FILED November 8, 2019 INDIANA UTILITY REGULATORY COMMISSION

PETITIONER'S EXHIBIT 2

IURC CAUSE NO. 43955 DSM-8 DIRECT TESTIMONY OF AMY B. DEAN FILED NOVEMBER 8, 2019

DIRECT TESTIMONY OF AMY B. DEAN SENIOR STRATEGY AND COLLABORATION MANAGER DUKE ENERGY BUSINESS SERVICES LLC ON BEHALF OF DUKE ENERGY INDIANA, LLC CAUSE NO. 43955 DSM-8 BEFORE THE INDIANA UTILITY REGULATORY COMMISSION

1		I. <u>INTRODUCTION</u>
2	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
3	A.	My name is Amy B. Dean, and my business address is 1000 E. Main Street,
4		Plainfield, Indiana 46168.
5	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
6	A.	I am employed by Duke Energy Business Services LLC. Duke Energy Business
7		Services LLC is an affiliate of Duke Energy Indiana, LLC ("Duke Energy
8		Indiana" or "Company"). My title is Senior Strategy and Collaboration Manager.
9	Q.	WHAT DUTIES AND RESPONSIBILITIES DO YOU HAVE IN YOUR
10		CURRENT POSITION?
11	A.	As Senior Strategy and Collaboration Manager, I have responsibilities for Duke
12		Energy Indiana's Energy Efficiency ("EE") initiatives including compliance,
13		filings and the Company's Oversight Board ("OSB").
14	Q.	PLEASE STATE YOUR EDUCATIONAL AND BUSINESS EXPERIENCE.
15	A.	I graduated from Indiana University in May of 1997 with a Bachelor of Science in
16		Accounting and have a Master's in Business Administration from Butler

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1		University. I am a Certified Public Accountant in the state of Indiana. I was
2		employed by the Company in May 1997 holding various accounting positions
3		with increasing responsibility in the Energy Merchant Business Unit and then the
4		1935 Act External Reporting Group. In 2003, I was promoted to Lead Analyst in
5		the Service Company Accounting group. In January 2008, I left Duke Energy to
6		become an Accounting Manager at Veolia Water North America. At Veolia, I
7		was responsible for managing fixed asset accounting, payroll accounting,
8		accounts receivable, IFRS accounting, and other general ledger accounting. In
9		July 2009, I returned to Duke Energy as a contractor in the Smart Grid Support
10		area and was hired back as a full-time employee to the Rates Department in
11		January 2010 as Lead Rates Analyst. In August 2017, I was promoted to Senior
12		Strategy and Collaboration Manager, with responsibilities for Duke Energy
13		Indiana's EE initiatives. As Senior Strategy and Collaboration Manager, I work
14		with our Program Management, Rates, Evaluation, Measurement, & Verification
15		("EM&V"), Analytics, and Legal staffs on the Company's Indiana products and
16		services along with managing the OSB.
17	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
18	A.	I will describe the programs and budgets in Duke Energy Indiana's 2020 - 2023
19		EE Plan. I will also discuss Duke Energy Indiana's OSB.
20	Q.	ARE YOU SPONSORING ANY EXHIBITS?

Yes. I will be sponsoring Petitioner's Exhibit 2-A, which is a complete

21

A.

1		description of each EE program, along with each EE program's cost breakdown
2		and cost and benefit scores.
3	Q.	WAS PETITIONER'S EXHIBIT 2-A PREPARED BY YOU OR AT YOUR
4		DIRECTION?
5	A.	Yes.
6		II. DUKE ENERGY INDIANA'S PLAN FOR 2020 - 2023
7	Q.	PLEASE DESCRIBE HOW THE COMPANY'S FOUR-YEAR EE PLAN
8		WAS DEVELOPED.
9	A.	As stated in Mr. Duff's testimony, Duke Energy Indiana's proposed EE Plan was
10		designed by its program managers considering information contained in the MPS,
11		the state of the EE market in the Company's service territory, past program
12		success, and the addition of new programs to continue to grow the EE
13		opportunities for our eligible customers.
14	Q.	PLEASE SUMMARIZE WHAT PROGRAMS DUKE ENERGY INDIANA
15		PROPOSES IN THIS PROCEEDING.
16	A.	The 2020 - 2023 EE Plan contains most of the same programs that were approved
17		by the Commission in Cause No. 43955 DSM-4 ("DSM-4"). The newest addition
18		to our portfolio is an outdoor lighting program for Company owned lights, which
19		I will discuss below. The following is a listing of the programs included in the
20		portfolio for this filing. A complete description of each program, cost breakdown
21		and cost and benefit scores can be found in Petitioner's Exhibit 2-A. Duke

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1 Energy Indiana seeks Commission approval to offer the following programs:

Duke Energy Indiana 2020 - 2023 Energy Efficiency Programs

Residential

Agency Assistance Portal
Energy Efficiency Education
Program for Schools
Low Income Neighborhood
Low Income Weatherization
Multi-Family Energy Efficiency
Products & Services
My Home Energy Report
Residential Energy Assessments
Smart \$aver® Residential
Power Manager

Non-Residential

* Public Efficiency Streetlighting Smart \$aver Non-Residential

Power Manager for Business Small Business Energy Saver

Key: * New Program

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O. PLEASE PROVIDE FURTHER DETAILS ON THIS OUTDOOR

- 4 **LIGHTING PROGRAM.**
- 5 A The proposed outdoor lighting program will provide outdoor lighting customers a
- 6 rebate to upgrade Company-owned lighting to more efficient LED fixtures.
- 7 O. WHY IS THE COMPANY PROPOSING THIS PROGRAM?
- 8 A. Duke Energy Indiana owns over 120,000 street and area lights in our service
- 9 territory that we operate and maintain for our customers. These customers have
- participated in the EE Rider since its inception, but the Company has not offered
- programs directly targeted to these customers. Duke Energy Indiana has not
- historically offered a program that would be based on company-owned assets.
- After seeing a company-owned asset program had been approved for another

1		Indiana utility in 2018, Duke Energy Indiana started to investigate its own
2		offering.
3		What we found in our investigation was that Indiana is very far behind, as
4		compared to the rest of the U.S. streets and roadways, 1 for LED outdoor lighting
5		penetration. Creating a program for LED outdoor lights will help transform the
6		market in Indiana for this technology.
7	Q.	HOW WILL THIS PROGRAM BE STRUCTURED GIVEN THAT THE
8		LIGHTS ARE COMPANY OWNED?
9	A.	Duke Energy Indiana proposes to offer incentives to its customers, similar to the
10		Company's offering in its non-residential prescriptive program for customer
11		owned lights. For customer-owned lighting, the Company offers four (4)
12		different incentive levels based on the wattage of the fixture. The incentives
13		range from \$30 for an exterior LED fixture replacing a high intensity discharge
14		fixture up to 175 watts, \$50 for a fixture between 176-250 watts, \$75 for between
15		251-400 watts and \$200 per fixture replaced greater than 400 watts.
16		Duke Energy Indiana intends to leverage its existing EE incentive
17		processing and tracking system to receive the applications on the front end and
18		make the incentive payments on the back end. The Company's outdoor lighting
19		and distribution groups will spearhead the actual lighting changeouts for the

¹ U.S. Department of Energy, Energy Efficiency & Renewable Energy, *Adoption of Light-Emitting Diodes in Common Lighting Applications*, July 2017, Pages 51-52 (https://www.energy.gov/sites/prod/files/2017/08/f35/led-adoption-jul2017_0.pdf).

1		customers that would like to participate in this program. Additional information
2		about this new program is provided in Petitioner's Exhibit 2-A.
3	Q.	IN DSM-4, DUKE ENERGY INDIANA PROPOSED NEW
4		DEVELOPMENT PROGRAMS TO BE DEPLOYED DURING THE
5		THREE-YEAR PLAN. PLEASE PROVIDE AN UPDATE ON THOSE
6		PROGRAMS.
7	A.	Prior to DSM-4, Duke Energy Indiana's OSB did not have authority to add new
8		programs, so the Company did not want to allow all three (3) years of the
9		portfolio to run without the potential to add new programs. In DSM-4, Duke
10		Energy Indiana had several new programs in its new product development
11		("NPD") group that we were in the process of vetting. Duke Energy Indiana
12		added some programs for the out years (2018 - 2019) that were in development in
13		hopes that it would be able to deliver these programs and their associated impacts
14		sometime during the 2017 - 2019 portfolio. Unfortunately, Duke Energy Indiana
15		has not yet brought these programs to market in Indiana. For the 2020 - 2023 EE
16		portfolio, the Company will add the measures it still plans to pursue from these
17		programs in as part of existing programs. For example, measures from the new
18		program entitled "Multifamily retrofit" will be rolled in to the existing
19		Multifamily EE products & services portfolio. This will help Duke Energy
20		Indiana leverage the success of existing programs while continuing to add new
21		value for its customers. The same will happen with Bring Your Own Thermostat

1		("BYOT"). This will transition to be managed along with the Residential Power
2		Manager programs for Indiana.
3	Q.	WHAT DEMAND RESPONSE PROGRAMS ARE INCLUDED IN DUKE
4		ENERGY INDIANA'S PLAN?
5	A.	The Company has one (1) residential demand response ("DR") program and one
6		(1) non-residential program. For residential customers, Duke Energy Indiana will
7		continue to offer its very successful Power Manager® program that now is
8		available to both single family and apartment dwellers. As part of this program
9		and as explained previously, the Company plans to layer in BYOT, which is one
10		of the Company's programs previously approved in DSM-4. For non-residential
11		customers, the Company offers Duke Energy Indiana's Power Manager® for
12		Business program. Duke Energy Indiana has consistently offered successful DR
13		programs. Most recently, in Cause No. 43955 DSM-4, the Commission once
14		again approved the Company's DR Plans as part of its Energy Efficiency portfolio
15		filing.
16	Q.	ARE ALL PROGRAMS INCLUDED IN THE PROPOSED EE PLAN
17		COST EFFECTIVE?
18	A.	Yes. All programs pass at least one of the cost benefit analyses. As discussed in
19		the Direct Testimony of Jean P. Williams, all programs except the Low Income
20		Neighborhood and Low Income Weatherization Programs pass the Utility Cost
21		Test ("UCT"). The Low-Income Neighborhood and Weatherization programs do

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	pass the Participant Cost Test ("PCT") cost benefit analysis. The Low-Income
	Neighborhood program currently provides up to 16 low cost measures to be
	installed in selected neighborhoods. Due to the high cost of weatherization and
	little to no customer contribution required to participate, low-income
	weatherization programs in general struggle to pass the UCT. The Low Income
	Weatherization Program offers a Tier 1 and Tier 2 grouping of measures
	depending upon the need of the customer's home. Additionally, up to seven
	hundred and fifty dollars (\$750.00) is allotted for health and safety for every
	home included in Tier 2. The program also includes a refrigerator replacement
	component.
	Even though these two programs do not pass the UCT, the Company
	believes there are benefits to bringing these needed improvements to low-income
	customers and offering energy efficiency programs to this group of customers,
	especially where, as here, the Energy Efficiency Program portfolio as a whole
	(including the two low income programs) passes the cost benefit analysis under
	the UCT.
Q.	ARE THERE INDIVIDUAL ENERGY EFFICIENCY MEASURES IN
	OTHER PROGRAMS BESIDES THE LOW-INCOME NEIGHBORHOOD
	AND WEATHERIZATION PROGRAMS THAT DO NOT PASS THE
	UTILITY COST TEST?

1	A.	Yes. There are programs that have some measures below 1.0 UCT. On the
2		residential side, there are 15 measures that do not pass the UCT. Eleven (11) of
3		these reside within Smart \$aver® Residential program. For Non-Residential
4		Smart \$aver Prescriptive, there are three (3) measures that do not pass the UCT.
5		All of these programs contain multiple measures.
6	Q.	WHY ARE THESE MEASURES INCLUDED IN THE PROGRAMS IF
7		THEY DO NOT PASS THE UCT?
8	A.	Although some programs contain measures that do not pass the UCT on a stand-
9		alone basis, when the entirety of the measures contained in each of the programs
10		are evaluated, all programs except Low Income pass the UCT. It is important to
11		offer our customers comprehensive programs and these measures round out
12		certain technologies that overall have passing scores and ensure a program that
13		can serve all segments of the residential, commercial and industrial markets. For
14		example:
15		• <u>Smart \$aver® Non-Residential Prescriptive</u> – Overall this program
16		contains four hundred thirty-two (432) measures. In this filing, this
17		program has expected participation in one hundred fifty-six (156)
18		measures and a UCT of 3.65. Of those measures, three (3) fail the
19		UCT. In general, it is reasonable to include these measures if the
20		overall program and portfolio pass the UCT.

1 •	Smart \$aver® Residential – The HVAC replacement equipment
2	measures offer customers incentives to help improve the efficiency of
3	the single largest energy user in a typical home. The HVAC measures
4	include a two-tiered incentive structure, based on the efficiency rating
5	of the new unit installed, along with an add-on optional smart
6	thermostat that customers can choose to combine with the equipment
7	replacement to further improve the efficiency of the HVAC
8	system. The HVAC measures include nomenclature for each tier, and
9	type of system; however, all constitute the HVAC replacement
10	equipment measure within the Smart \$aver program. Together these
11	HVAC measures pass the UCT. Specifically, Heat Pump Water
12	Heaters are one of the most efficient water heaters available, and can
13	save customers up to 50 percent (50%) in energy usage compared to a
14	traditional electric resistance water heater; however, these measures do
15	not currently pass the UCT. Heat Pump Water Heaters are a proven
16	technology; however, they are only a fraction of the total market in
17	terms of sales. It is anticipated that these heat pump water heaters will
18	continue to gain market share with increased customer adoption, which
19	should improve the UCT score by spreading the fixed program costs
20	across a larger number of participants.

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1 Q. PLEASE PROVIDE PROGRAM BUDGETS FOR EACH OF THE

- 2 **PROGRAMS INCLUDED IN THE EE PLAN.**
- 3 A. Total program budgets for the 2020 2023 EE Plan are included in the table
- 4 below. In addition, Ms. Karen K. Holbrook has included Petitioner's Confidential
- 5 Exhibit 5-A that has the amounts for each program by year.

Duke Energy Indiana 2020 - 2023 Energy Efficiency Programs *

Residential		
Agency Assistance Portal	\$	128,925
Energy Efficiency Education Program for Schools	\$	3,421,567
Low Income Neighborhood	\$	2,702,836
Low Income Weatherization	\$	6,409,068
Multi-Family EE Products & Services	\$	8,888,181
My Home Energy Report	\$	12,216,932
Residential Energy Assessments	\$	5,821,479
Smart \$aver® Residential	\$	18,539,694
Power Manager	\$	11,195,414
Total Residential	\$	69,324,096
Non-Residential		
Public Efficiency Streetlighting	\$	2,242,460
Smart \$aver Non-Residential	\$	53,248,383
Power Manager for Business	\$	6,967,667
Small Business Energy Saver	\$ \$	15,192,022
Total Non-Residential	\$	77,650,532
Market Potential Study	\$	275,000
Total Market Potential Study	\$	275,000
Grand Total 2020-2023 Portfolio	\$	147,249,627

* Totals may not foot due to rounding

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2 Q. WHAT IS THE STATUS OF THE MARKET POTENTIAL STUDY

3 ("MPS") THAT WAS APPROVED IN CAUSE NO. 43955 DSM-3?

- 4 A. The Company and its OSB agreed to delay the start of the MPS until early 2017
- 5 and the final report was presented to the OSB on February 8, 2018. The OSB

1		delayed the start of the MPS so the results would be as current as possible for use
2		in developing the energy efficiency portion of the Company's IRP which was
3		submitted on July 1, 2019. Costs for the MPS were incurred in 2017 and 2018.
4	Q.	IN THIS PROCEEDING, DOES THE COMPANY ALSO SEEK
5		APPROVAL FOR FUNDING OF A MARKET POTENTIAL STUDY
6		("MPS") IN 2021?
7	Α.	Yes. The Company's most recent MPS was completed in February 2018, as I just
8		mentioned. A new MPS would be used to inform the Company's next IRP due in
9		November 2021. The Company has included in the budget two hundred seventy-
10		five thousand dollars (\$275,000) and is proposing that it would be recovered
11		contemporaneously as a program cost. If funding is approved, the Company will
12		work with the OSB on the RFP process and jointly oversee the delivery of a final
13		report.
14		III. <u>COST RECOVERY</u>
15	Q.	WHAT ARE THE TOTAL PROGRAM COSTS THAT DUKE ENERGY
16		INDIANA SEEKS TO RECOVER?
17	A.	For all programs included in the EE Plan, the total program costs for the $2020-$
18		2023 period, which includes direct and indirect costs, EM&V, and other
19		recoveries, including incentives and lost revenues, are \$197,135,234. These costs
20		can be broken down as follows:

Duke Energy Indiana					
	2020-2023				
Cost Category	Rev	enue Requirement			
Direct Administrative	\$	63,084,161			
Indirect Administrative	\$	14,313,069			
Customer Incentives	\$	64,058,372			
EM&V	\$	5,794,025			
Company Incentives	\$	21,087,319			
Lost Revenues	\$	28,798,288			
Total	\$	197,135,234			

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IV. OVERSIGHT BOARD

3 Q. IS DUKE ENERGY INDIANA MAINTAINING ITS OSB?

A. Yes. The Duke Energy Indiana OSB meets monthly with four (4) quarterly inperson meetings and seven (7) phone calls. At each meeting, the OSB reviews the previous month's scorecard that presents the performance of each program in the portfolio. The Company's Program Managers lead the discussion regarding program performance and the background information on year-to-date performance and what is expected for the remainder of the year. During the quarterly in-person meetings, the OSB has a more in-depth meeting to review EM&V draft reports and other substantive issues that are more conducive to speaking in-person.

Q. DOES THE COMPANY PROPOSE ANY CHANGES TO ITS OSB?

14 A. No.

1		V. <u>CONCLUSION</u>
2	Q.	DOES THIS CONCLUDE YOUR PREPARED TESTIMONY AT THIS
3		TIME?
4	A.	Yes, it does.

Program Description Agency Assistance Portal	through proparticipating customer's h Customers a Income Hom This program multi-family	in this ome. re eligne Ener dwelli ocal ag	energy program ible for t gy Assis ilable to l ngs with gencies w	ef wi his tand both electher	program in homeowic service e low-inco	bull a pa if th n (I ners ome	ney apply for LIHEAP) the sand renters rovided by customers s	ble control or the cough occup Duke I seek as	ustome bulbs federa a low- ying si Energy	ing energy costs ers. Customers delivered to the lly funded Low income agency. ingle family and Indian. ee, Duke Energy
Program Objectives	money on th	eir util	ity bills	by	using ener	gy	efficient lig	hting.	Duke	save energy and Energy Indiana administer this
Marketing Plan	agencies as	The marketing strategy for this program will focus on utilizing the low-income agencies as the primary method of informing customers. Duke Energy Indiana will provide table tents and posters for agencies to place on display within their offices.								
Program										
Projected	KWh	2020		20)21	2	2022	202	23	Total kWh
Savings		835,2	240							835,240
	KW	2020) 20		2021	2	2022	202	23	Total kW
		97								97
										_
Program	Total Progr	om	2020		2021		2022	20)23	Total by
Budget	Budget	aiii	2020		2021		2022	20	123	Line Item
Budget	Admin - Di	rect	99,351		5,747		5,948	6	156	117,202
	Admin - Inc		9,595		666		702	76		11,723
	Customer	ancet	7,373		000		702	7.0	'1	11,723
	Incentives									
	EM&V									
	Total by Ye	ear	108,94	6	6,412		6,649	6.9	917	128,925
								•		
Program Cost	UCT		TRC			R	IM		PCT	·
Effectiveness	1.46		1.46			0.55			>1.0	
Dunganor				л	1'C '	1		1	L	
Program Measure Life	5.0		"Note: N	viea	sure life is	s ba	sed on kWh	weigh	uea av	erage
ivicasure Life										
	<u> </u>									

Program Description

Low Income Neighborhood

The Low Income Neighborhood program, known as the Neighborhood Energy Saver Program, or NES, assists low-income customers in reducing energy costs through energy education and installation of energy efficient measures. The primary goal of this program is to empower low-income customers to better manage their energy usage.

Customers participating in this program will receive a walk-through energy assessment and one-on-one education. Additionally, the customer receives a comprehensive package of energy efficient measures. Each measure listed below is installed or provided to the extent the measure is identified as energy efficiency opportunity based on the results of the energy assessment.

- 1. Energy Efficient Bulbs Up to 15 LED bulbs to replace incandescent bulbs.
- 2. Electric Water Heater Wrap and Insulation for Water Pipes.
- 3. Electric Water Heater Temperature Check and Adjustment.
- 4. Faucet Aerators Up to three low-flow faucet aerators.
- 5. Showerheads Up to two low-flow showerheads.
- 6. Wall Plate Thermometer –one per home.
- 7. HVAC Winterization Kits Up to three winterization HVAC kits for wall/window air conditioning units along with education on the proper use, installation and value of the winterization kit as a method of stopping air infiltration.
- 8. HVAC Filters A one-year supply of HVAC filters will be provided along with instructions on the proper method for installing a replacement filter.
- 9. Refrigerator Magnet highlighting the top 10 energy tips.
- 10. Air Infiltration Reduction Measures Weather stripping, door sweeps, caulk, foam sealant and clear patch tape will be installed to reduce or stop air infiltration around doors, windows, attic hatches and plumbing penetrations.

Targeted low-income neighborhoods qualify for this program if approximately 50% of the households have incomes of <200% of the Federal Poverty Guidelines. Duke Energy Indiana analyzes electric usage data to prioritize neighborhoods that have the greatest need and highest propensity to participate. While the goal is to serve neighborhoods where the majority of residents are low-income, this program is available to all Duke Energy Indiana customers in the defined neighborhood. This program is available to both homeowners and renters occupying single family, manufactured housing and multi-family dwellings in the target neighborhoods with electric service provided by Duke Energy Indiana.

The community approach offered by this program offers the following benefits:

Community involvement raises awareness of energy efficiency opportunities

	• Cor	mmunity leader	rs provide a tru	sted voice									
		_	e is possible v	when neighbors	and friends	go through this							
	pro	gram together											
		•	ained by work	ing in the sam	e close proxi	imity for longer							
	peri	periods of time											
	• Mo	re resources are	e available to tl	he individual pa	articipants to	meet their needs							
	• Enr	colling is simple	e										
	• Imp	olementation of	measures is fa	st and easy									
	• Tim	Timely tracking and reporting of activity											
		1.0.11											
Program Objectives						tomers to better							
Objectives		nanage their energy bills. Duke Energy Indiana will engage low-income customers on personal basis using a grass roots marketing approach to gain their trust. Crucial steps											
						lucating them on							
	how to ma	nage their ene	rgy needs. Aft	ter a one-on-or	ne education	session, energy							
		efficiency technicians provide customers with leave-behind materials to emphasize the											
	measures in	measures installed, the importance of each measure, and how to maintain the measure.											
Marketing Plan	The market	ing strategy for	r this program	will focus on a	a grassroots a	pproach. Below							
					-	utilize to meet							
	participation			- <i>6</i>									
	1 1	- Direct mai	il										
		- Door-to-de	oor canvassing										
		- Door hang	_										
		- Yard signs											
		- Press relea											
		- Flyers											
		- Social med	dia										
		- Communi	ty presentation	s and partnersh	ips								
			• •	publications su	•	ters, etc.							
				-									
Program													
Projected	kWh	2020	2021	2022	2023	Total kWh							
Savings		887,167	887,167	887,167	887,167	3,548,667							
	kW	2020	2021	2022	2023	Total kW							
	K VV	192	192	192	192	770							
		174	194	134	174	110							
	<u> </u>												

Program Budget	Total Program Budget	2020	2021	2022	202	23	Total by Line Item	
	Admin - Direct	543,695	553,908	563,497	7 573	3,272	2,234,372	
	Admin - Indirect	52,509	64,152	66,470	70,	832	253,963	
	Customer Incentives							
	EM&V	82,500		132,000)		214,500	
	Total by Year	678,704	618,060	761,968	644	4,104	2,702,836	
Program Cost	UCT	TRC		RIM		PCT	PCT	
Effectiveness	0.55	0.55		0.37	0.37		>1.00	
Program Measure Life	7.0 *Note: Measure life is based on kWh weighted average					verage		

Program Description Low Income Weatherization	The Low Income Weatherization program is designed to help Duke Energy Indiana income-qualified customers reduce their energy consumption and lower their energy cost. This Program will specifically focus on owner occupied, single family homes meeting income qualification levels based on DOE standards (<i>i.e.</i> , income below 200% of the federal poverty level). This program will provide direct installation of weatherization and energy-efficiency measures including refrigerator and furnace replacement. Duke Energy Indiana will utilize the Indiana Housing and Community Development Authority (IHCDA) to administer the program, partnering with the current Indiana
	Community Action Association weatherization network. This program will operate on a tier system, based on an annual KWH/sq. ft. consumption. Tier 1 services are as follows:
	 Energy Education Tier Two services are all Tier One Services plus: Additional cost effective measures using the National Energy Audit Tool ("NEAT") audit where the energy savings pay for the measure over the life of the measure as determined by a standard heat loss/economic calculation. Such items can include but are not limited to attic insulation, air sealing, wall insulation, crawl space insulation, floor insulation, duct sealing. In addition, up to \$750 can be spent on a home for Health & Safety issues which may prevent them from receiving weatherization assistance. However, the Health & Safety component must average no more than \$250 per home. In addition, refrigerator replacement will be available to income-eligible customers whose refrigerators test to be inefficient or >10 years old, including renters.
Program Objectives	This program will educate customers on their energy usage and identify other opportunities that can help reduce energy consumption and lower energy costs. The program is designed to provide additional weatherization assistance monies to the agencies, allowing them to install more energy-saving measures and/or serve more homes.
Marketing Plan	The marketing strategy for this program will utilize low income and non-profit agencies that provide weatherization services as the primary method for providing weatherization assistance to eligible customers. Additional marketing will include direct mail, flyers and direct contact between agencies and customers.

Program											
Projected	kWh	2020		2	2021		2022	1	2023		Total kWh
Savings		636,4	00	636,400			636,400		636,400		2,545,599
	kW	2020	0 202)21	2	022 2		2023		Total kW
		132	32		32	1	32	13	32		530
Program Budget	Total Progra	am 2	020		2021		2022		2023		Total by
											Line Item
			1,381,820		1,382,774		1,383,761		1,384,781		5,533,137
			133,454		160,148		163,229		171,100		627,931
	Indirect										
	Customer										
	Incentives										
	EM&V	1	11,600)					136,400		248,000
	Total by Ye	ar 1	,626,8	74	1,542,923		1,546,990		1,692	,281	6,409,068
Program Cost	UCT		TRC	,			RIM		F	PCT	
Effectiveness	0.31		0.31				0.25		>	>1.00)
Program	12.7		*Note:	M	easure life	is t	oased on kW	/h v	veighte	ed av	erage
Measure Life											

Program Description	in public and	privat	e schools	who	o reside in	households ser	ved by	Duke	tudents enrolled Energy Indiana. Children (NTC)		
Energy	targets K-12	grade	students	. Th	e primary	goal of this pr	ogram	is to e	educate students		
Efficiency Education									r energy bills in n for the school		
Education									cipating student		
									e app, Kilowatt		
									a performance,		
	regardless of										
Program									curriculum that		
Objectives									re related, ways		
									terpiece of the uch as energy,		
									actors. Teachers		
									ent take home		
	_		workboo	oks,	assignme	nts and activ	ities n	neet s	tate curriculum		
	requirements										
	Contract to the contract of th										
	Students are encouraged to request an Energy Efficiency Starter Kit. The kit contains specific energy efficiency measures to reduce home energy consumption. The kit is										
									re Duke Energy		
									onths. Program		
		is driv	en by stu	dent	t household	ds that elect to	receive	the Er	nergy Efficiency		
	Starter Kit.			~							
Marketing Plan									campaigns and		
	Program.	C uuii	izes direc	et in	an and em	ian sent direct	iy to pr	пстра	ls to market the		
	1 Togram.										
Program											
Projected	kWh	2020		2021		2022	2023		Total kWh		
Savings		3,221		3,189,135		3,189,135		4,892	12,714,387		
	kW	202		_	<u>)21</u>	2022	2023		Total kW		
		1,51	16	1,:	501	1,501	1,46	6	5,984		
Program	Total Progr	am	2020		2021	2022	202	13	Total by		
Budget	Budget	um	2020		2021	2022	202	.5	Line Item		
	Admin - Di	rect	727,55	7	722,325	723,289	709	,048	2,882,220		
	Admin - Inc		70,266		83,657	85,319	87,	608	326,851		
	Customer										
	Incentives										
	EM&V		48,996		54,500	54,500		500	212,496		
	Total by Ye	ar	846,81	9	860,482	863,109	851	,157	3,421,567		
Program Cost	UCT		TRC			RIM		PCT			
Effectiveness	2.87		2.87			1.12 >1.0			U		
Program	8.0		*Note:	Mea	asure life is	s based on kW	h weigl	hted av	verage		
Measure Life	L						0161				

Program Description Multifamily Energy Efficiency Products & Services	The Multifamily Energy Efficiency Products & Services program will allow Duke Energy Indiana to use an alternative delivery channel which targets multifamily rental complexes. Often times, neither property managers/owners or tenants are motivated to make energy efficiency improvements because they either don't pay the electric bill or the residence is considered temporary. This Program bridges this gap by educating property managers/owners about benefits and provides a low cost/no cost solution for improving the efficiency of the apartments. Franklin Energy is the implementation vendor who delivers this program.
Program Objectives	This program's objective is the installation energy efficient measures including: LED Lighting Kitchen Faucet Aerators* Bathroom Faucet Aerators* Showerheads* Hot Water Pipe wrap* *Water measures are only available if water is heated electrically Measures are installed by program crews during scheduled direct install visits and the crews are accompanied by property personnel. Franklin Energy installers carry tablets to keep track of what is installed in each apartment and what energy inefficient products are removed. After installations are complete, Quality Assurance ("QA") inspections are conducted
Marketing Plan	on approximately 20% of properties that completed installations in a given month. The QA inspections are conducted by an independent third party. Promotion of this program is primarily focused on personalized outreach to targeted property managers/owners where each unit is individually metered and has electric water heating. Program collateral stresses the benefits of this program to property managers. Benefits include higher occupancy rates, lower energy bills, lower water
	bills and lower tenant turnover. In addition, tenants will be informed about the energy efficient measures installed in their residence and how these new measures will help reduce their energy costs. Once enrolled, the program provides property managers with a variety of marketing tools to create awareness of this program to their tenants. Materials include Program letters to each tenant informing them of what is being installed and when the installation will take place. Tenants are provided an educational leave-behind brochure when the installation is complete. The brochure provides additional details on the installed measures as well as an opportunity to fill out a customer satisfaction survey to provide valuable Program feedback. Once the installation is complete the property
	will receive a complimentary window cling highlighting the participation in the program.

Program										
Projected	kWh	2020)	20	21	2	022	2023		Total kWh
Savings		15,0	68,898	14,315,490		10,827,186		8,145,640		48,357,214
	kW	202	0	20	2021		022	2023		Total kW
		1,69	1,693		509	1	,148	798		5,248
Program	Total Progra	ım	2020		2021		2022	202	3	Total by
Budget	Budget									Line Item
			2,441,214		2,321,509		1,732,344	1,250,028		7,745,095
	Admin - Ind			235,769			204,348	154	,450	863,437
	Customer									
	Incentives									
	EM&V		20,928		123,201				,520	279,649
	Total by Ye	ar	2,697,911		2,713,580)	1,936,692	1,53	39,998	8,888,181
Program Cost	UCT		TRC			R	IM		PCT	
Effectiveness	2.55		3.26			0.	.69		>1.00)
Program Measure Life	10.8		*Note:	Mea	sure life is	ba	ased on kWh	weigh	nted av	erage

Program Description Residential Energy Assessments	Residential Energy Assessments is a free in-home assessment designed to help customers reduce energy usage and energy cost. A Building Performance Institute ("BPI") certified energy specialist completes a 60 to 90 minute walk through assessment of the home and analyzes energy usage specific to the home to identify energy saving opportunities. As part of the assessment, the energy specialist reviews and provides a customized report to the customer that identifies actions the customer can take to increase energy efficiency in their home. The recommendations may range from behavioral changes to equipment modifications that can save energy and reduce cost. Customers receive an Energy Efficiency Kit with a variety of measures that can be directly installed by the energy specialist at the time of the assessment. The kit may include measures such as energy efficient lighting and water measures, outlet/switch gaskets, weather stripping and energy saving tips.										
	gaskets, weath	ier su	arpping ar	ia e	nergy savin	ıg	ups.				
Program Objectives	The primary goal is to empower customers to better manage their energy usage. Example recommendations might include the following: Turning off vampire load equipment when not in use Turning off lights when not in the room Using energy efficient lighting in light fixtures Using a programmable thermostat to better manage heating and cooling usage Replacing older equipment Adding insulation and sealing the home										
Marketing Plan	family home. mailings; how marketing wil to mass medi	This program targets Duke Energy Indiana residential customers that own a single family home. Program participation is primarily driven through bill inserts and targeted mailings; however, for those who elect to receive offers electronically, email marketing will be used to supplement. Additional channels include but are not limited to mass media, billboards, community events, and online awareness via the Duke Energy website as well as through online services.									
Program											
Projected	kWh	2020		20	21		022	2023	Total kWh		
Savings			7,418	_	789,649	_	,882,896	2,839,471	9,759,434		
	kW	202		_	21		022	2023	Total kW		
		132		30	3	3	13	308	1,055		
	 								1		
Program	Total Progra	m	2020		2021		2022	2023	Total by		
Budget	Budget	oot.	1 215 2	07	1 272 294	1	1 205 242	1 256 476	Line Item		
	Admin - Dire		1,215,2 117,371		1,272,384 147,363	+	1,285,243 151,608	1,256,476 155,247	5,029,390 571,589		
	Customer	nect	11/,3/1		147,303		131,008	133,247	3/1,389		
	Incentives										
	EM&V				105,000			115,500	220,500		
	Total by Yea	ar	1,332,6	58	1,524,747	7	1,436,850	1,527,223	5,821,479		

Program Cost	UCT	TRC	RIM	PCT	
Effectiveness	1.57	1.57	0.85	>1.00	
Program Measure Life	11.0	*Note: Measu	re life is based on kW	h weighted average	

Duke Energy Indiana Energy Efficiency Program Description & Information 2020 - 2023

Program Description

Free LED Program

Smart Saver® Residential

The Free LED program is designed to increase the energy efficiency of residential customers by offering customers LEDs to install in high-use fixtures within their homes. The LEDs are offered through an on-demand ordering platform, enabling eligible customers to request LEDs and have them shipped directly to their homes. Eligibility and participation limits are based on past participation in the CFL program and other Duke Energy Indiana programs distributing lighting. The maximum number of bulbs available for each customer is 15, but customers may choose to order less. Bulbs are available in 3, 6, 8, 12 and 15 pack and include 9 watts dimmable LEDs.

Customers have the flexibility to order and track their shipment through three separate channels:

Telephone

Customers may call a toll-free number to access the Interactive Voice Response ("IVR") system which provides prompts to facilitate the ordering process. Both English and Spanish-speaking customers may easily validate their account, determine their eligibility and place their LED order over the phone.

Duke Energy Web Site

Customers can go online to complete the ordering process. Eligibility rules and frequently asked questions are also available.

My Account

Customers who are enrolled in the My Account program can order their LEDs through the My Account "Featured Offer" or through an intercept upon logging in, if they are eligible.

Specialty Lighting & other energy efficient products

The Duke Energy Savings Store is an extension of the on-demand ordering platform enabling eligible customers to purchase a variety of energy efficient products. These products are shipped directly to customers' homes. The Savings Store offers a variety of products including specialty Light Emitting Diodes lamps ("LEDs") lighting, including; Reflectors, Globes, Candelabra, 3 Way, Dimmable and A-Line type bulbs, smart thermostats, smart strips, water savings products, dehumidifiers, air purifiers, & LED fixtures. Duke Energy incentive levels vary by bulb type and product, the customer pays the difference, including shipping. The amount of product each customer can purchase is restricted by an account limit per product type, but customers may choose to order more without the Duke Energy incentive. Currently, residential customers can check eligibility and shop for products through four separate channels:

Duke Energy Web Site

Customers can go online to visit the Savings Store and purchase energy efficient products. Frequently asked questions and product information are available to help customers understand how much they can save and how sustainable they can be by purchasing and using LED lighting and other energy efficient products.

My Account

Customers enrolled in the Company's My Account may visit the Savings Store and purchase. Upon login, eligible customers are intercepted with the Duke Energy Indiana Energy Efficiency Program Description & Information 2020 - 2023

Savings Store offer. Customers can choose to "Shop Now" or "No Thanks". Additional links within My Account are also available for customers to access the Savings Store.

Telephone

Customers may call a toll free number to contact the programs third-party vendor, Energy Federation Inc. ("EFI",) directly to place their orders.

The Savings Store is managed by a third party vendor, Energy Federation Inc. ("EFI"). EFI is responsible for maintaining the Savings Store website and fulfilling customer purchases. The Savings Store landing page provides information about the store, products, account information and order history. Support features include a toll free number, package tracking, live chat and frequently asked questions. Educational information is available to help customers with their purchase decisions. The educational information provides information on product types, application types, compatibility, savings, benefits, understanding watts versus lumens and recycling/safety tips.

Duke Energy Indiana residential customers with an active residential account are eligible to participate and must agree to terms and conditions, including the condition that all products will be installed at the accounts premise address, to participate in this program.

Retail Lighting

This upstream, buy-down retail-based lighting program works through lighting manufacturers and retailers to offer discounts to Duke Energy Indiana customers selecting incentivized LEDs and energy-efficient fixtures at the shelf for purchase at the register. Retailers, such as, but not limited to, Home Depot, Lowe's, Sam's Club, Walmart and Costco will be evaluated at the store level for possible inclusion in this program.

This program encourages customers to adopt energy efficient lighting through incentives on a wide range of LED products, including Reflectors, Globes, Candelabra, 3 Way, Dimmable and A-Line type bulbs, as well as fixtures. Customer education is imperative to ensure customers are purchasing the correct bulb for the application in order to obtain high satisfaction with energy efficient lighting products, ensuring subsequent energy efficient purchases.

The incentive amount varies by product type and the customer pays the difference as well as any applicable taxes. Pack limits will be in place and enforced to the best of the retailers' ability.

CLEAResult is the implementation vendor for the Retail program. CLEAResult will utilize a field team to promote and monitor the program at the participating retail locations. A toll free call center and website will be hosted by CLEAResult to provide program information to Duke Energy Indiana customers. The website will include a retailer locator where customers can enter their zip code and search for retailers and specific bulb and fixture types in their area. A tool available to customers is an interactive savings calculator, which will explain the different types of lighting technologies, help guide customers to the appropriate bulb/s for their

application and provide an estimate of energy and monetary savings. Eligible program participants include Duke Energy Indiana residential customers.

Save Energy and Water Kit

The Save Energy and Water Kit ("SEWK") is designed to increase the energy efficiency of residential customers by offering customers energy efficient water measures, and Insulated Pipe Wrap to install in high-use fixtures within their homes. These energy saving devices will be offered to eligible customers and by opting in, customers can have these devices shipped directly to their homes, free of charge. Eligibility is based on past campaign participation (including this Program and any other programs offering energy efficient water devices that Duke Energy Indiana has offered to Indiana customers) and the customer must have an electric water heater. Customers receive a kit with varying amounts, based on the size of the home, of the following devices: bath and kitchen aerators, state-of-the-art shower heads and insulated pipe tape. Customers also now have the ability to upgrade the showerhead(s) included in their kit to a form factor that better meets their needs. Upgrade options include a wider pattern showerhead and a shower wand. Customers will be able to upgrade showerheads at Program cost, there is no margin associated with these measures. Upgrades are intended to increase In-Service Rates and Customer Satisfaction. The kit also includes directions and items to help with installation.

This programs implementation vendor is EFI, who will receive and fulfill orders and provide support for damaged and missing orders. In addition to processing Business Reply Card orders, EFI also maintains the Save Energy and Water Kit Online store where customers can redeem the offer online. The Online Store helps reduce print and postage costs as well as paper waste and enables the ability for customers to upgrade the showerhead(s) in their kit. For customer service, EFI will maintain a call center to answer questions, provide installation support, and take orders.

Program Objectives

Free LED Program

The primary objective of this program is to demonstrate a commitment to high customer satisfaction by enabling customers to order a product that will allow them to save energy and money through a user-friendly, multi-channel platform.

The benefits of providing three distinct channels include:

- Improved customer experience
- Advanced inventory management
- Simplified program coordination
- Enhanced reporting
- Increased program participation
- Reduced program costs

Specialty Lighting & other energy efficient products

The primary goal for this program is to help customers lower their energy bills and to remove inefficient equipment from the electric grid. This program educates customers about energy consumption and how it compares to high efficiency alternatives.

This program provides discounted products for residential customers to help them reduce their energy usage while maintaining a comfortable atmosphere.

Retail Lighting

The primary goals for this program are to help customers lower their energy bills and to remove inefficient equipment from the electric grid. This program educates customers about energy consumption attributed to lighting and how to reduce their consumption by using high efficiency alternatives.

Save Energy and Water Kit

The overall strategy of this program is to reach residential customers who have not adopted energy efficient water devices and water heating pipe insulation. Duke Energy Indiana will educate customers on the benefits of using energy efficient water devices and saving the energy used to heat water, while addressing barriers for consumers who have not participated in this program.

Marketing Plan

Free LED Program

Marketing strategies to generate awareness of the program may include use of:

- My Account Intercepts
- IVR Intercepts
- Direct Mail (such as BRCs and New Customer Letters)
- Social Media
- Email Blasts

Specialty Lighting & other energy efficient products

This program will implement an integrated approach to marketing which may include, but not limited to:

- Direct mail
- My Account Intercepts
- Bill inserts/messaging
- Community/trade events
- Digital and broadcast media

Retail Lighting

This program will implement an integrated marketing plan which may include, but is not limited to:

- Point of Purchase materials at the participating retailer locations
- Duke Energy and Program website
- General Awareness Campaigns
 - o Email
 - o Digital advertising
 - o Paid advertising/mass media
- Advertised events at key retailers including:
 - o Direct mail
 - o Email
 - o Paid advertising/mass media (radio, newspaper, etc.)
 - Social media
 - o In Store materials (fliers, bag stuffers, posters, banners, etc.)

Duke Energy Indiana Energy Efficiency Program Description & Information 2020 - 2023

• Community outreach events (home shows, sporting events, cultural events, etc.)

These marketing efforts are designed to create customer awareness of this program, to educate customers on energy saving opportunities and to emphasize the convenience of Program participation. Additionally, marketing efforts related to advertised in-store events are designed to motivate customer participation.

Save Energy and Water Kit

Duke Energy Indiana will market the SEWKP program through various promotional channels which may include direct mail, email and through an online store.

Program Description

HVAC Equipment

The HVAC Equipment program offers prescriptive incentives to residential customers for the purchase and installation of energy efficient measures designed to help customers improve the efficiency of their HVAC. As a result of increased federal energy efficiency standards for baseline (SEER rating) and higher cost for energy efficient equipment, the Company will implement modifications to offer a cost-effective Program. Modifications include a tiered incentive structure for HVAC equipment, an optional add-on measure, and a new referral channel component for eligible trade allies. Two incentive levels will be made available for customers replacing HVAC equipment, based on the efficiency rating of the new unit installed, along with an add-on optional efficiency measure, for a smart thermostat. Customers can choose to combine the optional smart thermostat with the HVAC equipment replacement that will further improve the efficiency of the HVAC system. The smart thermostat is a programmable Wi-Fi enabled thermostat to help customers monitor and manage their HVAC from their smart device, and must be purchased and programmed as part of the HVAC equipment installation.

Attic Insulation and Air Sealing

Program incentives are provided to customers that have a trained participating contractor to seal and insulate the home's attic. Trained technicians utilize diagnostic equipment and proven procedures to identify and seal attic penetrations to improve the homes comfort and to reduce energy bills. After the sealing process is complete, attic insulation is installed to provide protection from higher attic temperatures. Trade allies submit incentive applications following successful completion of insulation and air sealing within the attic. The attic insulation and air sealing incentive is available one time per household.

Duct Sealing

Program incentives are provided to customers that have a certified contractor seal the home's duct system to reduce air leakage. Trained technicians utilize diagnostic equipment and proven procedures to seal leaks which can reduce energy bills and improve comfort. Trade allies submit incentive applications following successful completion of duct sealing measure. The duct sealing incentive will be paid one time per duct system.

Duke Energy Indiana Energy Efficiency Program Description & Information 2020 - 2023

Heat Pump Water Heater

Program incentives are provided to encourage the adoption and installation of high efficiency heat pump water heaters in existing residences with electric water heating. Duke Energy Indiana served homeowners currently residing in or building a single family residence, condominium, or duplex home are eligible for this program. Duke Energy program personnel establish relationships with plumbing contractors and national home improvement retailers who interface directly with residential customers. Incentives are paid directly to the customer following the installation of a qualified heat pump water heater by a participating contractor and approval of a completed application.

Variable-Speed Pool Pump

Program incentives are provided to encourage the adoption and installation of energy efficient, variable-speed pool pumps for the main filtration of in-ground residential swimming pools. Duke Energy Indiana served homeowners currently residing in or building a single family residence with an in-ground swimming pool are eligible for this program. Duke Energy program personnel establish relationships with pool professionals who interface directly with residential customers. Incentives are paid directly to the customer following the installation of a qualified variable-speed pool pump by a participating contractor and approval of a completed application.

Referral Channel

The referral component of the Program is a new delivery channel that provides a free referral service to customers to enhance program awareness and participation. The service simplifies the customer's decision-making around energy efficiency purchases and takes the guesswork out of finding reliable, qualified contractors with competitive offers. This delivery channel supports the Company's role as an energy efficiency program administrator while building trusted partnerships with customers and HVAC and home performance contractors as well as home builders ("Trade Allies") who interface directly with residential customers.

The Referral Channel offers high achieving Trade Allies in the Program the ability to receive referral services. The Referral Channel establishes designations between registered Trade Allies as referred or non-referred. As part of the Program, the Company will generate leads for qualified, referred Trade Allies by identifying prospective customers with interest in eligible incentivized energy efficiency upgrades and/or subsequent non-incentivized services.

Trade Ally eligibility to participate in the referral channel will be based upon previous registration in one or more of the Program incentive measures, and meeting minimum performance requirements which demonstrates their active engagement and promotion of the Program. Performance criteria include such metrics as quantity and accuracy of qualifying rebate applications submitted, customer service rating, and quality assurance. Trade Allies who meet the performance criteria may elect to opt-in to participate in the referral channel. These Trade Allies will be able to receive referrals from the Company when requested by a customer. Customers will have the option of contacting one or more of the referred Trade Allies. For those referrals that result in a closed sale, the Trade Ally will pay the Company a set fee, structured in a manner that encourages sales of qualifying, high efficiency products and services. These fees

	. 11	1 0 0	1 1 1	C /1 C	1 1 1	111 1 1 .
		the Company for to improve cos			ral channel are	e paid back into
		y Indiana will de Allies an en				erred and non- tible measures.
Program Objectives	satisfaction purchase and improve the	through offerir d installation o	ng prescriptive of energy effic their HVAC sy	incentives to	residential customic designed to 1	ased customer stomers for the help customers and swimming
Marketing Plan	Marketing of and new hore they interface event which information website. The activities successful aware customers are	me builders. The current can have a including Trade e majority of tree that as: face-to-feness of the Property	quipment and s rade Allies are stomer during significant im e Ally enrollme rade ally marke face, phone, ele ogram and the pare be benefits of the	the equipment to the equipment on annual ent forms will be ting is conducted to the control of the Program at the time to the extrement of the	the program s t purchase de tal energy us te available on ted through pe rect mail. By Trade Allies, time of purcha	to Trade Allies uccess because cision- making age. Program Duke Energy's rsonal outreach increasing the it ensures more ase. Trade Ally
	Several broad of the Program out of home insert, bill in promote the improvement topics such a and savings, These market educate cust	am. The market and print which nessaging) the benefits of the tts. Customers as energy usage and other ener	eting campaign h will be in add Program has he referral chann will have access e, benefits of e gy efficiency p	s may leverage dition to the transistorically contended to customer as to a Duke Ennergy efficient programs.	e channels such additional chann mmunicated that is for home en energy represent the equipment, ex-	e the awareness th as TV, radio, nels (email, bill arough and will tergy efficiency tative to discuss expected pricing the Program, to he convenience
Program	l	2020	2021	2022	2023	Total kWh
Program Projected	kWh	2020	2021	2022		
Program Projected Savings	kWh	2020 24,164,936				
Projected	kWh	24,164,936	24,447,139	27,486,071	22,958,610	99,056,756 Total kW

Program	Total Program	2020	2021	2022	2023	Total by		
Budget	Budget					Line Item		
	Admin - Direct	1,149,089	884,748	966,487	896,312	3,896,637		
	Admin - Indirect	392,909	454,104	510,753	465,801	1,823,567		
	Customer	2,919,195	3,036,137	3,363,384	2,873,60	5 12,192,321		
	Incentives							
	EM&V	36,599	233,451	115,525	241,595	627,170		
	Total by Year	4,497,792	4,608,440	4,956,149	4,477,31	3 18,539,694		
Program Cost	UCT	TRC		RIM	PC'	PCT		
Effectiveness	2.20	1.31		0.66	3.0	3.01		
						_		
Program	14.1	14.1 *Note: Measure life is based on kWh weighted average						
Measure Life								

Program Description My Home Energy Report	My Home Energy Report (MyHER) program provides customers with a comparison of their energy usage to similar single family residences in the same geographical area based upon the age, size and heating source of the home. Specific energy saving recommendations are provided to encourage energy saving behavior. The paper reports are mailed up to 8 times and emailed up to 12 times a year for single family dwellings. Multifamily dwellings receive up to 6 paper reports if they do not have an email and up to 4 paper reports and 12 electronic reports throughout the year. MyHER Interactive, a portal, provides similar information as the printed report but also provides the ability to create a savings plan, see how energy is used in the home by end use, provides an energy expert to respond to customer questions and delivers weekly email challenges. MyHER is a foundational part of the existing EE portfolio because it provides customers with an awareness of their usage and provides them information they can use to reduce their monthly electric bill, including information about other EE measures available to them through the Duke Energy Indiana Residential EE Portfolio.									
Program Objectives	Generate kWh savings, increase customer satisfaction and educate customers on other Energy Efficiency offers from Duke Energy Indiana.									
Marketing Plan	The paper report MyHER program is an opt out program that automatically creates and sends reports for eligible customers. The MyHER Interactive portal is an opt in program and is marketed through messages in the printed report and email marketing campaigns. Sweepstakes offers are used to encourage enrollment on the Interactive Portal.									
Program										
Projected	kWh 2020		202		1 20		022 2023			Total kWh
Savings			30,036		473,515		7,617,289	57,76	1,357	230,182,198
	kW	202		_)21	_	2022	2023		Total kW
		5,23	33	5,	246	5	5,259	5,272	2	21,011
						•				
Program	Total Program		2020		2021		2022	2023		Total by
Budget	Budget									Line Item
	Admin - Direct		3,355,228		2,603,555		2,459,549	2,31	5,585	10,733,917
	Admin - Indirect		324,043		301,535		290,129	286	,108	1,201,815
	Customer									
	Incentives							1		
	EM&V		140,600		2.007.000		140,600	0.55	1 606	281,200
	Total by Year		3,819,871		2,905,090		2,890,278	2,60	1,693	12,216,932
Program Cost	UCT		TRC		_			PCT		
Effectiveness	1.09		1.09		0.52		>1.00			
_		ı								
Program Measure Life	1.0		*Note:	Mea	asure life i	s ba	ased on kWl	n weigl	nted av	erage

Duke Energy Indiana Energy Efficiency Program Description & Information 2020 - 2023

Program Description

Power Manager®

Power Manager® is a residential load control program. It is used to reduce electricity demand by controlling residential air conditioners, electric water heaters, and thermostats during periods of peak demand. A load control switch is attached to the outdoor air conditioning unit of participating customers. For water heaters, the switch is installed on or near the appliance. The device enables Duke Energy Indiana to cycle central air conditioning systems off and on when the load on Duke Energy Indiana's system reaches peak levels. The water heater switch will enable Duke Energy Indiana to cycle off electric water heaters during times of high electric demand—year round.

Power Manager® is offered to residential customers that have a functional central air-conditioning system with an outside compressor unit. Customers must agree to have the control device installed on their A/C system and to allow Duke Energy Indiana to control their A/C system during Power Manager® events. If the customer also has an electric water heater, the customer may choose to also have a control device installed on or near that appliance and allow Duke Energy Indiana to control the appliance during Power Manager® events.

Customers residing in single family homes participating in this Program receive a one-time enrollment incentive and monthly bill credits during the months of May – September for Power Manager® participation. Customers who select Option A, which cycles their air conditioner to achieve a 1.0 kW load reduction, receive a \$25 credit at installation. Customers selecting Option B, which cycles their air conditioner to achieve a 1.5 kW load reduction, receive a \$35 credit at installation. The bill credit provided for each cycling event is based on: the kW reduction option selected by the customer. For each control season (May through Sept), customers will receive a credit of \$7.50 for Option A and \$10 for Option B in credits. For water heaters, participating customers receive a one-time incentive of \$5 and a bill credit for Power Manager® participation. Annually, customers will receive a bill credit of \$6 in credits.

Additionally, the Power Manager® program has a specific offer focused on customers who are tenants in apartment complexes/communities—marketed as Power Manager® for Apartments. The program is offered to property/managers/owners of individually metered apartment units that have a functional central air-conditioning unit with an outside compressor unit. The landlord must agree to have the control device installed on the A/C system and to allow Duke Energy Indiana to control the A/C system during Power Manager® events and enroll tenants in the program. In addition, if the apartments have electric water heaters, the property managers/owners will be offered the opportunity to have load control switches installed on those appliances and enroll the tenants in this program.

The property managers/owners will receive an annual incentive for each air conditioning unit receiving a load control switch. This incentive is \$5 per air conditioning switch installed. The purpose of these incentives revolves around the fact that the landlord owns the equipment, controls access to the equipment and the maintenance of the equipment. Communication about maintenance events and that a switch has been disconnected is very valuable for persistence of these measures. The most efficient way to deliver this Program (and provide savings in kW to Duke Energy Indiana and in dollars to Customers) is via these property managers/owners. The

property manager/owners will receive a one-time enrollment incentive of \$5 for each water heater switch installed.

Additionally, the Customers (tenants) participating in this Program receive bill credits for Power Manager® participation. Customers will receive a \$10.00 bill credits annually for their participation in the air conditioning part of this program. Customers who also have a water heater switch installed on their unit will receive a \$6.00 annually in bill credits. After installation of the switch(es), tenants will be notified of their Program eligibility and given the opportunity to opt-out of participation.

For the 2020-2023 portfolio, Duke Energy Indiana is now including our Bring Your Own Thermostat (BYOT) program in to our Power Manager suite. Bring Your Own Thermostat (BYOT) is a residential Demand Response (DR) program leveraging customers "Smart" two-way communicating thermostats instead of traditional load control switches that are installed by the utility. It is intended for customers who have already purchased, installed, and registered a smart thermostat in their home, allowing the utility to avoid the hardware and installation costs associated with traditional direct load control programs. The utility can verify how many thermostats are operable and online at any given time, and determine which thermostats are participating in DR events as opposed to opting-out. Since it was first introduced in 2012, over a dozen utilities have implemented, or are planning to implement BYOT pilot programs in the United States. Duke Energy Indiana is partnering with a third-party vendor who has contracts with multiple thermostat manufacturers to offer demand response through aggregation of the different thermostat models.

Program Objectives

The objective of the Power Manager® program is to provide customer bill savings to customers through reducing their usage during times of high system loads or high wholesale energy prices. This program delivers direct savings to participating customers in the form of bill credits as well as reduces rates for all customers by providing a cheaper capacity option than building generation for the small number of hours that the program impacts. For the apartment complex marketplace, the program also provides property manager/owners incentives to provide apartment units that will have lower monthly operating costs for their tenants. For BYOT, Duke Energy Indiana hopes to reach new customers who have not traditionally participated in demand response. For their participation, customers are provided annual recurring monetary incentives via gift cards or bill credits.

Marketing Plan

Customers are informed of the program via the program website and associate brochure on the Duke Energy website (as of this writing, found at http://www.duke-energy.com/indiana/savings/power-manager.asp). Customer recruitment is focused primarily on outbound telemarketing, and supplemented by email and direct mail solicitations. Door-to-door canvassing is being used in other Duke Energy operating companies for similar programs, and will be evaluated and potentially added to the marketing mix, if appropriate.

Power Manager® for Apartments is marketed through personalized outreach to targeted property managers/owners with individually metered units. Program collateral will stress the benefits of this program to property managers that are motivated by higher occupancy rates and providing lower electric costs for their tenants. It is also planned

	to leverage opportunities, contacts and learnings from the Residential Multifamily Energy Efficiency Program. BYOT will be marketed to customers through participating device manufacturers who offer utility branded marketing and enrollment services. One of the significant advantages of Smart Thermostats is two-way communication. Agreements with the aggregation vendor and their thermostat partners allow them to send marketing messages to device owners inviting them to participate in their utility's DR program. Marketing communication may include, but is not limited to, messages within the manufacturers smart phone application, co-branded email, and text messages. Interested customers are then directed to enroll electronically through the various marketing channels. In addition to the thermostat manufacturer communication, the company may use a number of other channels, such as the utility website and social media.									
Program	kWh 2020 2021 2022 2023 Total kWh									
Projected Savings	kWh	2020)	20	21		2022	2023	•	Total kWh
	kW	202	0) 20		2	2022	2023		Total kW
		68,4	170	69	,916	7	70,815	72,86	51	282,062
Program Budget	Total Progra	m	2020		2021		2022	2023		Total by Line Item
	Admin - Dir		1,825,83		1,633,826	<u>,</u>	1,668,607		2,263	6,820,532
	Admin - Ind	irect	214,356		241,339		251,637		,546	974,879
	Customer Incentives		600,077	,	617,662		635,745	652,	,518	2,506,002
	EM&V		264,000)	180,000		270,000	180,		894,000
	Total by Yea	ar	2,904,20	68	2,672,828	}	2,825,990	2,79	2,328	11,195,414
Program Cost	UCT		TRC			_	RIM		PCT	
Effectiveness	4.57		5.88			4	.57		>1.00)
Program Measure Life	1.0		*Note:	Mea	asure life is	ba	ased on kW w	veight	ed ave	rage

Program Description

Power Manager® for Business

Power Manager® for Business is a non-residential program that provides business customers with the opportunity to participate in demand response, earn incentives and realize optional energy efficiency benefits. This program is designed as a flexible offer that provides small-to-medium size business customers with options on device types as well as level of demand response participation. Customers first select the type of device from two available options: thermostat or switch.

Customers who opt for the thermostat will have the ability to manage their thermostat remotely via computer, tablet or smartphone. The thermostat comes with presets designed to help the business manager/owner set an efficient schedule that works for their business. This realizes additional benefits in the form of EE impacts/savings. Customers then select one of three levels of summer demand response ("DR") participation, and earn an incentive based upon that selection.

Both thermostat and switch customers have the same DR participation options, and receive the same DR incentives.

Power Manager® for Business will be offered to business customers with qualifying air conditioning systems, summer weekday energy usage and broadband/Wi-Fi internet. Customers must agree to have the control device installed on their A/C system and to allow Duke Energy Indiana to control their A/C system during Power Manager® events. Qualifying air conditioning systems include:

Individual split air conditioning systems Rooftop Units Packaged terminal air conditioners ("PTACs")

Customers participating in this Program receive an incentive based on upon the level of demand response cycling they select:

30% cycling: \$50 per DR summer season (per device) 50% cycling: \$85 per DR summer season (per device) 75% cycling: \$135 per DR summer season (per device)

The incentive will be paid out after installation of the device(s) and then annually. Devices are installed at the customer premise at no charge to the customer.

Program Objectives

The objective of the Power Manager® for Business program is to provide customer bill savings to customers through reducing their usage during times of high system loads or high wholesale energy prices. This program delivers direct savings to participating customers in the form of bill credits as well as reduces rates for all customers by providing a cheaper capacity option than building generation for the small number of hours that the program impacts. In addition, this program is reaching a subset of the customer base that previously has not been well-served by similar demand response programs (too small for PowerShare® and not eligible for the residential Power Manager® program).

Petitioner's Exhibit 2-A (ABD) IURC Cause No. 43955 DSM-8 Duke Energy Indiana Energy Efficiency Program Description & Information 2020 - 2023

Marketing Plan	Power Manager® for Business will be marketed through targeted direct mail campaigns, targeted e-mail campaigns, outbound telemarketing, on Duke Energy's Web site and via cross selling with the Small Business Energy Saver Program. Direct sales via doo-to-door outreach will also be evaluated for potential inclusion as a future marketing channel.									
Program										
Projected	kWh 2020 2021 2022 2023 Total kWh									
Savings		1,14	3,734	1,1	165,298	1	,194,327	1,194	1,327	4,697,685
	kW	2020		20)21	2	.022	2023		Total kW
		13,0)83	16	5,832	2	0,521	21 24,037		74,473
Program	Total Progra	Total Program			2021		2022	2023		Total by
Budget	Budget									Line Item
	Admin - Direct		818,890		850,327		884,853	908,223		3,462,292
	Admin - Indirect		111,781		147,625		167,351	191,	,503	618,260
	Customer Incentives		338,520		424,313		533,852	640,430		1,937,115
	EM&V		200,000		250,000		250,000 250,0		.000	950,000
	Total by Year		1,469,191		1,672,264		1,836,056	1,990,156		
Program Cost	UCT		TRC			R	IM		PCT	
Effectiveness	1.79		2.48	1.39			>1.00			
										_
Program Measure Life	8.0		*Note:	Mea	asure life is	ba	ased on kWh	weigh	nted av	erage

Duke Energy Indiana Energy Efficiency Program Description & Information 2020 - 2023

Program Description

Small
Business
Energy Saver

The purpose of Duke Energy Indiana's Small Business Energy Saver (SBES) program is to reduce energy usage through the direct installation of energy efficiency measures within qualifying small and medium non-residential customer facilities. SBES is designed to offer a convenient, turn-key process for non-residential customers to make facility energy efficiency improvements. Many small and medium business owners lack the time, upfront capital, or technical expertise to facilitate the retrofit or replacement of older equipment within their facilities. The SBES program effectively removes these barriers by offering a turn-key energy efficiency offering which facilitates the direct installation of energy efficiency measures, and minimizes financial obstacles with significant upfront incentives from Duke Energy Indiana which offset the cost of projects. Participants may be in owner-occupied or tenant facilities with owner permission.

All aspects of SBES are managed by a Duke Energy-authorized program vendor. Program participants receive a free, no-obligation energy assessment of their facility followed by a recommendation of energy efficiency measures to be installed in their facility along with the projected energy savings, costs of all materials and installation, and up-front incentive amount from Duke Energy Indiana. Upon receiving the results of the energy assessment, if the customer decides to move forward with the proposed energy efficiency project, the customer makes the final determination of which measures will be installed. The energy efficiency measure installation is then scheduled at a convenient time for the customer and the measures are installed by a Duke Energy-authorized vendor electrical subcontractor.

The SBES program incentive amount is calculated per project, based upon the estimated energy savings of the energy efficiency improvements and the conditions found within the customer's facility. Incentivized measures address major end-uses in lighting, refrigeration, and heating ventilation and air conditioning (HVAC) applications. Lighting measures such as interior and exterior light emitting diode (LED) fixtures, screw-in LED lamps; LED tubes and LED retrofit kits; LED exit signs; and occupancy sensors may be offered. All lighting measures offered are Consortium for Energy Efficiency ("CEE"), ENERGY STAR, or Design Lights Consortium ("DLC") qualified products. Refrigeration measures may include new electronically commutated ("EC") motors, anti-sweat heater controls, evaporator fan controls, LED refrigeration case lighting, beverage machine/novelty cooler controls, and automatic door closers for walk-in freezers. HVAC upgrades such as unitary, split systems, and air sourced heat pumps and programmable thermostats may be included. anticipation of technological advancements, Duke Energy Indiana proposes the flexibility to incentivize additional cost effective measures where appropriate within the lighting, refrigeration and HVAC fields. In order to encourage participation within this hard-to-reach customer segment, Duke Energy Indiana provides an upfront customer incentive for up to 80 percent of the total cost of installed measures. Incentives will be provided based on Duke Energy Indiana's cost effectiveness modeling to ensure cost effectiveness over the life of the measures.

Duke Energy Indiana's incentive payment for any installed measures will be paid directly to the program vendor upon verification that the energy efficiency measure(s) have been installed. The program vendor is only compensated by Duke Energy Indiana for energy savings produced through the installation of energy efficiency measures.

	All project costs above the incentive amount will be the responsibility of the customer and paid based upon payment terms arranged between the customer and program vendor. The program vendor will offer interest-free extended payment options to the customer, to further minimize any financial barriers to participation.										
Program Objectives	The objective of the Small Business Energy Saver (SBES) program is to enable the direct installation of high efficiency equipment in existing small and medium non-residential facilities by removing common barriers to energy efficiency program participation.										
Marketing Plan	This program may be promoted through various marketing channels that include, but are not limited to:										
Program											
Projected	kWh	2020		202	21	20)22	2023		Total kWh	
Savings		17,55	51,805	15,	504,095	14	1,431,484	13,45	6,384	60,943,769	
	kW	202	0	20)21	2	2022	2023	3	Total kW	
		3,25	52	2,	872	2	2,673	2,49	3	11,290	
Program Budget	Total Progr Budget	am	2020		2021		2022	202	3	Total by Line Item	
	Admin - Di	rect	346,25	1	302,245		292,516	283,606		1,224,618	
	Admin - In	direct	370,16	4	391,693		372,662	365,609		1,500,128	
	Customer Incentives		3,486,5	527	3,079,76	5	2,866,700	2,673,004		12,105,996	
	EM&V		61,560		110,484		67,716	121,520		361,280	
	Total by Yo	ear	4,264,5	502	3,884,18	8	3,599,594	3,443,739		15,192,022	
Program Cost	UCT	-	TRC			R	IM		PCT		
Effectiveness	2.48		1.62				.73		3.40		
Program Measure Life	12.2		*Note:	Mea	isure life i	s ba	ased on kWh	n weig	hted av	erage	

Duke Energy Indiana Energy Efficiency Program Description & Information 2020 - 2023

Program Description

Smart \$aver® Nonresidential Incentive

The Smart \$aver® Non-residential Incentive Program provides incentives to commercial, industrial, and institutional consumers for installation of energy efficient equipment in applications involving new construction, retrofit, and replacement of failed equipment. This program also uses incentives to encourage maintenance of existing equipment in order to reduce energy usage. Incentives are provided based on Duke Energy Indiana's cost effectiveness modeling to assure cost effectiveness over the life of the measure.

All non-residential customers served by Duke Energy in Indiana on a non-residential rate to which the Energy Efficiency Revenue Adjustment is applicable are eligible for the Smart \$aver® program, except for those customers that choose to opt-out of the Duke Energy Indiana Program.

This program is delivered to customers through three incentive categories: Prescriptive, Custom and Performance.

Prescriptive Incentives

Prescriptive Incentives are pre-determined, fixed incentives for common energy efficiency equipment. Pre-approval is not required; eligibility requirements and incentive amounts are published on the application form posted to the Duke Energy website.

This program promotes prescriptive incentives for the following technologies – lighting, HVAC, pumps, variable frequency drives, food services, process equipment, and information technology equipment. Equipment and incentives are predefined based on current market assumptions and Duke Energy's engineering analysis. The eligible measures, incentives and requirements for both equipment and customer eligibility are listed in the applications posted on Duke Energy's Business and Large Business websites for each technology type.

Duke Energy Indiana is examining providing a limited quantity of low-cost energy efficient equipment directly to eligible Nonresidential customers, at no cost to the customer, through this program or in partnership with other Duke Energy programs.

Standards continue to change and new, more efficient technologies continue to emerge in the market. The Company expects that new measures will be added to the program to increase participation and provide customers a broader suite of products.

Prescriptive Incentives are offered to customers through multiple channels, including an application form (paper and electronic), the online Energy Efficiency Store, and Midstream network. Additional channels may be added in the future, in order to reach as many customers as possible.

Custom Incentives

Unlike Prescriptive Incentive Program measures, Custom Incentives require approval prior to the customer's decision to implement the project. Proposed energy efficiency measures may be eligible for Custom Incentives if they clearly reduce electrical consumption and/or demand. There are two potential approaches for applying for Custom Incentives; Classic Custom and Custom to Go. Application documents vary

slightly depending on the approach taken. The two approaches differ in terms of the method by which energy savings are calculated. Customers eligible for the Custom to Go calculations approach may elect to apply under the Classic Custom approach if that is their preference.

The following application forms are located on the Duke Energy website under Smart \$aver Custom Incentives (Business and Large Business tabs). These forms may be completed and returned to the program via e-mail or through use of the Online Application Portal.

- Custom Application Administrative Information
- Energy Savings Calculations & Basis
 - o Classic Custom Approach (> 700,000 kWh <u>or</u> no applicable Custom to Go calculator)
 - Variable Frequency Drives
 - Energy Management Systems (HVAC)
 - Compressed Air Systems
 - Lighting
 - General (for technologies not listed above)
 - O Custom to Go Calculators (< 700,000 kWh unless otherwise noted and applicable Custom to Go calculator)
 - Variable Frequency Drives (Fans & Pumps)
 - HVAC/Energy Management Systems
 - Compressed Air Systems
 - Lighting (>700,000 kWh is supported)

The Smart \$aver Custom Incentive team continues to explore additional program enhancements designed to increase program participation. Recently, the software-based Custom-to-Go calculation tools will transition to a web-based environment and marketed as the "Smart Saver Tools". Lighting and HVAC tools have already been transitioned.

Performance Incentives

Duke Energy Indiana's \$mart Saver Performance Incentive provides a mechanism to encourage the installation of high efficiency measures not eligible for Smart \$aver Prescriptive or Custom Incentive payments. \$mart Saver Performance Incentive has been designed to complement the Company's Smart \$aver Prescriptive and Custom measures, and would encourage the implementation of energy conservation measures which are characterized, at the time of conception, by a degree of uncertainty associated with the end result. The types of measures that will be covered by \$mart Saver Performance Incentive will include some combination of unknown building conditions or system constraints, coupled with uncertain operating, occupancy, or production schedules. The specific type of measures will be included in the contract with the Customer.

To receive payment under this program, the customer must submit an application and receive approval before making a decision to implement the project. An estimated total project savings will be calculated and agreed to by the applicant and the Company. Program incentives will be based on the published incentive rate schedule. Incentives paid under Performance Incentive may be divided into multiple payments. When

applicable, the Initial incentive payment will be made upon completion of the project, and following a review and approval by the company. This initial payment will be based on a portion of the initial estimated total savings for the project that will be achieved with a high degree of confidence. Subsequent and, ultimately, Final Measured Incentive Payment(s) will be made as savings are confirmed and will be equal to the applicable incentive rate multiplied by the verified savings amount. The percentage of payment made for the initial incentive versus the verified incentive payment amount will be made on a project-by-project basis according to the measure of uncertainty assigned to the project.

Performance Incentives will leverage the application materials and processing channels established in the Smart Saver Custom program, as well as, the same promotional channels.

Due to the different types of projects, and the range of variables involved with these different categories of energy efficiency measures, the program Evaluation, Measurement & Verification will be performed separately for Prescriptive, Custom and Performance measures.

Program Objectives

Commercial, industrial, and institutional customers can have significant energy consumption, but may lack knowledge and understanding of the benefits of high efficiency alternatives. The Smart \$aver Incentive Program is designed to meet the needs of Duke Energy Indiana customers that have opportunities for electrical energy savings projects, whether the project involves common energy efficiency equipment or more complicated or alternative technologies.

The financial incentives help reduce the cost differential between standard and high efficiency equipment, offer a quicker return on investment, save money on customers' utility bills that can be reinvested in their business, and foster a cleaner environment. In addition, the Prescriptive Incentives offered in the Program encourages dealers and distributors (or market providers) to stock and provide these high efficiency alternatives to meet increased demand for the products, including sometimes directly providing the incentive to customers. The Custom Incentives and Performance Incentives offer options to encourage customers to implement energy efficiency measures that are not included in the list of Prescriptive Incentives.

Marketing Plan

This program is promoted directly to Nonresidential customers via targeted marketing material and communications, including direct mail, email, and online channels. Additionally, information about incentives is communicated through, but not limited to, the following;

- Energy efficient equipment collateral and tool kits
- New construction tool kit
- Trade ally outreach
- Duke Energy Large Account Managers
- Duke Energy Business Energy Advisors
- Duke Energy Energy Efficiency Engineers
- Duke Energy workshops/webinars
- Company website

	Optional energy assessments are available to identify and/or evaluate energy efficiency projects and measures. The scope of an energy assessment may include but is not limited to facility energy audit, new construction/renovation energy performance simulation, system energy study and retro-commissioning service. Payments are available to offset a portion of the costs of a qualifying energy assessment. The Company may vary the percentage of energy assessment payment based on the facility size, age, equipment, and other criteria that could affect the amount of energy efficiency opportunities identified. All, or a portion of, the energy assessment payment may be contingent on the customer implementing a minimum amount of cost effective energy efficiency measures within a set timeframe.										
Program											
Projected			2021	2022	2023	Total kWh					
Savings	81	,223,140	80,876,807	87,062,358	93,519,775	342,682,080					
	kW 2	020	2021	2022	2023	Total kW					
	1	2,995	13,003	14,088	15,278	55,364					
Program Budget	Total Program Budget	2020	2021	2022	2023	Total by Line Item					
	Admin - Direct	3,210,870	3,123,251	3,249,471	3,369,505	12,953,096					
	Admin - Indirect	1,081,702	1,282,051	1,389,244	1,547,633	5,300,630					
	Customer Incentives	7,989,359	7,946,400	8,527,748	9,145,919	33,609,426					
	EM&V	321,996	359,540	322,000	381,694	1,385,230					
	Total by Year	12,603,92	7 12,711,242	2 13,488,463	14,444,751	53,248,383					
Program Cost	UCT	TRC		RIM	PCT						
Effectiveness	3.65	1.63		0.81	3.11						
Program Measure Life	12.0	*Note:	Measure life i	s based on kW	h weighted av	verage					

Program
Description

Outdoor Lighting Modernization Program

The Outdoor Lighting Modernization Program encourages the market transition of Duke Energy Indiana owned street and area lighting to a more efficient Light-emitting diode (LED) lighting technology. Currently, only 5% of our Indiana lights (including streetlights and area lights) are LED as compared to 28% of US streets and roadways. Duke Energy Indiana's existing outdoor lighting customers are on the following tariffed rates:

- SL Streetlight Service
- UOLS Unmetered OL Electric Service
- MOLS Metered OL Electric Service
- OL-E Outdoor Lighting Service Agreement

Most existing outdoor lighting customers currently have Mercury Vapor ("MV"), Metal Halide ("MH"), or High Pressure Sodium ("HPS" or Sodium Vapor) fixtures. Upon complete fixture failure, the Company changes out MV, MH, and/or HPS fixtures to HPS. Customers may opt to upgrade to LED service under Rider 42, Rate LED Unmetered Outdoor Lighting Service or under Rate OL-E Outdoor Lighting Service Agreement. Under this program, these customers will be offered an incentive to switch to Rider 42 with a per-fixture incentive based on wattage.

Generally, LED outdoor lighting products are preferred by customers because they offer significantly reduced energy use, exhibit longer lifetimes, do not contain mercury, and provide a high color quality which provides better illumination.

Rider 42 includes prescriptive rates for LEDs, so it provides rate clarity for customers. There are no upfront costs to the customer unless the lighting installation exceeds the Company's standards, as described in the Rider 42 Tariff. Customers can opt for standard or decorative fixtures. If a customer has a decorative pole and converts to a decorative LED, the customer may need to change out the pole as well. Customers can choose from a wide selection of LED decorative fixtures as replacements for the currently installed fixtures. The rate impact will depend upon the LED fixtures selected by customers. If it is too cost prohibitive, the customer can choose not to upgrade. Pole prices are also clearly stated in the Rider 42 tariff.

Customers with company owned lights will be contacted regarding their eligibility to participate in this program. The customer will receive an engineering estimate prior to accepting the contract outlining the estimated costs. Once the customer has accepted the proposal with selections made as to fixture type and pole replacement, if applicable, the project will be submitted for completion. After verification of the installation, we will pay customers directly a per fixture incentive based on wattage of what is being replaced.

Program Objectives

The primary goal for this program is to incentivize customers to switch from older, less efficient High intensity discharge (HID) technology to LED technology. This will lower electrical energy consumption for street and area lighting. The program will be offered in 2021-2023 allowing for a ramp-up period in 2021 with 25% of forecasted participation and then 37.5% in both 2022 and 2023.

Petitioner's Exhibit 2-A (ABD) IURC Cause No. 43955 DSM-8 Duke Energy Indiana Energy Efficiency Program Description & Information 2020 - 2023

Marketing Plan	The marketing strategy for this program will use internal marketing resources for this program and communications also via our community relations and account managers. A dedicated 1-800 number will be established as well as a comprehensive marketing plan once program approval has been received.									
Program								1		
Projected	KWh	2020		202			022	2023		Total kWh
Savings				5,820,270		8,732,960		8,732,960		23,286,189
	KW 2020)	20	021	2	2022	2023		Total kW
Program Budget	Total Progr	am	2020	•	2021	•	2022	20	23	Total by
	Budget		2020					2020		Line Item
	Admin - Direct		62,500		36,038		39,057	39,057		176,652
	Admin - Indirect		6,036		53,613		87,217		,430	238,296
	Customer Incentives				426,878		640,317	64	0,317	1,707,512
	EM&V						60,000	60	,000	120,000
	Total by Y	68,536	,536 516,529		826,591		83	0,804	2,242,460	
Program Cost	UCT		TRC			R	IM		PCT	
Effectiveness	3.90		1.04			0.	.66		2.59	
Program Measure Life	15.0	:	*Note:	Mea	sure life is	bas	sed on kWh	weigh	ted ave	erage

VERIFICATION

I hereby verify under the penalties of perjury that the foregoing representations are true to the best of my knowledge, information and belief.

Signed:

Amy B. Dean

Dated: