rebates (Furnaces, Boiler)	Air sealing and Insulation	Living units DI (low flow, reprogramming)	Builders and Raters rebates for beyond code construction
Energy Education	Controls rebates (Smart T-stats)	Basement / Sidewall / Duct sealing	Laundry, water heating and circulation controls, pipe insulation	
Energy Saving Kits	Air balancing and HVAC optimization rebates	SF Assessments and Audits with DI (Low flow, pipe wrap)	Building HVAC system retrofit and maintenance rebates	
		Controls (smart t-stats, reprogramming)	Customized rebates	

Sector
Program
Key Measures

Income Qualified Program and Offerings



Income Qualified Sector		
SF Weatherization & Retrofits	Public Housing Authority / Multifamily	Affordable New Construction
Air Sealing and Attic / Wall insulation	Living units assessments with DI (low flow, wraps, controls)	Rebates for developers of affordable housing
Smart T-stats	PHA building HVAC retrofit / maintenance rebates	
Assessments	Customized incentives - Building projects	
Space heating and water heating equipment installs		

Sector
Program
Key Measures

Portfolio Design Objective



1. Budget
 - Do not exceed statutory budget
 - Size programs according to rate class contribution
2. Cost-effectiveness
 - Cost-effective portfolio
3. Savings
 - Annual and lifecycle savings
4. Fairness
 - Provide diverse cross section of opportunities
5. Market
 - Maintain stability for trade partners
6. Economic development
 - Increase economic activity in Illinois
7. Business Diversity

Proposed Portfolio Results



PY7-PY10 Proposed Targets	
Spending	\$160.5 MM
First Year Therm Savings (Net)	66 MM
Life Cycle Therm Savings (Net)	813 MM
Net Benefits	\$472 MM
TRC	2.64
Economic Impacts	\$131 MM economic output, 1,287 jobs and \$50 MM in wages supported annually
Cost Per First Year Therm Saved	\$2.43
Cost Per Life Cycle Therm Saved	\$0.19
Total Customer Touches	733,845

Proposed Portfolio Results – Comparison vs. Prior Approved Filings



Key Metrics	Docket 16-0421 Approved Targets Nicor Gas only	Docket 16-0421 and Docket 16-0422 Approved Combined	Proposed Plan
\$ / Net Therm	\$2.42	\$2.43	\$2.43
\$ / LC Net Therm	\$0.18	\$0.18	\$0.19
Annual Therms	12,400,476	16,507,982	16,510,753
LC Therms	166,507,527	213,989,943	203,402,821
Portfolio ML	13.43	12.96	12.32
Customer Touched	86,909	88,409	183,518

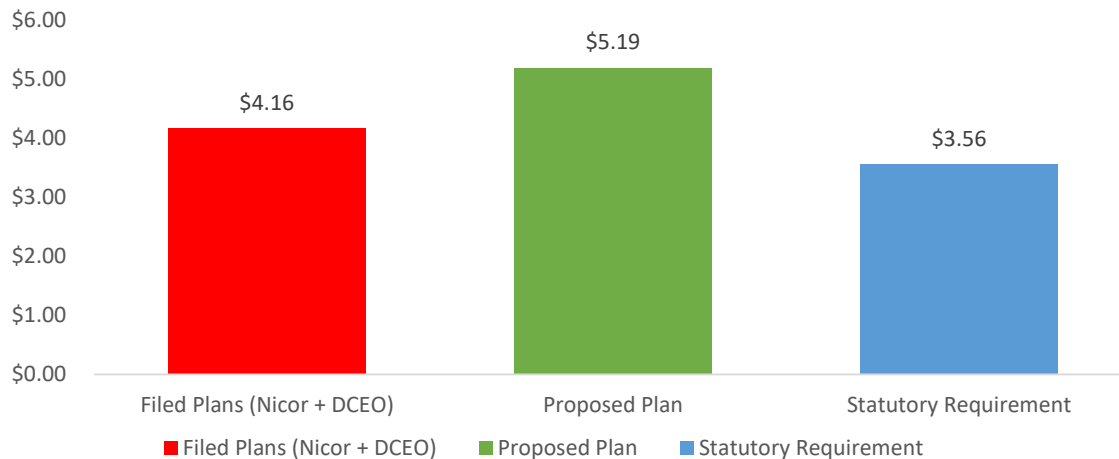
- Total customer touches over 4 years at ~734K in proposed plan vs. 263K over three years in previous filings

Income Qualified Statutory fulfilment – Comparison vs. Filed Plans

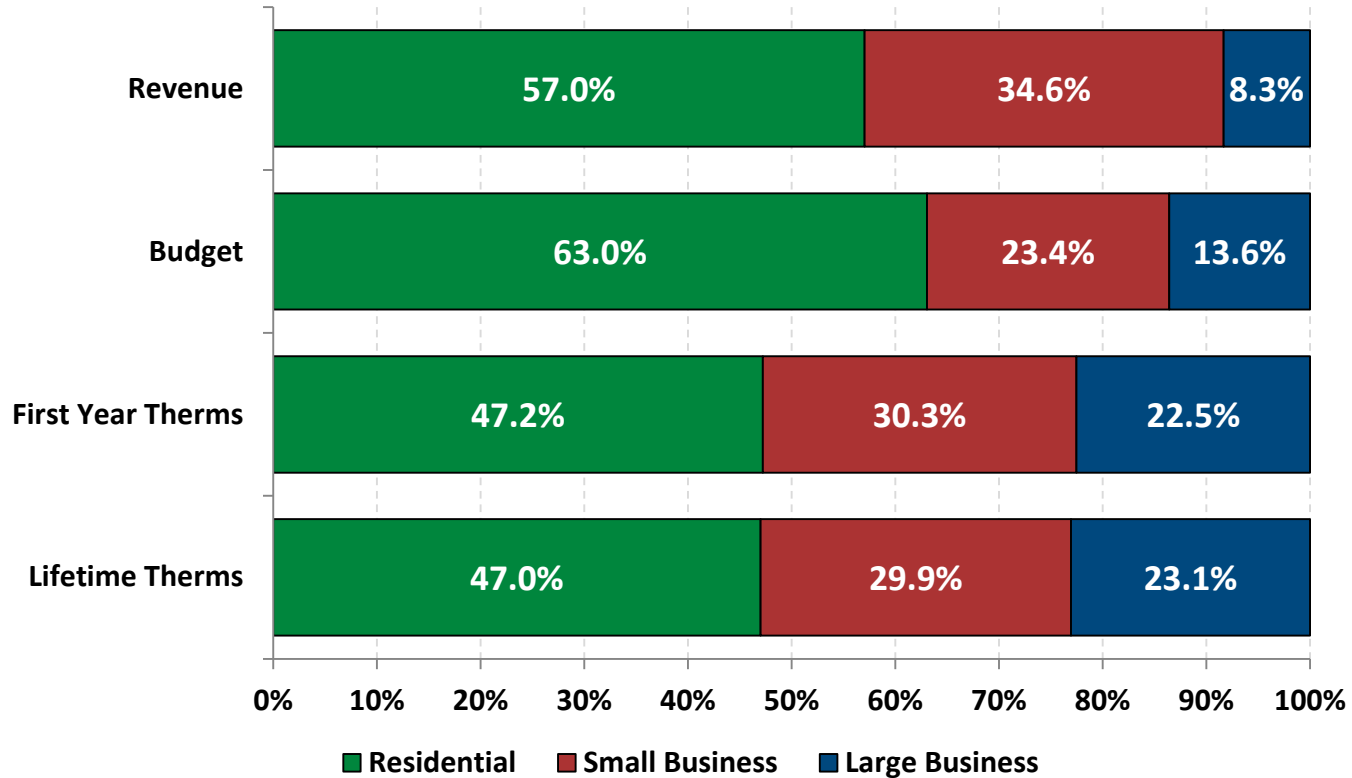


- Proposed program spending is ~25% higher vs. filed plans.
- Proposed program spending is ~ 42% higher vs. statutory requirements

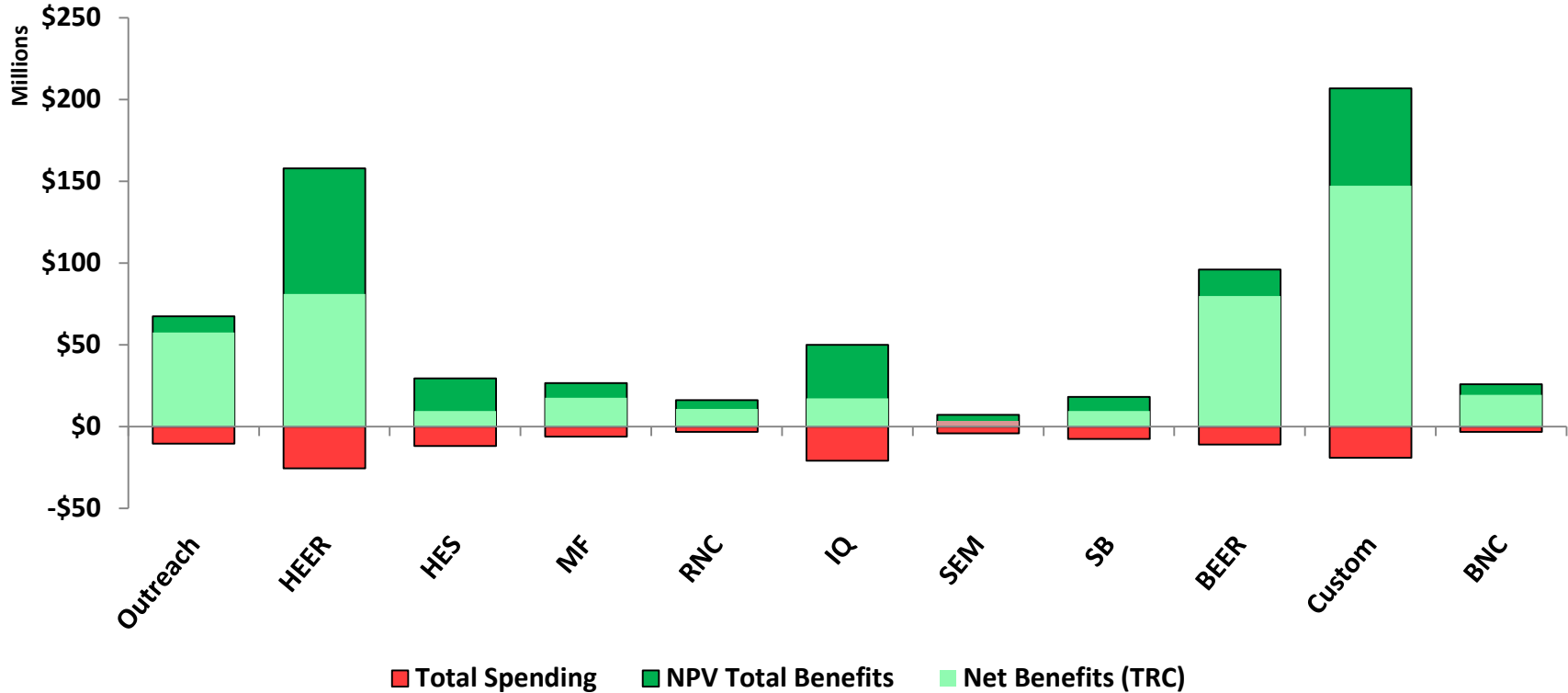
Income Qualified Program Spending (MM) Comparison



Proposed Portfolio – Revenue, Budgets, Savings by Rate Class



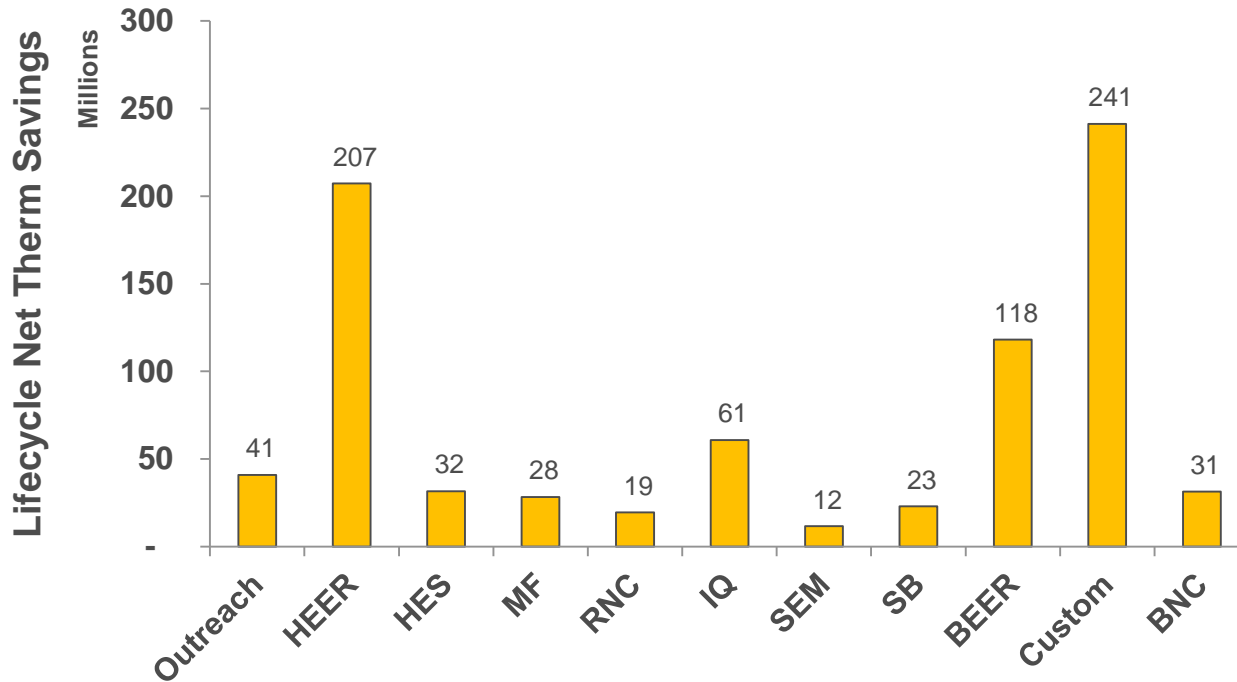
Proposed Portfolio – Spending and Benefits



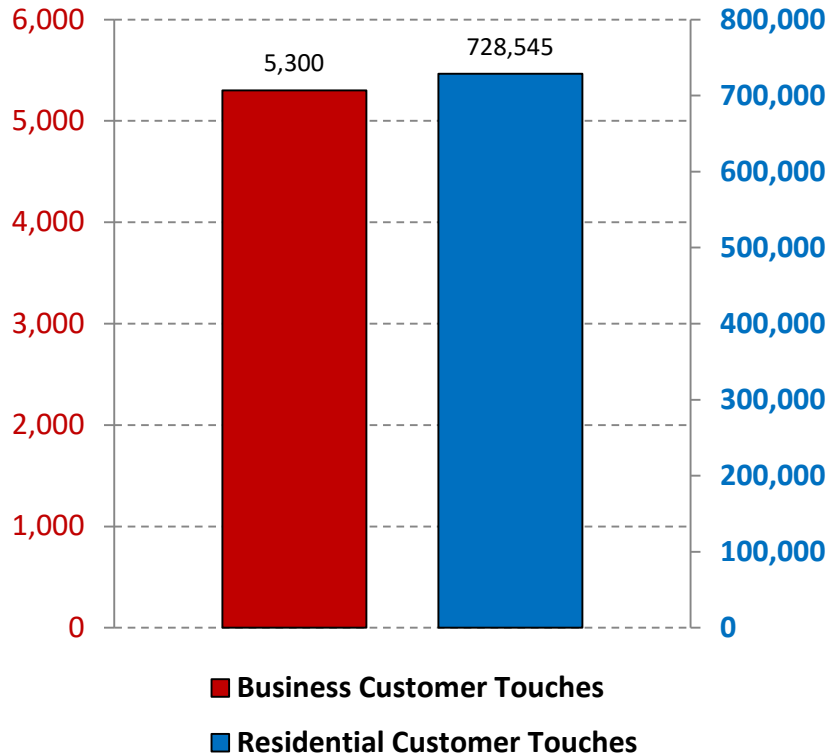
Proposed Portfolio – Program Net Goals and TRC



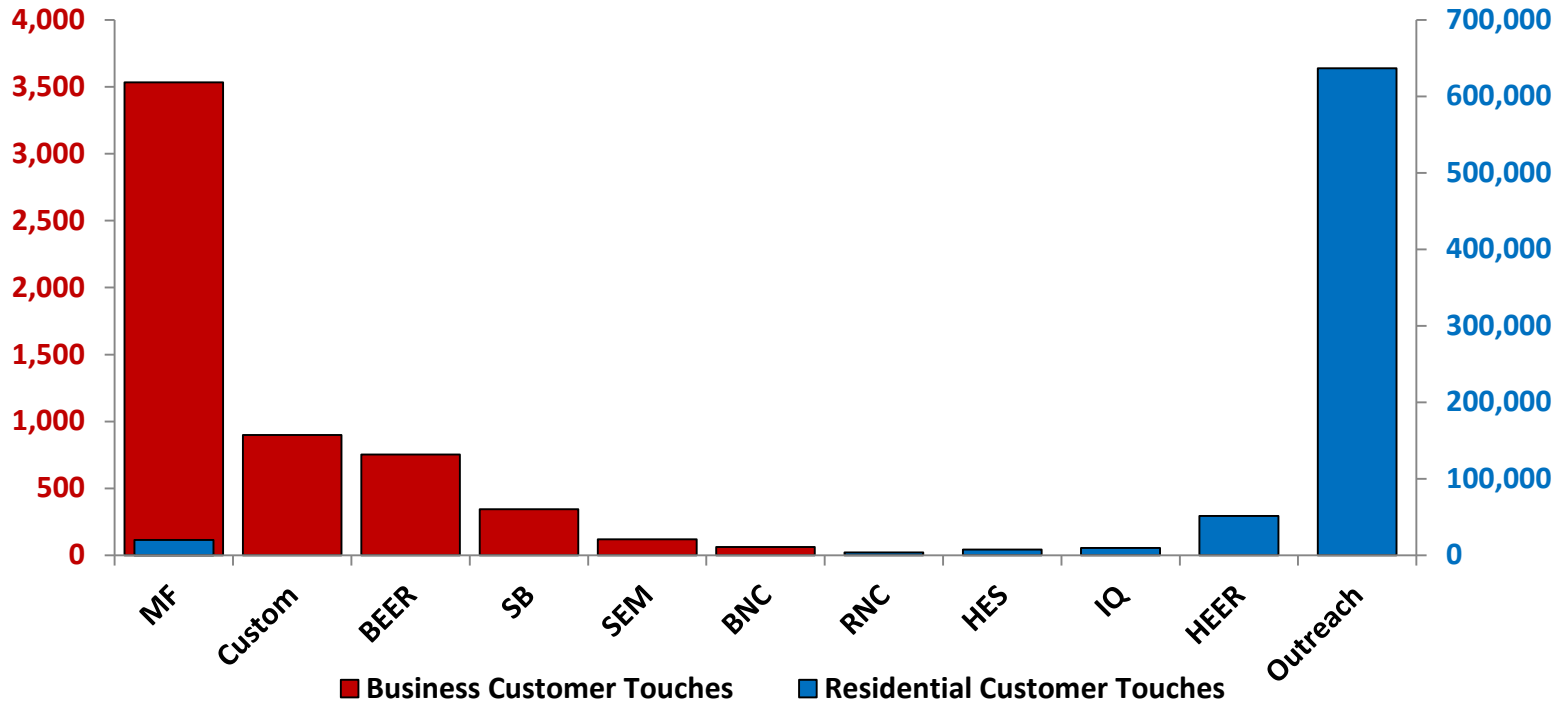
Proposed Portfolio – Life Cycle Savings by Program



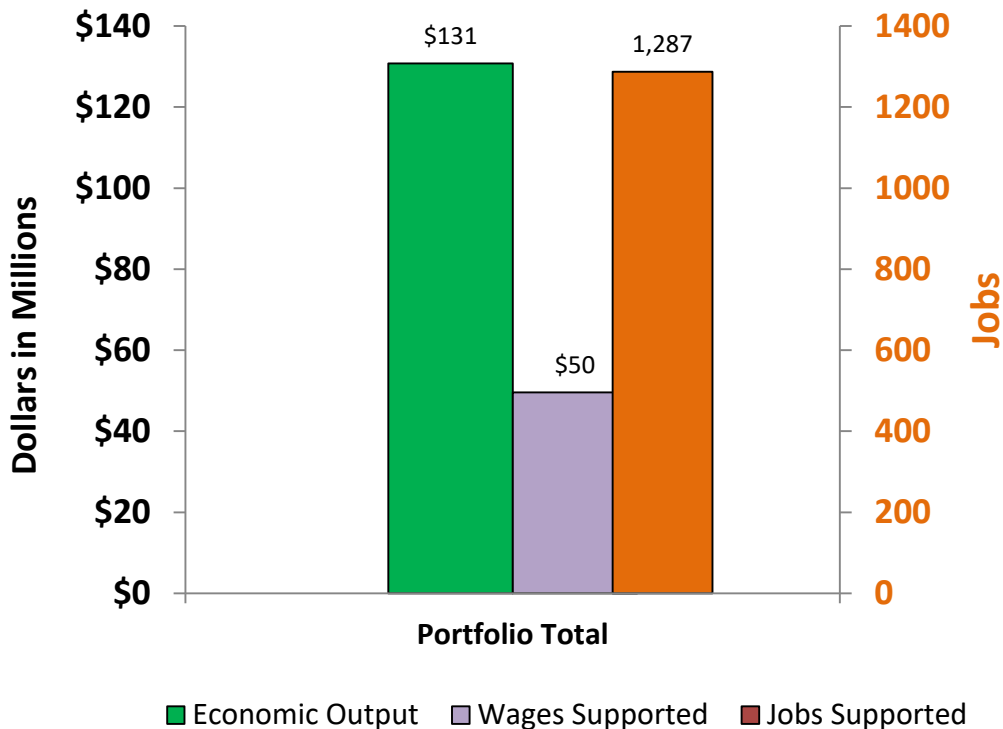
Proposed Portfolio – Total Customer Touches (PY7-PY10)



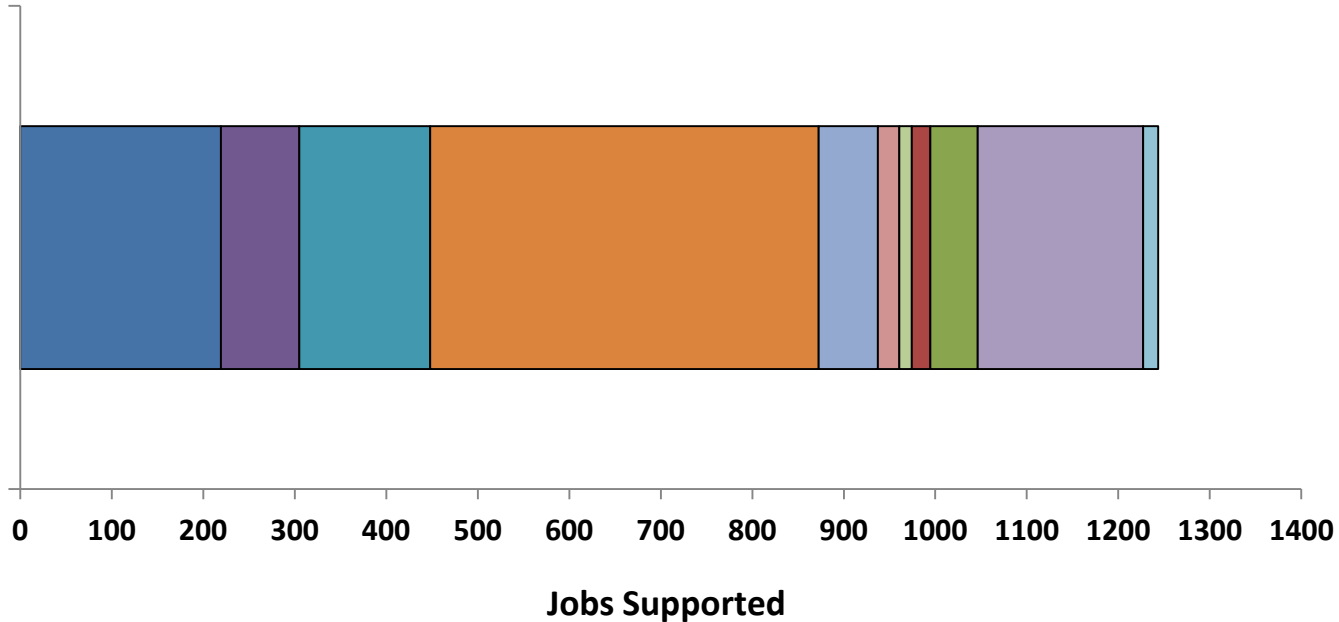
Proposed Portfolio – Customer Touches by Programs (PY7-PY10)



Proposed Portfolio – Economic Impacts (Annual)



Proposed Portfolio – Economic Impacts (Annual)



■ Outreach ■ HES ■ IQ ■ HEER ■ MF ■ RNC ■ SEM ■ SB ■ BEER ■ Custom Incentives ■ BNC

Business Programs



Proposed Programs

- Strategic Energy Management (SEM) Program
- Small Business Energy Efficiency (SB) Program
- Business Energy Efficiency Rebates (BEER) Program
- Custom Incentives (Custom) Program
- Business New Construction (BNC) Program

Public Sector (PS)



- Nicor Gas plan to address public sector customer energy efficiency opportunities through existing energySMART programs.
- A review of the DCEO programs and offering suggest close match.

Department Program	Nicor Gas Equivalent
Standard	Business Rebate
Custom	Custom
RCx	Custom / RCx
BNC	BNC
CHP	Custom / CHP
Boiler Tune Up	Custom, BEER/SB
Large Custom Gas	Custom
Green Nozzle	BEER/SB
STEP	SB/Free DI in any assessment

Public Sector – Spending determination



- Public Sector (PS) Spending per statute is defined as
 - Statute requires “... minimum of 10% of energy efficient savings procured from Local governments, Municipal corporations, Community college and School districts..”
 - That is at minimum annual spending of ~ \$4 MM attributed to PS customers annually or ~ \$16MM attributed to PS customer over four year program cycle.
 - The proposed portfolio meets the minimum spending requirement through providing energy efficiency opportunities in all of the business programs.

Public Sector – Goals determination



- The PS energy saving goals are matched to the DCEO filed goals.
- The measures closely follow the DCEO files plan while incentive levels are different but generally higher vs. similar private sector measure.

	Annual Net Goal
DCEO Public Sector	3,503,339
Stnd & Custom	2,639,385
RCx	307,302
CHP	149,851
NC	4,890
STEP	401,911
Minimum PS Goal	3,503,339

SEM Program



- Primarily focused on operational and process (behavioral) savings.
- Also driving participation in Custom and Prescriptive program.
- Cohort based approach proposing three cohorts of 10 participants each including
 - Commercial and Industrial segment
 - Health care segment
 - Education segment
- Program will address public sector through education segment targeting school districts, community college districts and college/university campuses.
- Batch files will show measure level details including proposed incentives, NTG, incremental costs and participation.
- Jointly delivered with electric utilities.

THERMS (MM)	
Gross Therms	3.86
Net Therms	3.86
Lifecycle Gross Therms	11.59
Lifecycle Net Therms	11.59

Small Business Program



- Program provides energy efficiency opportunities for small business customers including
 - Technical assistance and energy assessments
 - Free direct installation of energy saving equipment such low flow devices, pipe wraps, insulation, controls.
 - Prescriptive rebates for space heating and water heating equipment, commercial kitchen, HVAC systems and controls
- Program addresses eligible public sector customers.
- Batch files will show measure level details including proposed incentives, NTG, incremental costs and participation.
- Program delivery is coordinated with electric utilities.

THERMS (MM)	
Gross Therms	2.75
Net Therms	2.25
Lifecycle Gross Therms	27.84
Lifecycle Net Therms	22.88

BEER Program



- Program provides energy efficiency opportunities for commercial, public sector and industrial customers not eligible in SBEEP program.
- Program provides Incentives to save natural gas with focus on:
 - Steam Traps
 - HVAC equipment
 - Controls / Thermostats
 - Food service
 - Small customized projects
- Program addresses eligible public sector customers.
- Batch files will show measure level details including proposed incentives, NTG, incremental costs and participation.
- Program delivery is coordinated with electric utilities.

THERMS (MM)	
Gross Therms	17.60
Net Therms	11.97
Lifecycle Gross Therms	173.72
Lifecycle Net Therms	118.13

Custom Program



- Program provides energy efficiency opportunities for commercial, public sector and industrial customers that are not available in either SB or BEER.
- Program offers customized incentives and technical support for larger and more complex energy efficiency upgrades and projects.
- Facility and opportunity assessments are conducted to identify energy savings opportunities.
- Program addresses eligible public sector customers.
- Batch files will show measure level details including proposed incentives, NTG, incremental costs and participation.
- Program delivery is coordinated with electric utilities.

THERMS (MM)	
Gross Therms	18.18
Net Therms	15.73
Lifecycle Gross Therms	287.82
Lifecycle Net Therms	241.23

BNC Program



- Program is addressing new construction market by providing incentives for
 - Builders, design and engineering firms, architects engaged in commercial and public sector new construction.
- Batch files will show measure level details including proposed incentives, NTG, incremental costs and participation
- Program delivery is coordinated with electric utilities.

THERMS (MM)	
Gross Therms	1.63
Net Therms	1.26
Lifecycle Gross Therms	40.81
Lifecycle Net Therms	31.43

Residential Programs



Proposed Programs

- Education and Outreach Program
- Home Energy Efficiency Rebates (HEER) Program
- Home Energy Savings (HES) Program
- Multi-family Energy Efficiency (MF) Program
- Residential New Construction (RNC) Program

Education and Outreach Program



1. Primarily driving participation in residential programs by increasing awareness
2. Educating customers about benefits of energy efficiency
3. Includes following offers

Education

- Elementary education
- Exploring other options
- Jointly delivered with electric utilities.

Free customer-requested kits

- Online Customized
- Outreach events

Behavioral energy savings

- Home energy reports
- Tenant behavior modification and outreach
- Exploring more options

THERMS (MM)	
Gross Therms	9.17
Net Therms	8.79
Lifecycle Gross Therms	43.89
Lifecycle Net Therms	40.86

HEER Program



- Program provides mainly prescriptive rebates for space heating new equipment, controls and system optimizations including
 - High efficiency furnaces
 - High efficiency boilers
 - Smart T-stats through Retail and Prescriptive channels
 - Quality install of high efficiency furnaces
 - Quality maintenance of furnaces
- Batch files will show measure level details including proposed incentives, NTG, incremental costs and participation.
- Program delivery is coordinated with electric utilities.

THERMS (MM)	
Gross Therms	16.38
Net Therms	13.60
Lifecycle Gross Therms	249.28
Lifecycle Net Therms	207.30

HES Program



Program provides

- Technical assistance including free home energy assessments with direct installation of energy saving low flow devices, pipe wraps, programmable t-stat education and installation of smart t-stats
- Prescriptive rebates for weatherization measures such as air sealing, attic insulation, attic hatch, basement and wall insulation, etc.
- Customized rebates for deep residential retrofits including weatherization, mechanical and air balancing systems.
- Batch files will show measure level details including proposed incentives, NTG, incremental costs and participation.
- Program is jointly delivered with electric utilities.

THERMS (MM)	
Gross Therms	1.96
Net Therms	2.06
Lifecycle Gross Therms	30.09
Lifecycle Net Therms	31.59

MF Program



Program is providing energy efficiency opportunities for residents and property owners of multi-family buildings including

- Free living unit assessments including direct installation of energy saving low flow devices, programmable t-stats, pipe wraps
- Technical assistance and building energy assessments
- Prescriptive rebates for space heating, water heating, pipe insulation, laundromats and HVAC controls for energy efficiency opportunities in building common areas.
- Customized rebates for central plants, boilers and other energy efficiency opportunities not included in prescriptive manner.
- Batch files will show measure level details including proposed incentives, NTG, incremental costs and participation.
- Program is jointly delivered with electric utilities.

THERMS (MM)	
Gross Therms	2.70
Net Therms	2.54
Lifecycle Gross Therms	30.04
Lifecycle Net Therms	28.28

RNC Program



- Program is addressing new construction market by providing incentives for
 - Builder and rater rebates for above-code (20%) construction
 - Builder education
- Batch files will show measure level details including proposed incentives, NTG, incremental costs and participation.
- Program is jointly delivered with electric utilities.

THERMS (MM)	
Gross Therms	1.00
Net Therms	0.65
Lifecycle Gross Therms	29.97
Lifecycle Net Therms	19.48

Income Qualified (IQ) Program



- The proposed Income Qualified program closely aligns with legacy DCEO offerings.
- The program includes energy efficiency opportunities for economically challenged customers through
 - Single family retrofits (Weatherization and mechanicals)
 - Public Housing Authority and Multi-Family (Living units DI and building retrofits)
 - Affordable New Housing development

Income Qualified Program – Statutory Spending determination



- Low Income (LI) minimum spending as defined in the law

“The utilities shall also present a portfolio of energy efficiency measures proportionate to the share of total annual utility revenues in Illinois from **households at or below 150%** of the poverty level. Such programs shall be targeted to households with **incomes at or below 80% of area median income.**”

- Nicor Gas approach follows the statute to determine LI spend based on percentage of revenue collected from customers who are at or below 150% of poverty level.
- The program however will be available to all customers at or below 80% of area media income (~250% of poverty level)
- Further, Nicor Gas will track spending and savings occurring in Income qualified segment through residential programs termed as organic participation.

Statutory Spending determination – Revenue Share Determination



- Detailed analysis of income qualified market using
 - Census data on Income, Household size, Number of households per Census tract using American Community Survey Data.
 - Area Median Income (“AMI”) information from US HUD under “Data for Section 8 Income Limits” for all IL counties
 - Income and household size requirement for Poverty level determination using guidance from Federal Medicaid website
 - 2015 Customer Billing Data to determine average usage of single family and multi family living spaces occupied by customers at or below 150%

Income Qualified Market



- Census analysis and energyENGINE data analysis show following customer distribution

Nicor Gas Residential Market	
Total Households/Accounts	~ 2 million accounts
Income Qualified Accounts <= 150% of poverty	~ 330 thousand accounts
% of Total Accounts	16%
Income Qualified Accounts <= 80 AMI of poverty	~ 800 thousand accounts
% of Total Accounts	39%

- Previous DCEO analysis showed ~42% households in Illinois at 80 AMI or below.

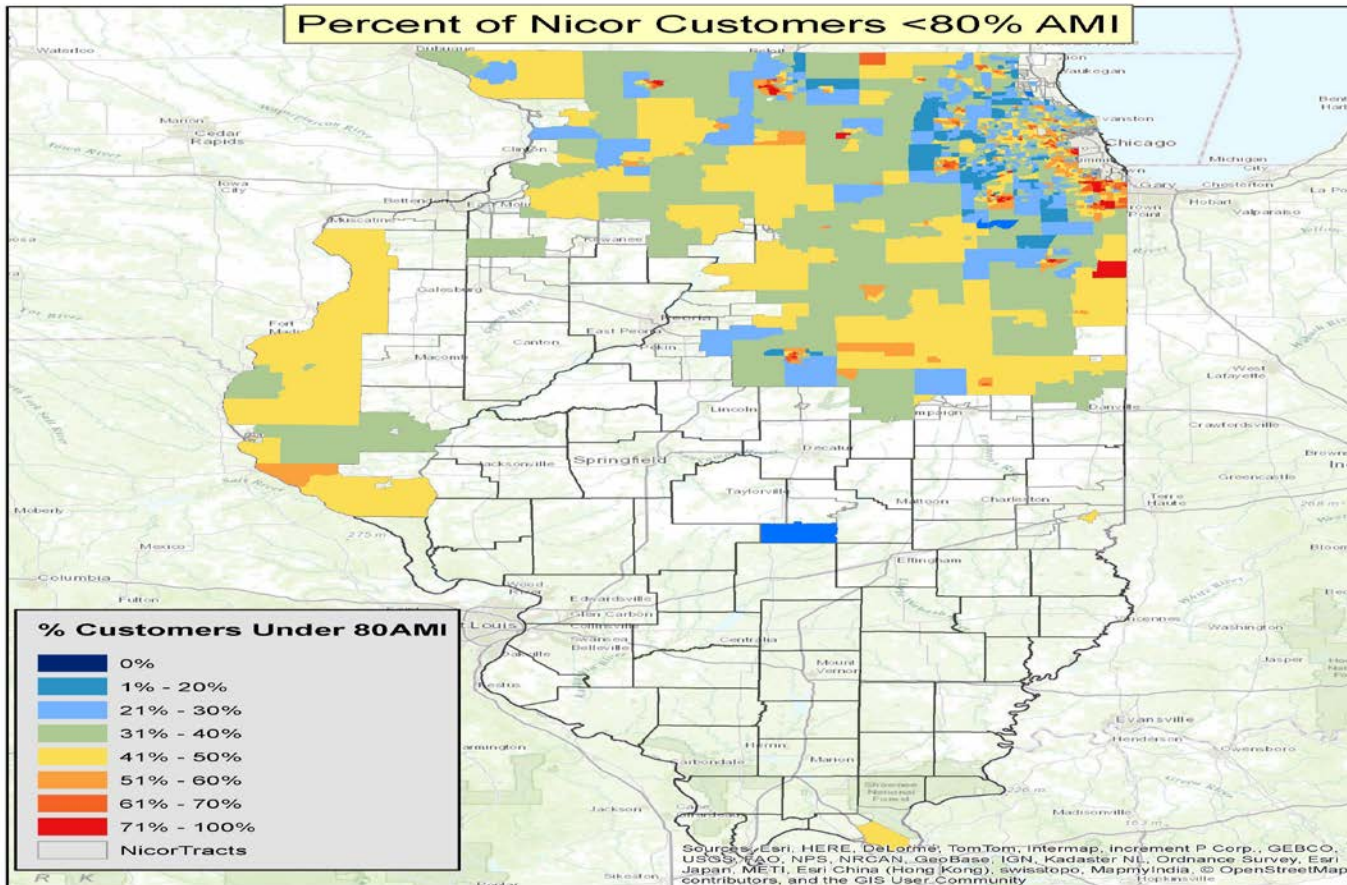


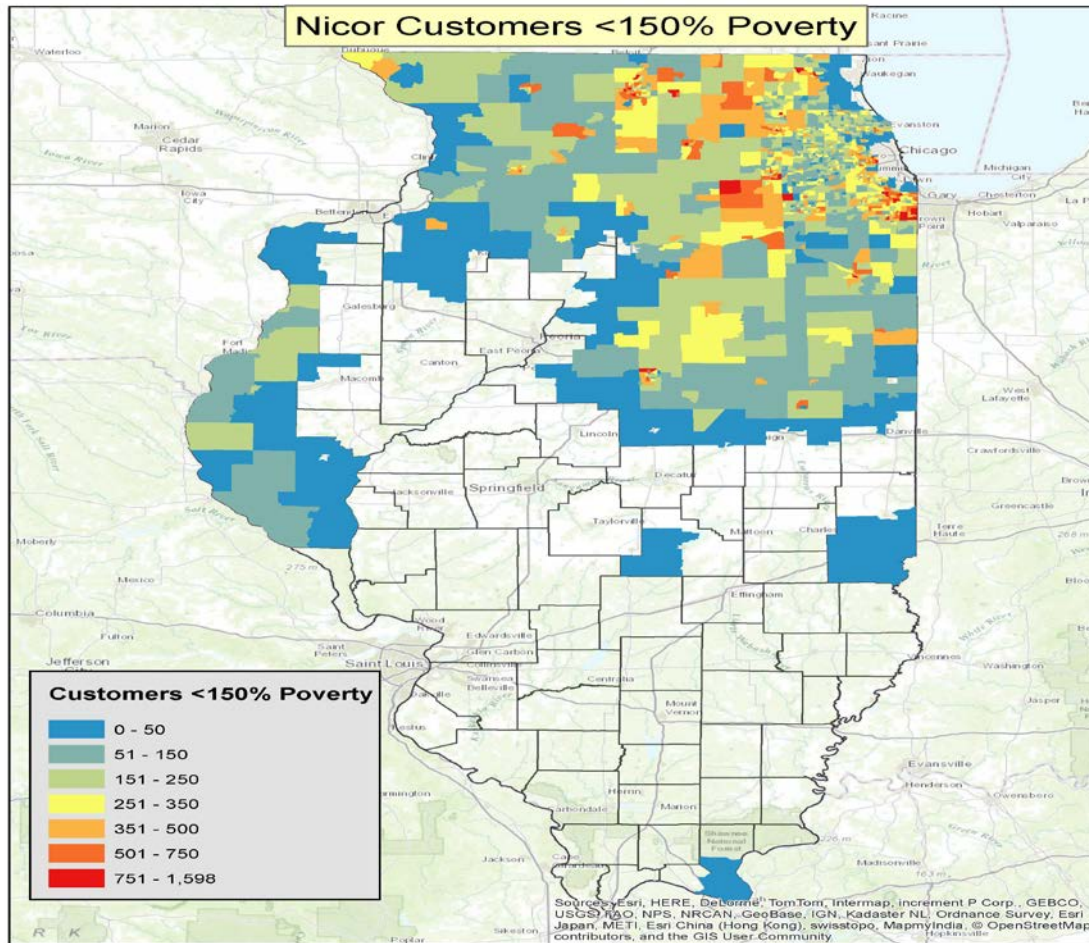
Low Income Market Data Update

Department has commissioned ERC to update low income market data for Plan 4 and preliminary budget proposal on their preliminary findings

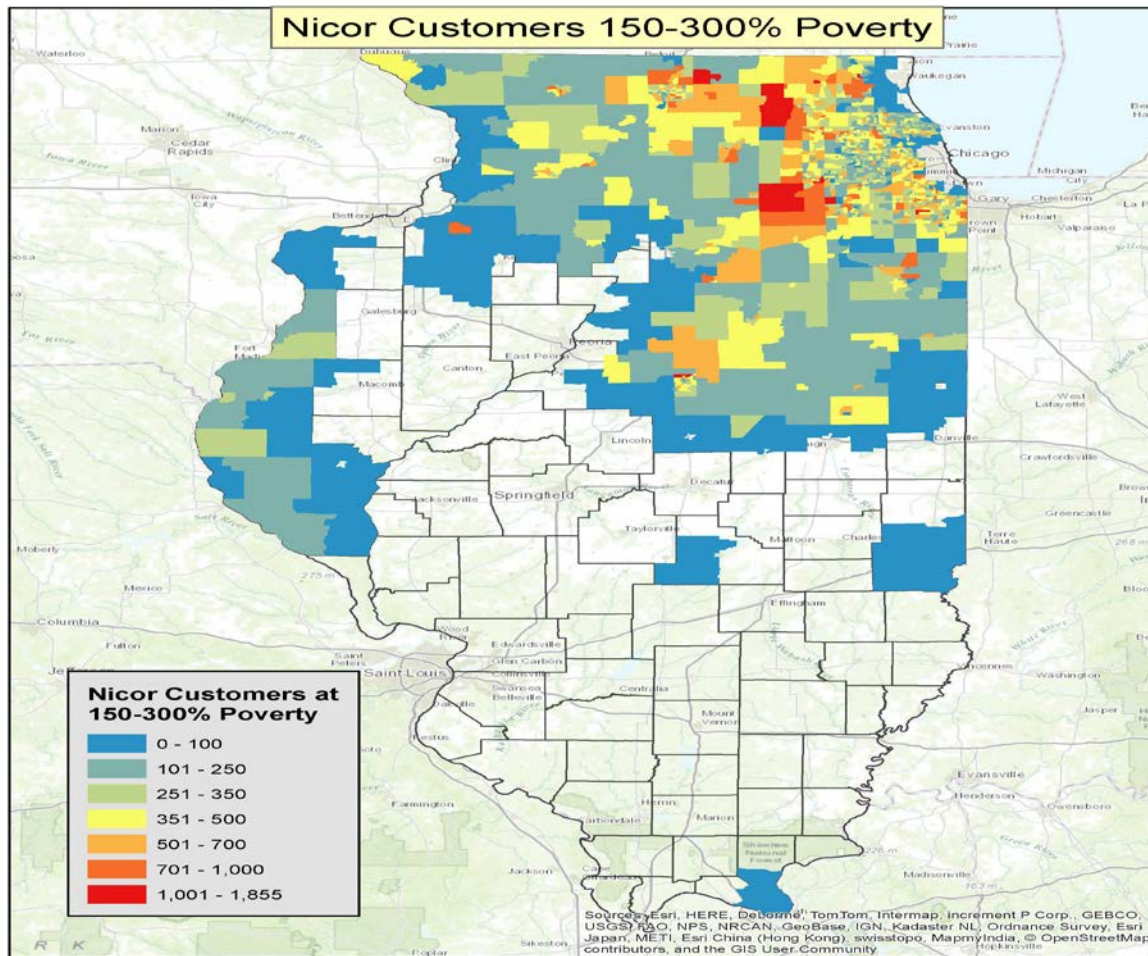


Statewide, 1.08M or ~22.6% of Illinoisans are at or below 150% of federal poverty level (up from 21% for Plan 3); **~41.7% at or below 80% AMI***





Nicor Customers 150-300% Poverty



Preliminary - Confidential Draft Document Subject to Change - For Illustrative and Discussion Purposes – SAG Presentation- May 01, 2017.

Statutory Spending determination – Revenue Share Determination



Revenue determination from Customer at or below 150% of Poverty Line	
% of Total Accounts	16%
% of Total Revenue	9%
EEP Budget (4 Years)	\$160.56
<= 150% Poverty Line Segment Share (4 Years)	\$14.24
<= 150% Poverty Line Segment Share (Annual)	\$3.56



Energy Savings Determination

- The goals for Income qualified programs are matched to the DCEO filed energy savings net goals and Nicor Gas dedicated mod income goals in filed plan
- The program provides similar offerings as the legacy DCEO income qualified programs.

	Annual Net Goal
Nicor Gas Filed Goal	127,725
DCEO LI	604,167
PHA	41,216
RR	543,062
NC	19,889
Minimum LI Goal	731,892

Income Qualified Statutory fulfillment



- Proposed program annual and program cycle targets

THERMS	Annual	Total (PY7-10)
Gross Therms	0.8	3.3
Net Therms	0.8	3.3
Lifecycle Gross Therms	15.2	60.8
Lifecycle Net Therms	15.2	60.8
BUDGET		
Non Incentive Cost	\$0.9	\$3.6
Incentive Cost	<u>\$4.3</u>	<u>\$17.2</u>
Total	\$5.2	\$20.8

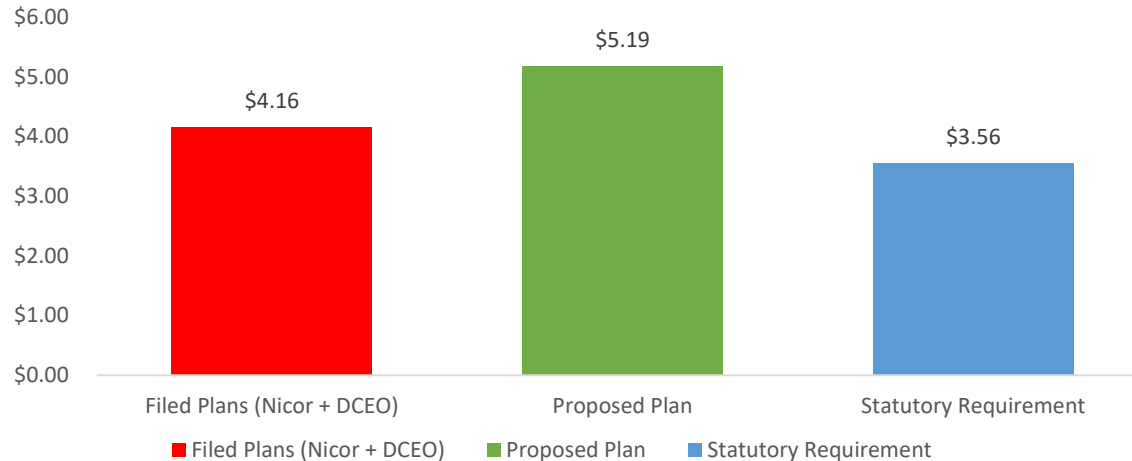
- The proposed program exceed both statutory spending requirement and previously filed goals by DCEO and Nicor Gas for Low and Mod income segments.

Income Qualified Statutory fulfilment – Comparison vs. Filed Plans



- Proposed program spending is ~25% higher vs. filed plans.
- Proposed program spending is ~ 42% higher vs. statutory requirements

Income Qualified Program Spending (MM) Comparison



Income Qualified Program



- Program offers energy efficiency opportunities through following three offerings
 - Single Family Residential Retrofits
 - Fully subsidized weatherization (air sealing and various insulation) opportunities for eligible customers.
 - Fully subsidized mechanical equipment upgrades to high efficient units
 - Smart T-stats
 - Public Housing Authority / Multifamily
 - Living units DI including pipe wraps, T-stats, low flow devices
 - Building HVAC, Envelop, Central plants and Control retrofits
 - Technical assistance to identify efficiency opportunities
 - New Construction
 - Incentives for developers of affordable new living spaces.
- Batch files will show measure level details including proposed incentives, NTG, incremental costs and participation.
- Program will be delivered jointly with electric utilities and other relevant parties.

Income Qualified Opportunities in Residential Programs



- In addition to Income Qualified program explained above, this segment also participates in Nicor Gas residential programs.
- In depth analysis of past participation of several Nicor Gas residential programs show considerable participation from the segment termed as organic participation.
- Nicor Gas proposed portfolio will track organic participation in addition to proposed income qualified program.
- The organic participation provides true picture of opportunities available and undertaken by the economically challenged customer segment from energySMART.
- Analysis conducted on all Residential programs including HEER, HES, Kits, Elementary Education, MF and Behavior programs.

Organic Participation – Past Trends



- The customer segment at or below 150% of poverty line past participation tracks closely to the segment’s relative size to over all Nicor Gas market.
- The segment size is ~16% of total market where as the past participation is between 13%-19% in programs offered from PY1 through PY4

Poverty Threshold <= 150 - % of Total Participation				
Programs	PY1	PY2	PY3	PY4
HEER Program	13%	14%	13%	14%
Behavior	N/A	9%	14%	N/A
Kits	N/A	N/A	19%	19%
HES	8%	11%	10%	14%
EEE	17%	17%	17%	17%

Organic Participation – Past Trends



- The customer segment at or below 250% of poverty line (~80 AMI) past participation tracks closely to the segment’s relative size to over all Nicor Gas market.
- The segment size is ~38% of total market where as the past participation is between 31%-38% in programs offered from PY1 through PY4

Poverty Threshold <= 250 - % of Total Participation				
Programs	PY1	PY2	PY3	PY4
HEER Program	31%	32%	32%	32%
Behavior	N/A	20%	31%	N/A
Kits	N/A	N/A	38%	38%
HES	24%	25%	24%	31%
EEE	37%	38%	38%	39%

Organic Participation – Past Trends



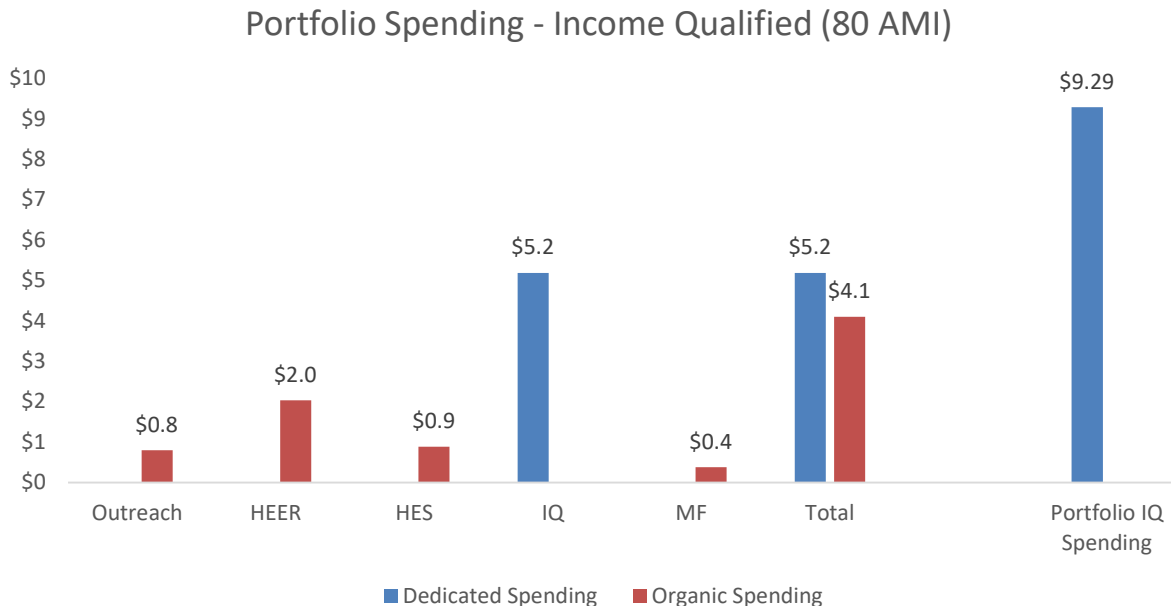
- The customer segment at or below 300% of poverty line (~80 AMI) past participation tracks closely to the segment’s relative size to over all Nicor Gas market.
- The segment size is ~40% of total market where as the past participation is between 39%-47% in programs offered from PY1 through PY4

Poverty Threshold <= 300 - % of Total Participation				
Programs	PY1	PY2	PY3	PY4
HEER Program	39%	40%	41%	41%
Behavior	N/A	29%	39%	N/A
Kits	N/A	N/A	46%	47%
HES	30%	33%	32%	40%
EEE	40%	40%	40%	43%

Organic Participation in Proposed Portfolio



- Using past organic participation results the proposed portfolio overall spending in Income qualified segment annually is ~\$9.3 MM.



80 AMI Market – Revenue Share



- The 80 AMI market contribution and fair share of revenue are below.
- The proposed portfolio in addition to meeting and exceeding $\leq 150\%$ market segment is also approximately addressing larger 80 AMI market in tune with its revenue contribution.

Revenue determination from Customer at or below 80 AMI	
% of Total Accounts	39%
% of Total Revenue	22%
EEP Budget	\$160.561
80 AMI Segment Share (4 Years)	\$34.909
80 AMI Segment Share (Annual)	\$8.727

Emerging Technologies Program (ETP)



- Nicor Gas plans to continue highly successful ETP program.
- The program focus continue to bring new and emerging efficient natural gas technologies and products to Illinois market by –
 - Testing
 - Savings, operational and installation validation
 - Inclusion in TRM
 - Program offerings
- Several technologies and products tested and validated by ETP are now in IL TRM and in Nicor Gas programs.
- Further focus on forming partnerships with R&D at various national and international manufacturers, institutes and other utilities.

Market Transformation Program



- The proposed energySMART plan includes a Market Transformation (MT) program. A program design is being developed with spending up to allowed 5% total portfolio

- According to NEEA, MT is defined as

“The strategic process of intervening in a market to create lasting change in market behavior by removing identified barriers and/or exploiting opportunities to accelerate the adoption of all cost-effective energy efficiency as a matter of standard practice”

- Nicor Gas will look to partner with interested parties and experts in the MT field to assist with program design, best practices and deployment.
- Initially no energy savings will be claimed rather program will aim to intervene in market to assess energy efficiency potential of various products, strategies and intervention methods including market uplift (NEEA method).
- Methods and techniques to evaluate and claim energy savings from MT activities will be undertaken.

Market Transformation Program



- Following opportunities are identified for PY7-PY10 in MT with aim of advancing energy efficiency as a standard practice in Illinois.
 - Building Code Compliance (CANDI codes)
 - Workforce development through training and education on energy efficiency trades and practices.
 - Gas fired heat pump water heaters and Commercial rooftop HVAC units
 - Combination gas water heating and space heating systems market development
 - Gas dryer equipment standards / Energy Star Gas dryer market development
 - Hearth products
 - Trees
 - ❖ Existing MT programs in IA / AZ and MMC presentation in SAG.
 - Green infrastructure

Next Steps



- Executed NDA's due back to Nicor Gas.
- Batch Files available ~ May 10th after NDA's are executed.
- Small Group discussion during June through August
- Plan filing on June 30th.



QUESTIONS