Exhibit JC-4

# IN THE MATTER OF THE PETITION OF JERSEY CENTRAL POWER & LIGHT FOR APPROVAL OF JCP&L'S ENERGY EFFICIENCY AND CONSERVATION PLAN INCLUDING ENERGY EFFICIENCY AND PEAK DEMAND REDUCTION PROGRAMS (JCP&L EE&C)

BPU DOCKET NO.

## DIRECT TESTIMONY

OF

# **BRENDON J. BAATZ**

**Gabel Associates, Inc.** 

On Behalf Of Jersey Central Power & Light

September 25, 2020

#### JERSEY CENTRAL POWER & LIGHT DIRECT TESTIMONY OF BRENDON J. BAATZ

#### 1 I. INTRODUCTION

### 2 Q. Please state your name, business address, and position.

A. My name is Brendon J. Baatz and my business address is 417 Denison Street, Highland
Park, New Jersey, 08904. I am presently employed as a Vice President at Gabel Associates,
Inc., an energy, environmental, and public utility consulting firm.

#### 6 Q. Please summarize your professional experience and educational background.

A. I have been employed with Gabel Associates since March of 2018. While at Gabel
Associates, I have worked for a range of public and private clients on various issues in the
utility industry. The issues include retail and wholesale electric rate design, renewable
energy project cost benefit analysis, and electric vehicle utility policy. I have also worked
extensively on energy efficiency program design, policy, and cost benefit analysis for
several clients, including gas and electric utilities.

Prior to my employment with Gabel Associates, I managed the utility program at the American Council for an Energy Efficient Economy ("ACEEE"). There I focused on various issues related to utility-sector energy efficiency programs, including efficiency program design, state policies, and regulatory issues affecting energy efficiency, including electric and gas rate design. While at ACEEE I published numerous reports on energy efficiency programs and policy, and also regularly spoke at conferences on related issues. I also testified in various proceedings on these issues during that time.

20 Prior to my employment with ACEEE, I was employed with the Federal Energy
21 Regulatory Commission ("FERC"). During my employment with FERC my primary

2

1 responsibilities were the review and analyses of electric utility cost of service studies in 2 wholesale transmission and electric power rate cases. I also worked on other litigated issues 3 while at FERC including but not limited to transmission capacity reservation rights, 4 municipal power contracts, and formula rate structure and protocols. Prior to my 5 employment with FERC, I held positions with the Maryland Public Service Commission 6 ("PSC") as an energy analyst and the Indiana Office of Utility Consumer Counselor 7 ("OUCC") as a utility analyst. While at the Maryland PSC, I worked on the EmPOWER 8 Maryland programs focusing on program design, avoided cost development, and other 9 policy issues. While working at the OUCC, I testified on a variety of utility issues including 10 but not limited to rate design, renewable energy credit compensation, and utility petitions 11 for construction. I also represented the agency in several oversight boards for utility energy 12 efficiency programs.

I hold a Master of Public affairs degree from Indiana University Bloomington and a Bachelor of Science in political science from Arizona State University. I have continued my education through attendance of various seminars and conferences. I have also completed formal training in rate design, cost of service, depreciation, and other utility regulatory matters.

18

My resume is attached as Exhibit BJB-1.

19 Q. Have you previously testified before the New Jersey Board of Public Utilities
20 ("Board" or "BPU")?

A. Yes. I previously testified in Docket Nos. GR18080860 and GR20070503.

22 Q. What is the purpose of your direct testimony in this case?

3

A. The purpose of my testimony is to present the cost effectiveness analysis conducted on the
 Jersey Central Power and Light ("JCP&L") proposed three-year energy efficiency
 portfolio.

# 4 Q. Are you sponsoring any schedules in connection with your direct testimony?

- A. Yes. I am presenting the following schedules, which have been prepared by me or under
  my direction and supervision, and are accurate and complete to the best of my knowledge
  and belief. These schedules contain information responsive to the Minimum Filing
  Requirements ("MFRs") as referenced in the MFR Index attached to the Petition as Exhibit
  A and as approved by the Board in its June 10, 2020 Order in Docket Nos. Q019010040,
  Q019060748, and Q010791004 ("June 10 Order"). The schedules attached include:
- 11 (a) Exhibit BJB-1 Baatz Resume
- 12 (b) Exhibit BJB-2 Cost Effectiveness Results
- 13 (c) Exhibit BJB-3 –Energy Efficiency Program Cost Benefit Analysis
  14 Workpapers (Confidential)
- 15 (d) Exhibit BJB-4 Emissions Avoided Results
- 16 (e) Exhibit BJB-5 Economic Development and Job Creation Analysis
  17 Results
- 18 (f) Exhibit BJB-6 –Cost to Achieve Results
- 19 (g) Exhibit BJB-7 –Energy Savings Target Development Schedule

# 20 II. COST EFFECTIVENESS ANALYSIS OF JCP&L EE&C PLAN

Q. Did you conduct cost effectiveness analysis of the program portfolio in the JCP&L
Plan?

11	Q.	Please describe the CBA tests required by the Board's MFRs.
10		evaluate the projected performance of the program offerings proposed for this time period.
9		the plan period of July 1, 2021 through June 30, 2023. These results allow the BPU to
8		required by the Board's MFRs for the Company's energy efficiency program results for
7		("SCT"). This testimony presents the methodology and results of the six CBA tests
6		("PAC") test, the Ratepayer Impact Measure ("RIM") test, and the Societal Cost test
5		Cost ("TRC") test, the Participant Cost test ("PCT"), the Program Administrator Cost
4		savings of each program for use in the New Jersey Cost Test ("NJCT"), the Total Resource
3		a model which analyzed measure-specific details and computed the estimated costs and
2		of the six tests prescribed in the MFRs as required by the Board. This entailed developing
1	A.	Yes. I prepared the cost-benefit analysis ("CBA") which calculates and details the results

- 12 A. In the June 10 Order, the Board updated the energy efficiency MFRs. Section V.a. in the
- 13 updated MFRs, states:
- 14 The utility shall conduct a benefit-cost analysis of the programs and 15 portfolio using the New Jersey Cost Test, Participant Cost Test, Program 16 Administrator Cost Test, Ratepayer Impact Measure Test, Total Resource 17 Cost Test, and Societal Cost Test that assesses all program costs and 18 benefits from a societal perspective i.e., that includes the combined 19 financial costs and benefits realized by the utility and the customer. The 20 utility may also provide any additional benefit-cost analysis that it believes 21 appropriate with supporting rationales and documentation.
- 22 Each test listed above is designed to provide a different perspective on the cost-
- 23 effectiveness of the proposed programs. The six cost effectiveness tests prescribed by the
- 24 Board provide the following perspectives for decision makers:
- New Jersey Cost Test The New Jersey Cost Test is the primary cost effectiveness
   test for energy efficiency programs in New Jersey. The test measures net costs of
   the program as a resource option based on total costs, similar to the total resource

cost test, but also includes additional benefits to address specific state policy
 considerations in New Jersey, like the social cost of avoiding carbon dioxide
 emissions.

- Societal Cost Test The Societal Cost Test measures the net costs of a program as
   a resource option based on the total costs of the program, including both the
   participants' and the utility's costs. The Societal Test differs from the total resource
   test in that it includes the effects of societal impacts such as environmental impacts
   to the economy, excludes tax credit benefits, and uses a different (societal) discount
   rate.
- <u>Total Resource Cost Test</u> The Total Resource Cost Test measures the net costs of
   a program as a resource option based on the total costs, including both the
   participant and the utility costs of the program.
- Participant Cost Test The Participant Cost Test is the measure of the quantifiable
   benefits and costs from the perspective of program participants. Since many
   customers do not base their decision to participate in a program entirely on
   quantifiable variables, this test is not a complete measure of the benefits and costs
   of a program to a customer.
- Program Administrator Cost Test The Program Administrator Cost Test measures
   the net costs of a program as a resource option based on the costs incurred by the
   program administrator or utility (including incentive costs) and excluding any net
   costs incurred by the participant. The benefits are similar to the TRC benefits. Costs
   include the total program costs. This test measures the net economic impact of
   investing in energy efficiency programs from the perspective of the utility.

6

- <u>Ratepayer Impact Measure Test</u> The Ratepayer Impact Measure test measures
   what happens to customer rates due to changes in utility revenues and operating
   costs caused by the program.
- In aggregate, these tests provide the Board with multiple viewpoints of the benefits and
  costs associated with the programs.
- 6 Q. Please describe your approach to assessing cost effectiveness using the six tests
  7 described above.
- 8 A. I completed all six tests using guidance from the Board's August 24, 2020 Order Adopting 9 the First New Jersey Cost Test ("August 24 Order") and the California Standard Practice Manual.<sup>1,2</sup> The August 24 Order provided specific guidance on how to estimate costs and 10 11 benefits of programs, including assumptions on line losses and discount rate, for the New 12 Jersey Cost Test. I applied the Board's guidance on the development of specific benefits 13 and costs to all tests conducted. For the Societal Cost Test, I included additional benefits 14 that were not included in the August 24 Order. For those benefits, I relied on industry best 15 practice methods.
- Q. Did you evaluate JCP&L's portfolio of programs being proposed using the six CBA
   tests required in the MFRs?
- A. Yes, I evaluated program cost effectiveness for all six tests. The results of this analysis are
   presented in Schedule BJB-2. The supporting workpapers for the cost benefit analysis are
   attached as Exhibit BJB-3.

<sup>2</sup> California Public Utilities Commission. 2001. *California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects*. cpuc.ca.gov/uploadedFiles/CPUC Public Website/Content/Utilities and Industries/Energy -

Electricity and Natural Gas/CPUC STANDARD PRACTICE MANUAL.pdf

<sup>&</sup>lt;sup>1</sup> New Jersey Board of Public Utilities. *Order Adopting the First New Jersey Cost Test.* Docket Nos. QO19010040 and QO20060389. August 24, 2020.

1

19

#### Q. Please summarize your conclusions.

A. The CBA shows the JCP&L portfolio is cost effective under the New Jersey Cost Test.
Under the New Jersey Cost Test, the three-year portfolio resulted in net benefits of \$685
million and a cost benefit ratio of 3.5. This implies that for every dollar JCP&L spends on
energy efficiency programs, customer will receive \$3.48 in benefits.

- 6 The portfolio also produced significant environmental and health benefits. I 7 estimate that the energy savings produced by the JCP&L Plan will reduce carbon dioxide 8 (" $CO_2$ ") emissions by 4.3 million tons, sulfur dioxide (" $SO_2$ ") emissions by 2,814 tons, and 9 nitrogen oxide (" $NO_X$ ") emissions by 2,239 tons.<sup>3</sup> The portfolio also will provide 10 significant economic development benefits. I estimate the portfolio will add \$981 million 11 to the New Jersey GDP and create 8,996 job-year equivalents over the life of the measures.<sup>4</sup>
- Q. Did you also review the JCP&L cost to achieve values in relation to the Board's
   proposed guidelines from the June 10th Order?
- A. Yes. The JCP&L sector level cost to achieve values are shown in Exhibit BJB-6. The
  JCP&L sector cost to achieve is within the guidelines suggested by the Board.
- 16 I. COST-BENEFIT ANALYSIS ASSUMPTIONS
- 17 **Q.** What types of cost benefit analyses did you prepare?
- 18 A. I prepared an analysis for each of the six CBA tests required by the Board's MFRs.
- 20 Q. What methodology did you use to undertake these calculations?

<sup>&</sup>lt;sup>3</sup> The results of the emissions avoided analysis are shown in Exhibit BJB-4.

<sup>&</sup>lt;sup>4</sup> The results of the economic development benefits analysis are shown in Exhibit BJB-5.

1	A.	I relied on methodology outlined in the Board's August 24 Order and the California
2		Standard Practice Manual. <sup>5,6</sup> Within the CBA tests, there are a wide range of costs and
3		benefits used to characterize program integrity, some of which are applicable in conducting
4		certain tests but not others. Table 1 shows a list of specific costs and benefits and the tests
5		they apply to:

<sup>&</sup>lt;sup>5</sup> New Jersey Board of Public Utilities. *Order Adopting the First New Jersey Cost Test.* Docket Nos. Q019010040 and Q020060389. August 24, 2020.

<sup>&</sup>lt;sup>6</sup> California Public Utilities Commission. 2001. California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects.

cpuc.ca.gov/uploadedFiles/CPUC Public Website/Content/Utilities and Industries/Energy -Electricity and Natural Gas/CPUC STANDARD PRACTICE MANUAL.pdf

	NJCT	SCT	TRC	РСТ	PAC	RIM
Program Benefits						
Avoided Wholesale Electric Energy	Х	Х	Х		Х	Х
Avoided Electric Ancillary Services	Х	Х	х		Х	Х
Avoided Wholesale Electric Capacity	Х	Х	х		Х	Х
Avoided Wholesale Natural Gas	Х	Х	Х		Х	Х
Demand Reduction Induced Price Effect	Х	Х	Х		Х	Х
Avoided RPS REC Purchases		Х			х	Х
Avoided Wholesale Volatility		Х			Х	Х
Avoided T&D	Х	Х	Х		Х	Х
Avoided Retail Electric and Gas Costs				х		
Customer Rebates and Incentives				х		
Utility Lost Revenues						Х
Non-Energy Benefits 5% Adder	Х					
Low-Income Benefit 10% Adder	Х					
Avoided Emissions Impacts (CO <sub>2</sub> )	Х	х				
Avoided Emissions Impacts (SO <sub>2</sub> & NO <sub>X</sub> )		X				
Economic Development Benefits		X				
Program Costs	•		•	•		
Incremental Costs	Х	Х	X			
Participant Costs				X		
Administration Costs	Х	X	X		Х	Х
Customer Rebates and Incentives					Х	Х
Utility Lost Revenues						Х

## 1 Table 1: Costs and Benefits Utilized in CBA Tests

# 2 **Q.** Please describe the Program Benefits shown in Table 1.

- 3 A. The following sections describe the benefits and calculation approach.
- 4

# 1. Avoided Wholesale Electric Energy Costs

5 The avoided wholesale electric energy costs benefit represents the wholesale 6 electric market purchases that would be avoided as a result of reductions in energy usage 7 associated with the programs. Consistent with the New Jersey Cost Test guidance 8 document, this value was estimated using the three year average of historic PJM energy

prices for the JCP&L zone.<sup>7</sup> The prices were then forecasted using a blend of basis adjusted energy market forward trading prices for PJM-Western Hub, the most liquidly traded zone in PJM, and forecasted prices from the Energy Information Administration ("EIA") in its newest (currently 2020) Annual Energy Outlook generation reference case for the PJM/East region.<sup>8</sup> Values were calculated for on- and off-peak prices on a monthly basis. All values were adjusted to account for marginal line losses on the JCP&L and PJM systems, and sales and use tax.

8

### 2. Avoided Electric Ancillary Services Costs

9 The avoided electric ancillary services costs benefit represents the wholesale 10 electric ancillary service market purchases that would be avoided as a result of reductions 11 in energy usage associated with the programs. Consistent with the New Jersey Cost Test 12 guidance document, this value was estimated using the three-year average of historic PJM 13 ancillary service prices based upon data from PJM's Independent Market Monitor.<sup>9</sup> The 14 prices were then forecasted using the electric energy forecast described above.

Avoided Wholesale Electric Capacity Costs
 The avoided wholesale electric capacity costs category captures the wholesale
 reduction in PJM capacity as a result of the reductions in electric demand associated with
 the programs. I used actual cleared PJM Eastern Mid-Atlantic Area Council ("EMAAC")

<sup>8</sup> United States Energy Information Administration. Annual Energy Outlook 2020. Table 54. Electric Power Projections by Electricity Market Module Region (Reference Case, PJM/East Region). eia.gov/outlooks/aeo/data/browser/#/?id=62-AEO2020&region=5-

10&map=&ctype=linechart&sourcekey=0.

<sup>&</sup>lt;sup>7</sup> New Jersey Board of Public Utilities. *Order Adopting the First New Jersey Cost Test.* Docket Nos. QO19010040 and QO20060389. August 24, 2020. *p. 12* 

<sup>&</sup>lt;sup>9</sup> Monitoring Analytics, LLC. *2019 State of the Market Report for PJM*. Section 10 Ancillary Services. Table 10-4. History of ancillary service costs per MWh of load: 1999 through 2019. monitoringanalytics.com/reports/PJM State of the Market/2019/2019-som-pjm-sec10.pdf

Locational Deliverability Area ("LDA") prices where available. Clearing prices were forecasted based upon a baseline of the average of the previous three delivery year clearing prices. Prices were escalated based upon a regression forecast of how capacity prices have increased over time. All values were adjusted to account for marginal line losses on the JCP&L and PJM systems, PJM's Forecast Pool Requirement ("FPR") to account for avoided reserve requirements, and sales and use tax.

7

### 4. Demand Reduction Induced Price Effect Benefits (Electric & Gas)

8 The demand reduction induced price effects ("DRIPE") price suppression (also 9 known as merit order benefits) is a benefit that captures the reduction in wholesale electric 10 and natural gas market prices to all customers, not just participants, as a result of energy 11 efficiency. Wholesale electric and natural gas markets are fundamentally supply and 12 demand based – therefore, downward movement in the electric or natural gas demand curve 13 as a result of reduced consumption should result in less expensive generation resources 14 being dispatched for electricity, and less expensive natural gas delivered. If either market 15 "clears" at a lower price, the associated reductions in market prices flow through to all 16 customers.

Both electric energy and capacity DRIPE benefits were estimated using a univariate
 regression model. This approach is consistent with the NJCT guidance document.<sup>10</sup>

19

#### 5. Avoided Wholesale Natural Gas Costs

The avoided wholesale natural gas costs category captures wholesale natural gas market purchases that would be avoided as a result of reduction in energy usage associated with the programs.

<sup>&</sup>lt;sup>10</sup> New Jersey Board of Public Utilities. *New Jersey Cost Test*. August 24, 2020. Page 15-16. <u>bpu.state.nj.us/bpu/pdf/boardorders/2020/20200824/8A% 20-%200RDER% 20New%20Jersey%20Cost%20Test.pdf</u>

1 The value of avoided natural gas costs is estimated using New York Mercantile 2 Exchange ("NYMEX") forward trading prices for Henry Hub adjusted for transportation 3 to Texas Eastern Transmission Pipeline (Tetco) M3 delivery point. The underlying Henry 4 Hub supply forecast was combined with the Tetco M3 basis to determine the avoided cost 5 projection. All values were adjusted to account for average losses and sales and use tax. 6 This approach is consistent with the prescribed method in the New Jersey Cost Test 7 guidance document.<sup>11</sup>

8

### 6. Avoided RPS REC Purchase Costs

9 The avoided Renewable Portfolio Standard ("RPS") Renewable Energy 10 Certificates ("RECs") purchase cost estimates the reduced volume of RECs that must be 11 purchased by New Jersey's electric retail suppliers as a result of energy efficiency 12 electricity reductions. The New Jersey RPS sets the total volume requirement of RECs that 13 must be purchased as a percentage of retail load. A reduction in retail load due to energy 14 efficiency will reduce the total number of RECs required to be purchased.

Forecast market prices for New Jersey Class I RECs, Class II RECs and solar renewable energy credits ("SRECs") (legacy, transition, successor) were used based upon an internal supply-demand analysis and compliance costs for the three New Jersey REC markets.

19

## 7. Avoided Wholesale Volatility Costs (Electric & Gas)

The avoided wholesale volatility cost category estimates the value of avoiding risk of wholesale purchases. Wholesale electric and natural gas prices are inherently risky as they are market-based and not fixed in price or volume. Large fluctuations in prices expose

<sup>&</sup>lt;sup>11</sup> *Ibid* page 13.

1 customers and retail suppliers to risks that ultimately are priced into retail rates. Energy 2 efficient measures and practices amount to a purchase of energy service which does not 3 contain the price volatility implicit in the price of electricity and natural gas. By reducing 4 the overall energy purchases of customers, customers are exposed to less fuel volatility. In 5 this regard, energy efficiency can be viewed as an energy resource that does not contain the price volatility embedded in purchases from the electric and gas supply systems. 6

7 The risk avoidance benefit of energy efficiency was applied as a price adder to the 8 cost of electricity and natural gas (only in the SCT). The price adder was determined based 9 upon a review of studies and regulatory decisions. While there is some variation among 10 the studies, a conservative premium based on these precedents equal to 10% of electric and natural gas costs was assumed.<sup>12</sup> 11

12

8. Avoided T&D Costs

13 The value of avoided transmission and distribution costs was estimated using the 14 methods prescribed in the NJCT guidance document. For transmission, the most recent 15 Network Integrated Transmission Service ("NITS") rate for the JCP&L service territory was used.<sup>13</sup> For distribution, the value was estimated in the manner prescribed by the Board 16

<sup>&</sup>lt;sup>12</sup> For studies reviewed, please see Baatz et al. Estimating the Value of Energy Efficiency to Reduce Wholesale Energy Price Volatility. American Council for an Energy-Efficient Economy; aceee.org/research-report/u1803. Stanton et al. Net Metering in Mississippi. Synapse Energy Economics, Appendix A. synapseenergy.com/sites/default/files/Net%20Metering%20in%20Mississippi.pdf; Hornby et al. Avoided Energy Supply Costs in New England: 2013 Report. Synapse Energy Economics. pp 5-22. publicservice.vermont.gov/sites/dps/files/documents/Energy\_Efficiency/AESC%20Report%20-%20With%20Appendices%20Attached.pdf; 2013 Integrated Resource Plan. Rocky Mountain Power. pacificorp.com/content/dam/pacificorp/doc/Energy Sources/Integrated Resource Plan/2013IRP/PacifiCorp-2013IRP Vol1-Main 4-30-13.pdf and pacificorp.com/content/dam/pacificorp/doc/Energy Sources/Integrated Resource Plan/2013IRP/PacifiCorp-2013IRP Vol2-Appendices 4-30-13.pdf; Bolinger et al. Quantifying the Value that Energy Efficiency and Renewable Energy Provide As a Hedge Against Volatile Natural Gas Prices. Lawrence Berkley National Labs. aceee.org/files/proceedings/2002/data/papers/SS02 Panel5 Paper02.pdf; Is Fixed Price Energy a Good Deal? Walden Labs. waldenlabs.com/is-fixed-price-energy-a-good-deal; EEU Avoided Costs for the 2016-2017 Time Period. P. 17 - number 6. puc.vermont.gov/sites/psbnew/files/doc library/order-re-eeu-avoided-cost-2016-2017.pdf.

1	in the NJCT guidance document. This required estimating the total distribution charges
2	that would have been paid by program participants in the absence of the program and then
3	subtracting the total distribution charges the customer paid after the implementation of the
4	energy efficiency measures. <sup>14</sup>
5	9. Avoided Retail Electric and Natural Gas Costs
6	The avoided retail electric and natural gas cost categories captures the actual bill
7	savings to participants of the programs. A key benefit of energy efficiency is reduced
8	consumption by participants which results in reduced utility costs.
9	Avoided retail electric costs were calculated based upon the electric charges and
10	applicable rate classes in JCP&L's Tariff for Electric Service. This method results in a
11	"price to compare" analysis, as only portions of the tariff which would be offset as a result
12	of the programs are included in the analysis. By way of example, customers will not offset
13	any of the monthly fixed service charge, so that avoiding that charge was not included in
14	the retail electric savings analysis. Each charge was escalated, by component, to account
15	for separate escalation rates for distribution and supply charges. Charges related to electric
16	delivery and transmission were assumed to escalate at 2.0% per year and electric energy
17	and capacity supply charges were escalated in a manner consistent with the wholesale
18	market escalations explained above.
19	Avoided retail natural gas costs were calculated based on the natural gas charges

- 20
- 21

and applicable rate classes available in New Jersey Natural Gas's Tariff for Gas Service.

This method results in a "price to compare" type analysis, as only portions of the tariff

integration-trans-service-june-2020.ashx?la=en <sup>14</sup> New Jersey Board of Public Utilities. *New Jersey Cost Test*. August 24, 2020. Page 13. bpu.state.nj.us/bpu/pdf/boardorders/2020/20200824/8A%20-%20ORDER%20New%20Jersey%20Cost%20Test.pdf

which would be offset as a result of the programs are included in the analysis. By way of
example, customers will not offset any of the monthly fixed service charge, so that avoiding
that charge was not included in the retail natural gas savings analysis. Each charge was
escalated, by component, to account for separate escalation rates for distribution and supply
charges. Charges related to natural gas delivery were escalated at 2.0% per year while
natural gas supply charges were escalated in a manner consistent with the wholesale market
escalations explained above.

8

#### 10. Customer Rebates and Incentives

9 The customer rebate and incentive cost category capture the direct rebate incentives 10 provided to participants of the programs. Depending on perspective, customer rebates and 11 incentive costs can either be a benefit to a program (to participants) or a cost to programs 12 (to the utility and ultimately, ratepayers). This benefit is only realized in the participant 13 cost test, as that test singles out the experience of a participant in the programs. The time-14 value of money associated with the provision of loans to participations is also a benefit to 15 customers (and costs to the utility and ultimately, ratepayers), and is captured as a benefit 16 in the PCT, and as a cost in the PAC and RIM tests.

17

#### 11. Avoided Emissions Damages

18The avoided emissions damages category captures the economic value (also known19as the avoided social cost) of reductions in CO2, NOx, and SO2. Energy efficiency programs20displace power plant emissions which cause negative impacts, also known as damages. I21did not include any other criteria air pollutants or greenhouse gases.

To estimate the displaced CO<sub>2</sub>, I relied on the electric emissions factor of 1,374 pounds per MWh and natural gas emission factor of 11.7 pounds per therm, per the NJCT

16

guidance document.<sup>15</sup> The avoided damages for CO<sub>2</sub> were estimated using the "Social Cost
 of Carbon for Regulatory Impact Analysis - Under Executive Order 12866" produced by
 the Interagency Working Group on Social Cost of Greenhouse Gases, United States
 Government.<sup>16</sup> This benefit was included in the NJCT and SCT.

5 I also estimate the economic value of the avoided  $SO_2$  and  $NO_X$  emissions from the programs. While not included in the NJCT, the economic value of avoiding these emissions 6 7 is substantial and reflected in the SCT. To estimated displaced SO<sub>2</sub> and NO<sub>x</sub> emissions, I 8 relied on the non-baseload tons per MWh estimate from the most recent eGrid data release (currently eGRID2018 released in March 2020).<sup>17</sup> I then de-escalated these rates over time 9 10 based upon emissions rates from the most recent EIA Annual Energy Outlook (currently 2020) for the PJM/East region.<sup>18</sup> The de-escalation is intended to reflect the likely shift 11 12 away from fossil based generation towards clean energy resources. To estimate the avoided 13 damages from SO2 and NO<sub>X</sub>, I relied on the February 2018 Technical Support Document 14 Estimating the Benefit per Ton of Reducing PM2.5 Precursors from 17 Sectors by the U.S. 15 Environmental Protection Agency Office of Air and Radiation Office of Air Quality

<sup>18</sup> United States Energy Information Administration. Annual Energy Outlook 2020. Table 54. Electric Power Projections by Electricity Market Module Region (Reference Case, PJM/East Region).
<u>eia.gov/outlooks/aeo/data/browser/#/?id=62-AEO2020&region=5-</u>

 <sup>&</sup>lt;sup>15</sup> New Jersey Board of Public Utilities. *New Jersey Cost Test.* August 24, 2020. Page 17.
 <u>bpu.state.nj.us/bpu/pdf/boardorders/2020/20200824/8A%20-%20ORDER%20New%20Jersey%20Cost%20Test.pdf</u>
 <sup>16</sup> Interagency Working Group on Social Cost of Greenhouse Gases, United States Government. 2016 Technical Support Document: -Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis -Under Executive Order 12866. August 2016. <u>epa.gov/sites/production/files/2016</u> 12/documents/sc co2 tsd august 2016.pdf

<sup>&</sup>lt;sup>17</sup> United States Environmental Protection Agency. Emissions and Generation Resource Integrated Database (eGRID). Released 1/28/2020, Revised 3/9/2020. <u>epa.gov/energy/emissions-generation-resource-integrated-database-egrid</u>

<sup>&</sup>lt;u>10&cases=ref2020&start=2018&end=2050&f=A&linechart=ref2020-d112119a.108-62-AEO2020.5-10~ref2020-d112119a.156-62-AEO2020.5-10~ref2020-d112119a.157-62-AEO2020.5-10~ref2020-d112119a.158-62-AEO2020.5-10~cref2020-d112119a.158-62-AEO20200.5-10~cref2020-d112119a.158-62-AEO20200.5-10~cref2020-d112119a.158-62-AEO20200.5-10~cref2020-d112119a.158-62-AEO20200.5-10~cref2020-d112119a.158-62-AEO20200-d112119a.158-62-AEO20200-d112119a.158-62-AEO20200-d112119a.158-62-AEO20200-d112119a.158-62-AEO20200-d112119a.158-62-AEO20200-d112119a.158-62-AEO20200-d112119a.158-62-AEO2020-d112119a.158-62-AEO2020-d112119a.158-62-AEO2020-d112119a.158-62-AEO2020-d112119a.158-62-AEO2020-d112119a.158-62-AEO2020-d112119a.158-62-AEO2020-d112119a.158-62-AEO2020-d112119a.158-62-AEO2020-d1120-</u>

Planning and Standards.<sup>19</sup> This source was used and approved by the Board<sup>20</sup> in the 1 Evaluation of New Jersey Solicitation for offshore wind renewable energy credits 2 ("OREC") for Offshore Wind Capacity Framework for Evaluation of Impacts.<sup>21</sup> 3 4 12. Economic Development Benefits 5 Energy efficiency programs can be a powerful tool for local economic development and job creation. While cost effective energy efficiency programs provide many other 6 7 benefits including reduced utility system costs, lower emissions, and lower bills for 8 program participants, the job creation and local economic growth benefits are critical as 9 states begin to recover from the COVID-19 pandemic. 10 Economic benefits are created by energy efficiency programs in two significant 11 ways. First, economic benefits are created through the direct implementation of the 12 programs, which are driven by the additional program spending and associated impacts in 13 industries directly receiving dollars. Second, benefits are also created through the ripple 14 effects on the economy of customer bills savings. Energy efficiency programs create 15 significant bill savings, which increase disposable income for residents and businesses. The 16 spending of this increased disposable income stimulates the economy, providing ripple 17 effects in many sectors of the economy. 18 I estimated the economic development benefits using IMPLAN, a widely used

19

industry standard input/output model. IMPLAN and similar input output models have been

<sup>&</sup>lt;sup>19</sup> United States Environmental Protection Agency. 2018. Technical Support Document: Estimating the Benefit per Ton of Reducing PM2.5 Precursors from 17 Sectors. <u>epa.gov/sites/production/files/2018-02/documents/sourceapportionmentbpttsd</u> 2018.pdf.

<sup>&</sup>lt;sup>20</sup> In the Matter of the Board of Public Utilities Offshore Wind Solicitation for 1,100 MW – Evaluation of the Offshore Wind Applications. Docket No. QO18121289. <u>bpu.state.nj.us/bpu/pdf/boardorders/2019/20190621/6-21-19-8D.pdf</u>

<sup>&</sup>lt;sup>21</sup> Levitan & Associates, Inc. *Evaluation of New Jersey Solicitation for ORECs for Offshore Wind Capacity Framework for Evaluation of Impacts*. <u>bpu.state.nj.us/bpu/pdf/boardorders/2019/20190621/6-21-19-8D%20-%20Public%20Version%20-%20Levitan%20NJ%20OREC%20Final%20Report.pdf</u>

presented to the Board numerous times, including instances by its own consultants and by
consultants to Rate Counsel. IMPLAN is also one of the input output models suggested by
the Board for evaluation of offshore wind investments. Finally, input/output modeling is
required under the Offshore Wind Economic Development Act ("OWEDA") for offshore
wind projects submitting for ORECs.<sup>22</sup>

6 I estimated the economic impacts by imputing the projected program spending and 7 bill savings into IMPLAN. For program spending, I used a program by program approach 8 to break out materials and labor, mapping spending into specific industries within 9 IMPLAN. For bill savings, I mapped the increased disposable income to households by 10 income level and to relevant commercial industries. Finally, to capture the negative 11 economic impacts of higher rates and bills from the cost recovery associated with the 12 programs, I offset the increased disposable income by the projected increase in bills driven 13 by program costs. Collectively, these three steps provide a comprehensive estimate of 14 economic impacts and job creation.

15

#### 13. Non-Energy and Low-Income Adders

I applied a 5% adder to avoided energy benefits to address non-energy benefits, including comfort, health, and safety. I also applied a 10% adder to avoided energy benefits to address low-income non energy benefits, including reduced arrearages and other lowincome specific benefits. The low-income adder was in addition to the 5% non-energy benefit adder. Both adders are consistent with the prescribed method in the New Jersey Cost Test guidance document.<sup>23</sup>

 <sup>&</sup>lt;sup>22</sup> N.J.A.C. 14: § 14:8-6.5 Application Requirements. <u>nj.gov/bpu/pdf/boardorders/2018/20180917/9-17-18-8G.pdf</u>
 <sup>23</sup> New Jersey Board of Public Utilities. *New Jersey Cost Test.* August 24, 2020. Page 18.

bpu.state.nj.us/bpu/pdf/boardorders/2020/20200824/8A% 20-% 20 ORDER% 20 New% 20 Jersey% 20 Cost% 20 Test.pdf/lineward/lineward/set/li

1 Q. Please describe the Program Costs listed in Table 1 above. 2 A. The program costs include: 3 1. Incremental Costs 4 The incremental cost category captures the incremental cost of participating in the 5 programs. This cost is calculated based upon the difference between the efficient measure 6 costs assumed to install energy efficiency technologies and processes and the base measure 7 cost assumed that a participant would otherwise pay without access to the proposed 8 program. 9 2. Participant Costs 10 The participant cost category captures the incremental cost of participating in the 11 programs paid by participants. This category includes both incremental costs paid by 12 participants for the non-subsidized portion of energy efficiency costs, as well as loan 13 repayments for programs offering financing. 14 3. Program Administration Costs 15 The program administration cost category captures the cost of administering the 16 energy efficiency programs by JCP&L. These include costs for marketing, outside services, utility administration, inspections and quality control, and evaluation. These costs were 17 18 developed based on JCP&L's previous experience delivering similar programs and 19 guidance from the Board in the June 10 and August 24 orders. 20 4. Customer Rebate and Incentives Cost 21 The customer rebate and incentive cost category capture the direct rebate incentives 22 provided to participants of the programs. These costs were developing through a

20

1

coordinated approach with other New Jersey utilities, but also based on existing programs in New Jersey and other jurisdictions for similar measures.

3

2

#### 5. <u>Utility Lost Revenues</u>

An associated cost is the reallocated distribution costs category which captures the value of any distribution costs being avoided by participants that must be collected from the balance of ratepayers. These are not direct program costs and represent the transfer between existing ratepayer subsectors. This cost is also known as lost utility costs or lost revenues.

9 Utility lost revenues were calculated based upon the individual rate charges which 10 currently contribute to supporting distribution costs. In addition, the utility lost revenues 11 also include tariff surcharges and riders which do not contribute to distribution costs but 12 would likely be reallocated to ratepayers at large. Utility lost revenues do not include any 13 supply related costs, as New Jersey's electric and natural gas utilities are deregulated, and 14 avoided supply costs resulting from energy efficiency are not currently borne by ratepayers.

### 15 Q. What assumptions did you use for measure-level energy savings?

A. All measure level assumptions were provided by JCP&L. These are also available in
Appendix C, Table C-2 of the JCP&L EE&C Plan.

## 18 Q. Were the costs and benefits evaluated on a nominal or present value basis?

A. For the purposes of each of the CBA tests, all costs and benefits were evaluated on a present
 value basis. The NJCT and SCT both relied on a 3% societal discount rate as prescribed by
 the Board in the August 24 Order.<sup>24</sup> The TRC, PCT, PAC, and RIM tests relied on the
 JCP&L weighted average cost of capital of 7.47% (post-tax) to discount costs and benefits.

<sup>&</sup>lt;sup>24</sup> New Jersey Board of Public Utilities. New Jersey Cost Test. August 24, 2020. Page 13. <u>bpu.state.nj.us/bpu/pdf/boardorders/2020/20200824/8A% 20-% 200RDER% 20New% 20Jersey% 20Cost% 20Test.pdf</u>

- 1 Q. What net to gross assumption did you make in conducting the cost benefit analysis?
- 2 A. Consistent with Board guidance, I used a 1.0 net-to-gross factor for all programs and measures.<sup>25</sup> 3

4

#### Q. Please describe how the JCP&L energy savings target was developed.

- 5 A. The JCP&L energy savings target is based on guidance from the Board in the June 10 6 Order. In the Order, Staff recommends that "the average usage for the purposes of 7 compliance be calculated based on the average of retail sales for the most recent three-year years relative to the program year for which the target is applicable."<sup>26</sup> Accordingly, the 8 9 savings target for each program year is based on an average of the three prior years. For 10 program year one, which runs from July 1, 2021 through June 30, 2022, the savings target 11 is based on the average of the actual sales in 2018-2019 and forecasted sales for 2020. For 12 program year two, the savings target is developed based on the average of actual sales in 13 2019, and forecasted sales in 2020-2021. The program year three target was based upon 14 forecasted sales for 2021-2023. The baseline developed through this approach was then 15 multiplied by the energy savings target percentages in the June 10 Order to determine the 16 MWh goals. The target development is detailed in Exhibit BJB-7.
- 17 III. CONCLUSIONS

#### 18 Q. Please summarize your testimony and recommendations to the Board.

19 A. The JCP&L 2021-2023 Energy Efficiency and Conservation Program is a cost-effective 20 portfolio of energy efficiency programs that achieve the state policy goals of the Board. 21 The programs provide energy savings opportunities to all customers in the JCP&L service

<sup>&</sup>lt;sup>25</sup> New Jersey Board of Public Utilities. Order Directing the Utilities to Establish Energy Efficiency and Peak Demand Reduction Programs. Docket Nos. Q019010040, Q019060748, and Q010791004. June 10, 2020. <sup>26</sup> See June 10 Order at page 19.

9	Q.	Does this conclude your testimony?
8		recommend the Board approve the JCP&L program portfolio as proposed.
7		while improving environmental quality and stimulating economic development. I
6		results indicate that the programs will provide significant benefits to all JCP&L customers,
5		Jersey Cost Test with a cost benefit ratio of 3.5 and net benefits of \$685 million. These
4		The CBA shows that the JCP&L program portfolio is cost effective under the New
3		five energy savings target mandated in the Clean Energy Act.
2		program benefits. The portfolio also puts JCP&L on a trajectory to meet the program year
1		territory and ensure low-to-moderate income customers have equal opportunity to realize

10 A. Yes.

# Brendon J. Baatz (231) 282-0585 | brendon@gabelassociates.com

Brendon Baatz has nearly ten years of experience working directly on issues related to the electric and gas utility industry. His primary areas of expertise include electric cost of service and rate design, energy efficiency program design, energy efficiency policy, cost benefit analysis, utility regulatory strategy, stakeholder engagement, integrated resource planning, electric vehicle policy, and renewable energy technology and policy.

Mr. Baatz is an internationally recognized expert in rate design and energy efficiency policy. He has published peer reviewed papers and spoken on a variety of topics at trade events and conferences. Mr. Baatz is also a sought-after expert witness in litigated cases before regulatory commissions. He has appeared before commissions in Arizona, Colorado, Indiana, Maryland, New Jersey, New York, Oklahoma, Pennsylvania, and Washington D.C.

# **Professional Experience**

Gabel Associates Inc. Vice President Highland Park, NJ 2018-Present

- Support and advise clients on a variety of energy and regulatory issues including retail and wholesale electric rate design, energy efficiency policy and program design, cost benefit analysis, resource planning, and renewable energy project development.
- Lead consultant to the solar industry in New York Reforming the Energy Vision (REV) regulatory process on rate design for mass market customers.
- Provide ongoing consulting services to multiple gas and electric utilities on energy efficiency program design, cost benefit analysis, avoided cost development, strategic guidance, and program delivery in New Jersey.
- Advise various wholesale energy market clients, including power plant project developers and operators on regulatory issues such as retail ratemaking, wholesale ratemaking, RTO governance, FERC rulemakings, and other relevant issues.
- Provide technical expert testimony for various clients in regulatory matters before state energy commissions. Have testified in Arizona, Colorado, Indiana, Maryland, New Jersey, New York, Oklahoma, Pennsylvania, and Washington D.C

American Council for an Energy-Efficient Economy Senior Manager, Utilities Program Washington, D.C. 2014-2018

- Oversaw and coordinated ACEEE's efforts related to utility sector energy efficiency programs. Served as project manager and lead author for research projects involving utility sector energy efficiency programs, business models, best practices, rate design, and other topics.
- Provided technical assistance for utilities and other energy efficiency implementation partners such as state government agencies on a variety of regulatory policy and best practice program topics.
- Filed testimony and formal comments before state regulatory commissions on issues related to energy efficiency programs, integrated resource planning, rate design, and other issues related to the best practices and policies for implementing energy efficiency.

Washington, D.C.

2013-2014

Federal Energy Regulatory Commission Energy Industry Analyst

> Served as a technical expert in litigated cases before the Federal Energy Regulatory Commission on behalf of the FERC trial staff. Issues examined included: wholesale energy rates, transmission rates, Open Access Transmission Tariff interpretation, transmission capacity rights, cost allocation for various customer classes, formula rate mechanics and protocols, electric cost of service, interruptible load, rate design, and regional transmission organization functionality and governance.

Maryland Public Service Commission **Energy Analyst** 

> Reviewed and analyzed utility filings for EmPOWER Maryland statewide energy efficiency, conservation, and demand response programs. Presented results of research before the Commission. Worked closely with the Agency energy efficiency evaluation contractor to develop evaluation policies that reduced costs for Maryland ratepayers while ensuring integrity of the evaluation process.

Indiana Office of Utility Consumer Counselor Utility Analyst

Served as a technical expert witness in utility cases before the Indiana Utility Regulatory • Commission on behalf of utility ratepayers in the State of Indiana. Developed agency position through analyses of relevant utility applications, petitions, testimony, schedules, and exhibits. Served as agency representative in collaborative demand side management oversight boards for electric and gas utilities.

# Education

Master of Public Affairs, Environmental Policy Analysis, Indiana University Bloomington, 2010

BS, Political Science and Sociology, Arizona State University, 2007

# Selected Research Publications

B. Baatz, G. Relf, and S. Nowak. 2018. The Role of Energy Efficiency in a Distributed Energy Future. The Electricity Journal, Vol. 31, Issue 10. doi.org/10.1016/j.tej.2018.11.004.

B. Baatz, J. Barrett, and B. Stickles. 2018. Estimating the Value of Energy Efficiency to Reduce Wholesale Energy Price Volatility. Washington, DC: ACEEE. aceee.org/research-report/u1803.

B. Baatz, G. Relf, and M. Kelly. 2017. Consequences of Large Customer Opt Out: An Ohio Example. The Electricity Journal, Vol. 30, Issue 9. doi.org/10.1016/j.tej.2017.10.002.

B. Baatz. 2017. Rate Design Matters: The Intersection of Residential Rate Design and Energy Efficiency. Washington, DC: ACEEE. aceee.org/research-report/u1703.

B. Baatz and J. Barrett. 2017. Maryland Benefits: Examining the Results of EmPOWER Maryland through 2015. Washington, DC: ACEEE. aceee.org/research-report/u1701.

Baltimore, MD 2012-2013

Indianapolis, IN

2011-2012

B. Baatz and A. Gilleo. 2016. Big Savers: Experiences and Recent History of Program Administrators Achieving High Levels of Electric Savings. The Electricity Journal, Vol. 29, Issue 8. doi.org/10.1016/j.tej.2016.09.009.

B. Baatz. 2015. Everyone Benefits: Practices and Recommendations for Utility System Benefits of Energy Efficiency. Washington, DC: ACEEE. aceee.org/everyone-benefits-practices-and-recommendations.

S. Nowak, B. Baatz, A. Gilleo, M. Kushler, M. Molina, and D. York. 2015. Beyond Carrots for Utilities: A National Review of Performance Incentives for Energy Efficiency. Washington, DC: ACEEE. aceee.org/beyond-carrots-utilities-national-review.

# Selected Expert Witness Regulatory Cases

Elizabethtown Gas; New Jersey Board of Public Utilities; July 31,2020 (Docket No. GR20070503). Client: Elizabethtown Gas. Issues: cost benefit analysis for energy efficiency true up filing.

Tucson Electric Power Company; Arizona Corporate Commission (Docket No. E- 01933A-19-0028); October 11, 2019. Client: Southwest Energy Efficiency Partnerships Issues: performancebased ratemaking, energy efficiency program cost recovery, time of use rate design, electric vehicle rate design.

Black Hills Colorado Electric; Public Utilities Commission of Colorado (Proceeding No. 18A-0676E), January 22, 2019. Client: Pueblo County, Colorado. Issue: time of use pilot proposal, low income bill analysis.

Oklahoma Gas and Electric Company; Oklahoma Corporate Commission (Cause No. PUD 201800140); April 22, 2019. Client: Oklahoma Energy Results. Issues: prudence of environmental cost recovery for aged coal units, integrated resource planning assessment.

Lancaster Solid Waste Management Authority; Federal Energy Regulatory Commission (Docket No. ER19-342); November 14, 2018. Client: Lancaster Solid Waste Management Authority. Issue: reactive power ratemaking.

Elizabethtown Gas; New Jersey Board of Public Utilities (Docket No. GR18080860); August 8, 2018. Client: Elizabethtown Gas. Issues: cost benefit analysis for energy efficiency true up filing.

Duquesne Light Company; Pennsylvania Public Utility Commission (Docket R-2018-3000124); June 25, 2018. Client: Keystone Energy Efficiency Alliance, Natural Resources Defense Council, and Clean Air Council. Issues: submetering for multifamily buildings, time of use rates, rate design.

Tucson Electric Power Company; Arizona Corporate Commission (Docket No. E- 01933A-15-0322); June 24, 2016. Client: Southwest Energy Efficiency Partnerships Issues: rate design, prepaid electricity.

PECO Electric Company; Pennsylvania Public Utility Commission (Docket R-2015-2468981); June 23, 2015. Client: Keystone Energy Efficiency Alliance, Natural Resources Defense Council, and Clean Air Council. Issues: rate design, revenue decoupling. PPL Electric Corporation; Pennsylvania Public Utility Commission (Docket R-2015-2469275); June 23, 2015. Client: Keystone Energy Efficiency Alliance, Natural Resources Defense Council, and Clean Air Council. Issues: rate design, revenue decoupling.

Northern Indiana Public Service Company; Indiana Utility Regulatory Commission (Cause 44012); October 20, 2011. Representing Indiana Office of Utility Consumer Counselor. Issues: environmental control upgrades, alternate scenario economic analysis.

Indianapolis Power and Light Company; Indiana Utility Regulatory Commission (Cause 43623 DSM-5); April 26, 2012. Representing Indiana Office of Utility Consumer Counselor. Issue: energy efficiency performance incentive reconciliation.

Indianapolis Power and Light Company; Indiana Utility Regulatory Commission (Cause 44018); August 22, 2011. Representing Indiana Office of Utility Consumer Counselor. Issue: renewable energy feed in tariff design.

Indiana Michigan Power Company; Indiana Utility Regulatory Commission (Cause 44034); August 12, 2011. Representing Indiana Office of Utility Consumer Counselor. Issue: renewable energy credit benefit allocation.

Indiana Gas Company, Inc. and Indiana Gas and Electric Company; Indiana Utility Regulatory Commission (Cause 44019); May 20, 2011. Representing Indiana Office of Utility Consumer Counselor. Issue: revenue decoupling.

Jersey Central Power and Light Energy Efficiency and Conservation Program Exhibit BJB-2

Cost Bene	ficiency and Conservation Program fit Results Summary										
											Home
Total R	esource Cost Test (TRC)				Total Portfolio	Efficient	Existing Homes	Home Energy Education and	Multifamily	Direct Install En	rgy Solutions for & Peak
						House		Management			Demand Reduction
BENEFITS	1 Avoided Wholesale Electric Energy and Electric Ancillary Costs		\$ 81,451,893 \$	83,474,961	5 166,281,560	\$ 76,555,817	\$ 3,667,034	\$ 1,229,043	\$ 1,270,588	\$ 15,342,359 \$	68,132,602 \$ 84,118
	2 Avoided Wholesale Electric Capacity Costs 3 Avoided Wholesale Natural Gas Costs		\$ 7,751,760 \$ \$ (3.008,451) \$	22,866,861 (1,515,820)	5 31.408.466	\$ 6,661,345 \$ (8.594,427)	\$ 878,164 \$ 5.585.976	\$ 212,251	\$ 167,760 \$ 564,621	\$ 5,129,735 \$	17,737,127 \$ 622,085 (1,515,820) \$ 177,961
	4 Avoided RPS REC Purchase Costs		\$ 41,730,105 \$	55,597,007	5 98,230,130	\$ 38,523,428	\$ 2,431,474		\$ 849,185	\$ 10,232,200 \$	45,364,806 \$ 53,834
	5 Avoided Wholesale Volatility Costs 6 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)		\$ 8,619,520 \$ \$ 20,856,455 \$	10,482,600 \$ 38,824,825 \$	5 19,390,834 5 60,800,677	\$ 7,462,273 \$ 18,844,707	\$ 1,013,117 \$ 1,548,306	\$ 144,129 \$ 463,442	\$ 200,297 \$ 378,576	\$ 2,047,209 \$ \$ 8,194,061 \$	8,435,391 \$ 88,416 30,630,764 \$ 740,822
	7 Avoided Transmission and Distribution Costs Total Benefits	1+2+3+4+5+6+7	\$ 121,042,206 \$ \$ 278,443,487 \$	141,925,660 \$ 351,656,094 \$	5 266,557,610	\$ 104,774,099 \$ 244,227,242	\$ 14,086,419			\$ 34,719,215 \$ \$ 75,664,779 \$	107,206,445 \$ 788,512 275,991,315 \$ 2,555,748
COSTS		111314131017									
	8 Incremental Costs 9 Administration Costs		\$ 52,662,717 \$ \$ 44,173,427 \$	129,933,572 9 26,401,367 9	5 75,786,170	\$ 38,991,489 \$ 25,157,780	\$ 13,671,228 \$ 15,361,623	\$ - \$ 3,654,024		\$ 9,385,332 \$ \$ 7,250,174 \$	120,548,239 \$ 929,536 19,151,193 \$ 1,905,144
	Total Costs Benefit Cost Ratio	8+9 (1+2+3+4+5+6+7)/(8+9)	\$ 96,836,144 \$ 2.9	156,334,938 \$	260,880,615	\$ 64,149,269 3.8	\$ 29,032,851	\$ 3,654,024	\$ 4,874,853	\$ 16,635,506 \$ 4.5	139,699,432 \$ 2,834,680 2.0 0.9
											Nomo
	pant Cost Test (PCT)		Res	<b>C&amp;I</b>	Total Portfolio	Efficient	Existing Homos	Home Energy	Multifamily	Direct loctall En	rgy Solutions for R. Book
Partici	pant cost lest (PCT)					Products		Management			Business Demand
BENEFITS	10 Avoided Retail Electric Costs		\$ 342,401,336 \$								265 168 103 \$ 374 772
	11 Avoided Retail Natural Gas Costs		\$ 342,401,336 \$ \$ (9,423,842) \$	(4,440,586) \$	5 685,332,262 5 (11,438,908)	\$ 321,473,727 \$ (27,141,450)	\$ 15,424,621 \$ 17,717,607	\$ 5,502,988	\$ 1,801,221	s - s	(4,440,586) \$ 624,300
	12 Program Incentive Costs 13 Time-Value of Loan Repayments		\$ (9,423,842) \$ \$ 49,114,171 \$ \$ (715,985) \$	59,356,334 (382,372) \$	5 111,151,671 5 (1,104,656)	\$ 28,426,305 \$ (442,286)	\$ 20,687,866 \$ (273,699)	s - s -	\$ 1,751,672 \$ (6.299)	\$ 15,016,532 \$ \$ (23,033) \$	44,339,803 \$ 929,494 (359,339) \$
COSTS	Total Benefits	10+11+12+13	\$ 381,375,679 \$						\$ 8,917,794	\$ 87,010,349 \$	304,707,981 \$ 1,928,566
CUSIS	14 Lifetime Participant Costs				5 190,344,123	\$ 41,182,944	\$ 14,685,565	s -		\$ 9,540,103 \$	122,405,879 \$ 929,536
	Total Costs Benefit Cost Ratio	14 (10+11+12+13]/14	\$ - \$ n/a	- S	190,344,123 4.1	\$ 41,182,944 7.8	\$ 14,685,565 3.6	s . n/a	\$ 1,600,097 5.6	\$ 9,540,103 \$ 9.1	122,405,879 \$ 929,536 2.5 2.1
											Home
Progra	m Administrator Cost Test (PAC)		Res	<b>C&amp;I</b>	Total Portfolio	Efficient	Existing Homes	Home Energy Education and	Multifamile	Direct Install En	rgy Solutions for & Peak
rogra						Products		Management			Business Demand
BENEFITS	17. Availed Whelevels Florida Francesco (*** *** ****************************		C 01 05 050 1								68.132.602 \$ 84.118
l	15 Avoided Wholesale Electric Energy and Electric Ancillary Costs 16 Avoided Wholesale Electric Capacity Costs		\$ 81,451,893 \$ \$ 7,751,760 \$	22 966 961 0	5 166,281,560 5 31,408,466	\$ 6.661.345	\$ 878.164	\$ 1,229,043 \$ 212,251	\$ 167.760	\$ 15,342,359 \$ \$ 5,129,735 \$	17 727 127 6 622 085
	17 Avoided Wholesale Natural Gas Costs 18 Avoided RPS REC Purchase Costs		\$ (3,008,451) \$ \$ 41,730,105 \$	(1,515,820) \$ 55,597,007 \$	5 (3,781,689) 5 98,230,130	\$ (8,594,427) \$ 38,523,428	\$ 5,585,976 \$ 2,431,474	\$ - \$ 775,202	\$ 564,621 \$ 849,185	\$ · · \$ \$ 10.232.200 \$	(1,515,820) \$ 177,961 45,364,806 \$ 53,834
	19 Avoided Wholesale Volatility Costs		\$ 8,619,520 \$ \$ 20,863,894 \$	10,482,600 9 38,832,415 9	5 19,390,834 5 60.815.064	\$ 7.462.273	\$ 1,013,117 \$ 1,537,556	\$ 144,129 \$ 463,442	\$ 200,297 \$ 377.131	\$ 2,047,209 \$ \$ 8,194,061 \$	8,435,391 \$ 88,416 30,638,354 \$ 741,624
	20 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE) 21 Avoided Transmission and Distribution Costs		\$ 121,042,206 \$	141,925,660	5 266,557,610	\$ 104,774,099	\$ 14,086,419	\$ 2,181,688	\$ 2,801,233	\$ 34,719,215 \$	107,206,445 \$ 788,512
COSTS	Total Benefits	15+16+17+18+19+20+21	\$ 278,450,927 \$	351,663,683	638,901,973	\$ 244,245,431	\$ 29,199,741	\$ 5,005,755	\$ 6,230,814	\$ 75,664,779 \$	275,998,905 \$ 2,556,550
	22 Administration Costs 23 Program Rebate Costs		\$ 44,173,427 \$ \$ 49,114,171 \$	26,401,367		\$ 25,157,780 \$ 28,426,305	\$ 15,361,623	\$ 3,654,024	\$ 3,306,233	\$ 7,250,174 \$ \$ 15,016,532 \$	19,151,193 \$ 1,905,144 44,339,803 \$ 929,494
	24 Time-Value of Loan Repayments Total Costs	22+23+24	\$ (715,985) \$ \$ 92,571,613 \$	(382,372)	5 (1,104,656) 185,833,185	\$ (442,286)	\$ (273,699)	s -	\$ (6,299)	\$ (23,033) \$ \$ 22,243,673 \$	(359,339) \$ 63,131,657 \$ 2,834,637
	Benefit Cost Ratio	22+23+24 (15+16+17+18+19+20+21)/(22+23+24)	\$ 92,571,613 \$ 3.0	85,575,529 5	3.4	\$ 53,141,799 <b>4.6</b>	\$ 35,775,790 0.8	5 3,654,024	\$ 5,051,606 1.2	\$ 22,243,673 \$ 3.4	63,131,657 \$ 2,834,637 4.4 0.9
											Home
Ratepa	iver Impact Measure Test (RIM)				Total Portfolio	Efficient	Existing Homes	Home Energy Education and	Multifamily	Direct Install En	rgy Solutions for & Peak
								Management			Demand Reduction
BENEFITS	25 Avoided Wholesale Electric Energy and Electric Ancillary Costs		\$ 81,451,893 \$	83,474,961	5 166,281,560	\$ 76 555 817	\$ 3,667,034	\$ 1 229 043	\$ 1 270 588	\$ 15,342,359 \$	68,132,602 \$ 84,118
1	26 Avoided Wholesale Electric Capacity Costs 27 Avoided Wholesale Natural Gas Costs		\$ 7,751,760 \$ \$ (3.008,451) \$	22,866,861 (1.515,820)	5 31,408,466	\$ 6,661,345 \$ (8,594,427)	\$ 878.164	\$ 212,251		\$ 5,129,735 \$	17,737,127 \$ 622,085 (1.515.820) \$ 177.961
1	28 Avoided RPS REC Purchase Costs		\$ 41,730,105 \$	55,597,007	5 98,230,130	\$ 38,523,428	\$ 2,431,474		\$ 849,185	\$ 10,232,200 \$	45,364,806 \$ 53,834
	29 Avoided Wholesale Volatility Costs 30 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)		\$ 8,619,520 \$ \$ 20,856,455 \$	10,482,600 \$	5 19,390,834 5 60,800,677	\$ 7,462,273 \$ 18,844,707	\$ 1,013,117 \$ 1,548,306	\$ 144,129 \$ 463,442	\$ 200,297 \$ 378,576	\$ 2,047,209 \$ \$ 8,194,061 \$	8,435,391 \$ 88,416 30,630,764 \$ 740,822
	31 Avoided Transmission and Distribution Costs Total Benefits	25+26+27+28+29+30+31	\$ 121,042,206 \$ \$ 278,443,487 \$	141,925,660 \$ 351,656,094 \$	5 266,557,610 638,887,587	\$ 104,774,099 \$ 244,227,242	\$ 14,086,419 \$ 29,210,491	\$ 2,181,688 \$ 5.005.755	\$ 2,801,233 \$ 6.232.258	\$ 34,719,215 \$ \$ 75,664,779 \$	107,206,445 \$ 788,512 275,991,315 \$ 2,555,748
COSTS	32 Administration Costs		\$ 44.173.427 S	26.401.367		\$ 25.157.780				\$ 7.250.174 S	19.151.193 \$ 1.905.144
	33 Program Rebate Costs		\$ 49.114.171 \$	59.356.334	5 111,151,671	\$ 28,426,305 \$ 99,188,730	\$ 20,687,866	\$ 5,654,024	\$ 1,751,672	\$ 15.016.532 \$	44,339,803 \$ 929,494
	34 Re-allocated Distribution Costs 35 Time-Value of Loan Repayments		\$ 114,570,720 \$ \$ (715,985) \$	(382,372) \$	5 (1,104,656)	\$ (442,286)	\$ (273,699)	s -	\$ (6,299)		(359,339) \$ -
	Total Costs Benefit Cost Ratio	32+33+34+35	\$ 207,142,333 \$	212,802,644 \$	430,951,959	\$ 152,330,529	\$ 49,161,350	\$ 5,650,454	\$ 7,727,054	\$ 53,704,591 \$	159,098,053 \$ 3,279,928
C	al Cost Test (SCT)		Res	CBI	Total Portfolio						Harma
Societa	al Cost Test (SCT)		Res					Home Energy		En	Home Optimization
BENEFITS						Products	Existing Homes	Home Energy Education and Management	Multifamily	Direct Install	Home Optimization Business Demand
						Products		Education and Management		Direct Install	Business Benand Reduction
	36 Avoided Wholesale Electric Energy and Electric Ancillary Costs 37 Avoided Wholesale Electric Capacity Costs		\$ 107,784,883 \$ \$ 10.932,457 \$	112,701,017 S	5 222.304.723	Products	\$ 5.014.020	Education and Management \$ 1,349,650	\$ 1,725,288	\$ 21,054,254 \$	Business 2 Peak Demand Reduction
	37 Avoided Wholesale Electric Capacity Costs 38 Avoided Wholesale Natural Gas Costs		\$ 10,932,457 \$ \$ (4,168,493) \$	32,504,739 (1,978,797)	5 222,304,723 5 44,405,693 5 (5,183,284)	\$ 101,421,213 \$ 9,414,770 \$ (11,800,883)	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389	Education and Management \$ 1,349,650 \$ 247,938 \$ -	\$ 1,725,288 \$ 241,816 \$ 766,240	\$ 21,054,254 \$ \$ 7,411,019 \$ \$ - \$	Business         X Peak Demand Reduction           91,646,762         93,536           25,093,720         5 726,681           (1,978,797)         197,766
	37 Avoided Wholesale Electric Capacity Costs 38 Avoided Wholesale Natural Gas Costs 39 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE) 40 Natural Gas Demand Reduction Induced Price Effects (DRIPE)		\$ 10,932,457 \$ \$ (4,168,493) \$ \$ 28,026,678 \$ \$ 10,041 \$	32,504,739 (1,978,797) 54,020,983 10,109	5 222,304,723 5 44,405,693 5 (5,183,284) 5 83,436,771 5 19,484	\$ 101,421,213 \$ 9,414,770 \$ (11,800,883) \$ 25,327,769 \$ 20,877	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389 \$ 2,172,813 \$ (10,835)	Education and Management \$ 1,349,650 \$ 247,938 \$ - \$ 526,096 \$ -	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556)	\$ 21,054,254 \$ \$ 7,411,019 \$ \$ \$ \$ 11,622,842 \$ \$ \$	Business         8 Maik Demand Reduction           91,646,762         93,536           25,093,720         726,681           (1,978,797)         197,766           42,398,142         \$ 865,455           10,109         \$ 890
	37 Avoided Wholesale Electric Capacity Costs 38 Avoided Wholesale Natural Gas Costs		\$ 10,932,457 \$ \$ (4,168,493) \$ \$ 28.026.678 \$	32,504,739 (1,978,797) 54,020,983 10,109	5 222,304,723 5 44,405,693 5 (5,183,284) 5 83,436,771 5 19,484 5 109,838,490	\$ 101,421,213 \$ 9,414,770 \$ (11,800,883) \$ 25,327,769 \$ 20,877 \$ 50,131,789	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389 \$ 2,172,813	Education and Management \$ 1,349,650 \$ 247,938 \$ - \$ 526,096 \$ - \$ 775,202	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 849,185	\$ 21,054,254 \$ \$ 7,411,019 \$ \$ - \$	Business         B PGA Do mand Reduction           91,646,762         93,536           25,093,720         726,681           (1,978,797)         197,766           42,338,142         \$ 855,455
	37 Avoided Wholesale Richtic Capacity Costs 38 Avoided Wholesale Natural Gas Costs 39 Bichtic Bengra and Capacity Demain Reduction Induced Price Effects (DRIPE) 40 Natural Gas Demain Reduction Induced Price Effects (DRIPE) 41 Avoided RPS SEV Purchase Costs 42 Avoided Wholesale Voibility Costs 43 Avoided Wholesale Voibility Costs 43 Avoided Transmission and Ostribution Costs		\$ 10,932,457 \$ \$ (4,168,493) \$ \$ 28,026,678 \$ \$ 10,041 \$ \$ 53,338,466 \$ \$ 11,454,885 \$ \$ 156,162,893 \$	32,504,739 ( (1,978,797) ( 54,020,983 ( 10,109 ( 55,597,007 ( 14,322,696 ( 185,036,223 (	5 222,304,723 5 44,405,693 5 (5,183,284) 5 83,436,771 5 19,484 5 109,838,490 5 26,152,713 5 345,761,358	\$ 101,421,213 \$ 9,414,770 \$ (11,800,883) \$ 25,327,769 \$ 20,877 \$ 50,131,789 \$ 9,903,510 \$ 134,965,580	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389 \$ 2,172,813 \$ (10,835) \$ 2,431,474 \$ 1,391,616 \$ 18,820,731	Education and Management \$ 1,349,650 \$ 247,938 \$ - \$ 526,096 \$ - \$ 775,202 \$ 159,759 \$ 2,376,582	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 849,185 \$ 273,334 \$ 3,724,013	\$ 21,054,254 \$ \$ 7,411,019 \$ \$ - \$ \$ 11,622,842 \$ \$ - \$ \$ 10,232,200 \$ \$ 2,846,527 \$ \$ 46,022,423 \$	Business         E Vols           Demand         Demand           91,646,762         \$ 93,536           25,093,720         \$ 726,681           (1,978,979)         \$ 197,766           10,109         \$ 890           45,364,806         \$ 53,834           13,9,012,800         \$ 838,229
	37 Avoided Wholesale Electric Capacity Cots 38 Avoided Wholesale Electric Capacity Cots 39 Electric Insergs and Capacity Demand Reduction Induced Price Effects (DRPR) 41 Avoided BFR BEC Functionae Cots 42 Avoided BFR BEC Functionae Cots 42 Avoided Workshoft Voldmith Cots 44 Avoided Ch, Instiance Damages 44 Avoided Ch, Unstiance Damages		\$ 10,932,457 \$ \$ (4,168,493) \$ \$ 28,026,678 \$ \$ 10,041 \$ \$ 53,338,466 \$ \$ 11,454,885 \$ \$ 156,162,893 \$ \$ 112,362,597 \$ \$ 126,276,747 \$	32,504,739 ( (1,978,797) ( 54,020,983 ( 10,109 ( 55,597,007 ( 14,322,696 ( 185,036,223 ( 120,451,970 ( 134,318,037 (	222,304,723 44,405,693 (5,183,284) 83,436,771 5 19,484 5 109,838,490 5 26,152,713 5 345,761,358 5 235,608,920 242,994,933	Products           \$ 101,421,213           \$ 9,414,770           \$ (11,800,883)           \$ 25,327,769           \$ 20,877           \$ 9,903,510           \$ 134,965,580           \$ 99,138,406           \$ 116,935,590	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389 \$ 2,172,813 \$ (10,835) \$ 2,431,474 \$ 1,391,616 \$ 18,820,731 \$ 11,659,598 \$ 7,639,821	Education and Management \$ 1,349,650 \$ 247,938 \$ 526,096 \$ 526,096 \$ - \$ 775,202 \$ 159,759 \$ 2,376,582 \$ 1,564,592 \$ 1,643,336	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 849,185 \$ 2,73,334 \$ 3,724,013 \$ 2,513,900 \$ 2,241,391	\$ 21,054,254 \$ \$ 7,411,019 \$ \$ \$ \$ 11,622,842 \$ \$ \$ \$ 10,232,200 \$ \$ 2,846,527 \$ \$ 46,023,423 \$ \$ 22,720,418 \$ \$ 25,278,034 \$	Business         L Vols Demand Reduction           91,646,762         \$ 93,536           25,093,720         \$ 726,681           (1,978,797)         \$ 197,766           23,98,142         \$ 885,455           10,109         \$ 890           42,398,142         \$ 885,455           10,109         \$ 890           45,364,806         \$ 33,834           11,476,169         \$ 838,229           97,731,552         \$ 280,453           109,140,0003         \$ 185,758
	37 Avoided Wholeale Electric Castle 38 Avoided Wholeale Electric Castle 39 Electric Tearry and Capacity Demander Marcal Electric (DRIPE) 40 Avoid 24 Demander Electric (DRIPE) 41 Avoided Phote Electric Costs 42 Avoided Phote Electric Costs 43 Avoided Phote Electric Costs 43 Avoided Phote Electric Costs 43 Avoided Phote Electric Costs 44 Avoided Phote Electric Costs 44 Avoided Phote Electric Costs 44 Avoided Phote Electric Costs 43 Avoided Phote Electric Costs 44 Avoided Phote Electric Costs 44 Avoided Phote Electric Costs 44 Avoided Phote Electric Costs 45 Avoided Phote Electric Costs 45 Avoided Phote Electric Costs 46 Avoided Phote Electric Costs 47 Avoided Phote Electric Costs 48 Avoided Phote Electric Costs 48 Avoided Phote Electric Costs 48 Avoided Phote Electric Costs 49 Avoided Phote Electric Costs 40 Avoided Phote Electric Costs 41 Avoided Phote Electric Costs 40 Avoided Phote Phot	36-37-38-39-40-13-42-43-46-45-46	\$ 10,932,457 \$ \$ (4,168,493) \$ \$ 28,026,678 \$ \$ 10,041 \$ \$ 33,384,466 \$ \$ 11,454,885 \$ \$ 114,54,885 \$ \$ 126,162,893 \$ \$ 126,276,747 \$ \$ 301,777,214 \$	32,504,739 ( (1,978,797) ( 54,020,983 ( 10,109 ( 55,597,007 ( 14,322,696 ( 185,036,223 ( 120,451,970 ( 134,318,037 (	5 222,304,723 5 44,405,693 5 (5,183,284) 83,436,771 5 19,484 5 109,838,490 26,152,713 5 345,761,358 5 235,608,920 5 262,994,933 5 769,214,869	Products           \$ 101,421,213           \$ 9,414,770           \$ (11,800,883)           \$ 25,327,769           \$ 20,877           \$ 9,903,510           \$ 134,965,580           \$ 99,138,406           \$ 116,935,590	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389 \$ 2,172,813 \$ (10,835) \$ 2,431,474 \$ 1,391,616 \$ 18,820,731 \$ 11,659,598 \$ 7,639,821 \$ 7,639,821	Education and Management \$ 1,349,650 \$ 247,938 \$ - \$ 526,096 \$ - \$ 775,202 \$ 159,759 \$ 2,376,582 \$ 1,564,592 \$ 1,564,592 \$ 1,564,338 \$ 5,497,606	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 849,185 \$ 273,334 \$ 3,724,013 \$ 2,513,900 \$ 2,241,391 \$ 8,355,921	\$ 21,054,254 \$ \$ 7,411,019 \$ \$ • \$ \$ 11,622,842 \$ \$ 10,232,200 \$ \$ 2,846,527 \$ \$ 46,023,423 \$ \$ 22,720,418 \$	Business         L Vols           Demand         Reduction           91,646,762         \$ 93,536           25,093,720         \$ 726,681           (1,978,797)         \$ 197,766           42,398,142         \$ 865,455           10,109         \$ 880           45,364,806         \$ 53,834           11,476,169         \$ 101,798           97,731,552         \$ 280,453           20,721,552         \$ 280,453
COSTS	37 Anded Wholesel Entric Capaby Costs 38 Anded Wholesel Entric Capaby Costs 39 Electric Lengra vol. Capaby Contained Beacterin Mediced Prior Effects (1989) 39 Electric Lengra vol. Capaby Costs 42 Anded Moheael Volatilly Costs 43 Anded Moheael Volatilly Costs 43 Anded Moheael Volatilly Costs 43 Anded Kosts (2000) 45 Anded Kosts (2000) 45 Anded Kosts (2000) 45 Anded Kosts (2000) 16 Anded Kosts 16 Ande	361738-3946-414248-4646-4646	\$ 10,932,457 \$ \$ (4,168,493) \$ \$ 28,026,678 \$ \$ 10,041 \$ \$ 53,338,466 \$ \$ 11,454,885 \$ \$ 156,162,893 \$ \$ 112,362,597 \$ \$ 126,276,747 \$ \$ 301,777,214 \$ \$ 903,908,367 \$	32,504,739 ( (1,978,797) ( 54,020,983 ( 10,109 ( 55,597,007 ( 14,322,696 ( 120,451,970 ( 134,318,037 ( 455,243,760 ( 134,318,037 ( 134,318,037 ( 134,318,037 ( 134,318,037 ( 137,903,354 ( 137,903,354 (	222,304,723 44,405,693 5 (5,183,284) 83,436,771 5 (19,88,490 26,152,713 345,761,358 245,761,358 5 (25,52,713 345,761,358 5 (25,52,713 245,994,933 5 (769,214,869 5 (769,214,869 5 (769,214,869 5 (759,20,059)	Products           \$ 101,421,213           \$ 9,414,770           \$ (11,800,883)           \$ 25,327,769           \$ 20,877           \$ 50,131,789           \$ 9,903,510           \$ 124,965,580           \$ 134,965,580           \$ 254,128,664           \$ 789,645,286           \$ 40,767,518	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389 \$ 2,172,813 \$ (10,835) \$ 2,431,474 \$ 1,391,616 \$ 18,820,731 \$ 1,659,598 \$ 7,639,821 \$ 7,639,821 \$ 42,100,944 \$ 100,122,319 \$ 14,569,338	Education and Management \$ 1,349,650 \$ 247,938 \$ - \$ 526,096 \$ - \$ 775,202 \$ 159,759 \$ 1,564,592 \$ 1,564,592 \$ 1,564,592 \$ 1,643,336 \$ 5,497,606 \$ 14,140,762 \$ -	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 849,185 \$ 273,334 \$ 3,724,013 \$ 2,513,900 \$ 2,241,391 \$ 2,241,391 \$ 2,541,3187 \$ 1,662,411	\$ 21,054,254 \$ \$ 7,41,019 \$ \$ 11,622,842 \$ \$ \$ \$ 11,622,842 \$ \$ 10,232,200 \$ \$ 2,846,527 \$ \$ 46,023,423 \$ \$ 22,720,418 \$ \$ 22,720,418 \$ \$ 22,720,418 \$ \$ 22,720,418 \$ \$ 22,720,418 \$ \$ 244,492,077 \$ \$ 10,051,106 \$	Business         Pack Participation           91,646,762         \$ 93,546           72,003,720         \$ 726,681           (1,978,797)         \$ 197,766           42,338,142         \$ 685,455           10,109         \$ 887,09           13,012,800         \$ 388,229           97,731,552         \$ 284,635           10,140,003         \$ 158,788           91,728,56,49         \$ 1,017,437
costs	37 Andeld Wholeael Enteric Capacity Costs 38 Rendet Wholeael Enteric Capacity Costs 39 Electric Intergy and Capacity General Relation Induced Price Effects (DRIPE) 41 Andeld Molecular Machaton Induced Price Effects (DRIPE) 43 Andeld Terminalism and Enterthan Induced Price Effects (DRIPE) 44 Andeld Terminalism and Enterthantion Casts 44 Andeld Co, Emissions Damages 45 John and Entergy Saving Economic Value Added Multipleir Benefits Table Banges 47 Incomental Casts 49 Administration Casts	5617-38-37-69-63-43-44-45-66 47-44	\$ 10,932,457 \$ \$ (4,168,493) \$ \$ 28,026,678 \$ \$ 10,041 \$ \$ 53,338,466 \$ \$ 11,454,885 \$ \$ 114,54,885 \$ \$ 112,362,597 \$ \$ 112,362,597 \$ \$ 10,727,214 \$ \$ 903,906,367 \$ \$ \$ 53,368,56 \$ \$ 46,580,883 \$	32,504,739 ( (1,978,797) ( 54,020,983 ( 10,109 ( 55,597,007 ( 14,322,696 ( 185,036,223 ( 120,451,970 ( 134,318,037 ( 455,243,760 ( 1162,227,744 ( 137,903,354 ( 27,954,932 ( 27,954,932 ( 19,932 ( 19,933 ( 19,932	5 222,304,723 5 44,405,693 5 (5,183,284) 5 83,436,771 5 19,484 6 109,838,490 5 261,52,713 5 345,761,358 6 235,608,920 5 235,608,920 5 235,608,920 5 262,994,933 5 766,214,869 5 20,994,534,671 5 195,920,059 5 80,099,644	Products           \$ 101,421,213           \$ 9,414,770           \$ (11,800,883)           \$ 25,327,769           \$ 0,131,789           \$ 9,903,510           \$ 134,965,580           \$ 99,138,406           \$ 116,993,590           \$ 25,4128,664           \$ 789,645,286           \$ 40,767,518           \$ 26,452,286	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389 \$ 2,172,813 \$ (10,835) \$ 2,431,457 \$ 1,391,616 \$ 18,820,731 \$ 11,659,538 \$ 7,639,821 \$ 42,100,944 \$ 100,122,319 \$ 14,569,338 \$ 16,218,956	Education and Management \$ 1,349,650 \$ 247,938 \$ - \$ 526,096 \$ - \$ 775,202 \$ 159,759 \$ 2,376,582 \$ 1,564,592 \$ 1,643,336 \$ 5,497,606 \$ 1,410,762 \$ 3,909,591	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 849,185 \$ 273,334 \$ 3,724,013 \$ 2,513,900 \$ 2,241,391 \$ 2,523,900 \$ 2,241,391 \$ 2,241,391 \$ 2,241,391 \$ 2,1213,187 \$ 1,662,411 \$ 1,662,411	\$ 21,054,254         \$           \$ 7,411,019         \$           \$ 7,411,019         \$           \$ 11,622,842         \$           \$ 12,232,200         \$           \$ 2,246,527         \$           \$ 2,244,23         \$           \$ 2,27,0418         \$           \$ 2,51,78,034         \$           \$ 2,44,92,077         \$           \$ 10,033,106         \$           \$ 2,646,695,106         \$	Business         II Plak Reduction           91,666,70,2         5 - 93.536           1,978,737         5 - 73.568           1,978,737         5 - 73.668           1,978,737         5 - 73.668           1,978,737         5 - 73.668           1,978,737         5 - 73.668           1,978,737         5 - 73.668           1,978,137         5 - 83.847           1,977,115,52         5 - 101.778           139,012,200         5 - 183.787           9,773,15,52         5 - 280.453           100,140,003         5 - 158.778           9,774,15,55         7 - 20.65,378           127,852,667         5 - 20.68,376           122,852,227         5 - 10.1748           122,852,227         5 - 10.07,87
costs	37 Anded Wholesel Entric Capaby Costs 38 Anded Wholesel Entric Capaby Costs 39 Electric Lengra vol. Capaby Contained Beacterin Mediced Prior Effects (1989) 39 Electric Lengra vol. Capaby Costs 42 Anded Moheael Volatilly Costs 43 Anded Moheael Volatilly Costs 43 Anded Moheael Volatilly Costs 43 Anded Kosts (2000) 45 Anded Kosts (2000) 45 Anded Kosts (2000) 45 Anded Kosts (2000) 16 Anded Kosts 16 Ande	8:17:31:31:49:41:42:41:44:45:46 0:44 [001739294:64:42:42:44:44:04(0940)	\$ 10,932,457 \$ \$ (4,168,493) \$ \$ 28,026,678 \$ \$ 10,041 \$ \$ 53,338,466 \$ \$ 11,454,885 \$ \$ 156,162,893 \$ \$ 112,362,597 \$ \$ 126,276,747 \$ \$ 301,777,214 \$ \$ 903,908,367 \$	32,504,739 ( (1,978,797) ( 54,020,983 ( 10,109 ( 55,597,007 ( 14,322,696 ( 120,451,970 ( 134,318,037 ( 455,243,760 ( 134,318,037 ( 134,318,037 ( 134,318,037 ( 134,318,037 ( 137,903,354 ( 137,903,354 (	5         222,304,723           44,405,693         (5,183,284)           5         33,436,771           6         19,484           6         109,838,490           6         225,608,920           5         225,608,920           5         225,608,920           5         2094,533           6         195,920,059           6         195,920,059	Products           \$ 101,421,213           \$ 9,414,770           \$ (11,800,883)           \$ 25,327,769           \$ 0,131,789           \$ 9,903,510           \$ 134,965,580           \$ 99,138,406           \$ 116,993,590           \$ 25,4128,664           \$ 789,645,286           \$ 40,767,518           \$ 26,452,286	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389 \$ 2,172,813 \$ (10,835) \$ 2,431,457 \$ 1,391,616 \$ 18,820,731 \$ 11,659,538 \$ 7,639,821 \$ 42,100,944 \$ 100,122,319 \$ 14,569,338 \$ 16,218,956	Education and Management \$ 1,349,650 \$ 247,938 \$ - \$ 526,096 \$ - \$ 775,202 \$ 159,759 \$ 1,564,592 \$ 1,564,592 \$ 1,564,592 \$ 1,643,336 \$ 5,497,606 \$ 14,140,762 \$ -	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 849,185 \$ 273,334 \$ 3,724,013 \$ 2,513,900 \$ 2,241,391 \$ 2,523,900 \$ 2,241,391 \$ 2,241,391 \$ 2,241,391 \$ 2,1213,187 \$ 1,662,411 \$ 1,662,411	\$ 21,054,254 \$ \$ 7,41,019 \$ \$ 11,622,842 \$ \$ \$ \$ 11,622,842 \$ \$ 10,232,200 \$ \$ 2,846,527 \$ \$ 46,023,423 \$ \$ 22,720,418 \$ \$ 22,720,418 \$ \$ 22,720,418 \$ \$ 22,720,418 \$ \$ 22,720,418 \$ \$ 244,492,077 \$ \$ 10,051,106 \$	Business         Pack Participation           91,646,762         \$ 93,546           72,003,720         \$ 726,681           (1,978,797)         \$ 197,766           42,338,142         \$ 685,455           10,109         \$ 887,09           13,012,800         \$ 388,229           97,731,552         \$ 284,635           10,140,003         \$ 158,788           91,728,56,49         \$ 1,017,437
costs	37 Andeld Wholeael Enteric Capacity Costs 38 Rendet Wholeael Enteric Capacity Costs 39 Electric Intergy and Capacity General Relation Induced Price Effects (DRIPE) 41 Andeld Molecular Machaton Induced Price Effects (DRIPE) 43 Andeld Terminalism and Enterthan Induced Price Effects (DRIPE) 44 Andeld Terminalism and Enterthantion Casts 44 Andeld Co, Emissions Damages 45 John and Entergy Saving Economic Value Added Multipleir Benefits Table Banges 47 Incomental Casts 49 Administration Casts	843738334444444444444444444444444444444	\$ 10,932,457 \$ \$ (4,168,493) \$ \$ 28,026,678 \$ \$ 10,041 \$ \$ 53,338,466 \$ \$ 11,454,885 \$ \$ 114,54,885 \$ \$ 112,362,597 \$ \$ 112,362,597 \$ \$ 10,727,214 \$ \$ 903,906,367 \$ \$ \$ 53,368,56 \$ \$ 46,580,883 \$	32,504,739 ( (1,978,797) ( 54,020,983 ( 10,109 ( 55,597,007 ( 14,322,696 ( 185,036,223 ( 120,451,970 ( 134,318,037 ( 455,243,760 ( 1162,227,744 ( 137,903,354 ( 27,954,932 ( 27,954,932 ( 19,932 ( 19,933 ( 19,932	222,304,723 5 44,405,693 5 (5,183,284) 5 83,436,771 5 19,484 6 109,838,490 5 261,52,713 5 345,761,358 6 235,608,920 5 235,608,920 5 235,608,920 5 262,994,933 5 766,214,869 5 20,994,534,671 5 195,920,059 5 80,099,644	Products           \$ 101,421,213           \$ 9,414,770           \$ (11,800,883)           \$ 25,327,769           \$ 0,131,789           \$ 9,903,510           \$ 134,965,580           \$ 99,138,406           \$ 116,993,590           \$ 25,4128,664           \$ 789,645,286           \$ 40,767,518           \$ 26,452,286	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389 \$ 2,172,813 \$ (10,835) \$ 2,431,457 \$ 1,391,616 \$ 18,820,731 \$ 11,659,538 \$ 7,639,821 \$ 42,100,944 \$ 100,122,319 \$ 14,569,338 \$ 16,218,956	Education and Management \$ 1,349,650 \$ 247,938 \$ - \$ 526,096 \$ - \$ 775,202 \$ 159,759 \$ 2,376,582 \$ 1,564,592 \$ 1,643,336 \$ 5,497,606 \$ 1,410,762 \$ 3,909,591	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 849,185 \$ 273,334 \$ 3,724,013 \$ 2,513,900 \$ 2,241,391 \$ 2,523,900 \$ 2,241,391 \$ 2,241,391 \$ 2,241,391 \$ 2,1213,187 \$ 1,662,411 \$ 1,662,411	\$ 21,054,254         \$           \$ 7,411,019         \$           \$ 7,411,019         \$           \$ 11,622,842         \$           \$ 12,232,200         \$           \$ 2,246,527         \$           \$ 2,244,23         \$           \$ 2,27,0418         \$           \$ 2,51,78,034         \$           \$ 2,44,92,077         \$           \$ 10,033,106         \$           \$ 2,646,695,106         \$	Business         II Plak Reduction           91,666,70,2         5 - 93.536           1,978,737         5 - 73.568           1,978,737         5 - 73.668           1,978,737         5 - 73.668           1,978,737         5 - 73.668           1,978,737         5 - 73.668           1,978,737         5 - 73.668           1,978,137         5 - 83.847           1,977,115,52         5 - 101.778           139,012,200         5 - 183.787           9,773,15,52         5 - 280.453           100,140,003         5 - 158.778           9,774,15,55         7 - 20.65,378           127,852,667         5 - 20.68,376           122,852,227         5 - 10.1748           122,852,227         5 - 10.07,87
costs	37 Andeld Wholeael Enteric Capacity Costs 38 Rendet Wholeael Enteric Capacity Costs 39 Electric Intergy and Capacity General Relation Induced Price Effects (DRIPE) 41 Andeld Molecular Machaton Induced Price Effects (DRIPE) 43 Andeld Terminalism and Enterthan Induced Price Effects (DRIPE) 44 Andeld Terminalism and Enterthantion Casts 44 Andeld Co, Emissions Damages 45 John and Entergy Saving Economic Value Added Multipleir Benefits Table Banges 47 Incomental Casts 49 Administration Casts	3647/39/3948/43/42/43/44445/46 4744 (5617/36/39/46/41-42-40-44445/46)[///44]	\$ 10,932,457 \$ \$ (4,168,493) \$ \$ 28,026,678 \$ \$ 10,041 \$ \$ 53,338,466 \$ \$ 11,454,885 \$ \$ 114,54,885 \$ \$ 112,362,597 \$ \$ 112,362,597 \$ \$ 10,727,214 \$ \$ 903,906,367 \$ \$ \$ 53,368,56 \$ \$ 46,580,883 \$	32,504,739 ( (1,978,797) ( 54,020,983 ( 10,109 ( 55,597,007 ( 14,322,696 ( 134,321,696 ( 134,318,037 ( 134,318,037 ( 134,318,037 ( 134,318,037 ( 137,903,354 ( 27,954,932 ( 165,838,286 ( 165,838,286 ( 7,0	222,304,723 5 44,405,693 5 (5,183,284) 5 83,436,771 5 19,484 6 109,838,490 5 261,52,713 5 345,761,358 6 235,608,920 5 235,608,920 5 235,608,920 5 262,994,933 5 766,214,869 5 20,994,534,671 5 195,920,059 5 80,099,644	Products           \$ 101,421,213           \$ 9,414,770           \$ (11,800,883)           \$ 25,327,769           \$ 0,131,789           \$ 9,903,510           \$ 134,965,580           \$ 99,138,406           \$ 116,993,590           \$ 25,4128,664           \$ 789,645,286           \$ 40,767,518           \$ 26,452,286	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389 \$ 2,172,813 \$ (10,835) \$ 2,431,457 \$ 1,391,616 \$ 18,820,731 \$ 11,659,538 \$ 7,639,821 \$ 42,100,944 \$ 100,122,319 \$ 14,569,338 \$ 16,218,956	Education and Management \$ 1,349,650 \$ 247,938 \$ - \$ 526,096 \$ - \$ 775,202 \$ 159,759 \$ 2,376,582 \$ 1,564,592 \$ 1,643,336 \$ 5,497,606 \$ 1,410,762 \$ 3,909,591	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 849,185 \$ 273,334 \$ 3,724,013 \$ 2,513,900 \$ 2,241,391 \$ 2,523,900 \$ 2,241,391 \$ 2,241,391 \$ 2,241,391 \$ 2,1213,187 \$ 1,662,411 \$ 1,662,411	5 21,054,254 S 5 7,411,019 S 5 - S 5 11,622,842 S 5 10,232,200 S 5 2,2445,527 S 5 46,023,200 S 5 22,720,418 S 5 225,178,034 S 5 23,4492,077 S 244,492,077 S 10,051,106 S 5 7,688,695 S 5 17,739,800 S	Business         II Plak Reduction           91,666,70,2         5 - 93.536           1,978,737         5 - 73.568           1,978,737         5 - 73.668           1,978,737         5 - 73.668           1,978,737         5 - 73.668           1,978,737         5 - 73.668           1,978,737         5 - 73.668           1,978,137         5 - 83.847           1,977,115,52         5 - 101.778           139,012,200         5 - 183.787           9,773,15,52         5 - 280.453           100,140,003         5 - 158.778           9,774,15,55         7 - 20.65,378           127,852,667         5 - 20.68,376           122,852,227         5 - 10.1748           122,852,227         5 - 10.07,87
costs Securitada New Je	37 Andeld Wholeael Enter Capacity Costs 38 Readed Wholeael Enter Capacity Costs 39 Electric Entergy and Capacity General Reduction Indexed Price Effects (DRIPE) 40 Andeld Schweiner Adectation Indexed Price Effects (DRIPE) 42 Andeld Wholeael Andectation Indexed Price Effects (DRIPE) 44 Andeld Wholeael Andectation Indexed Price 44 Andeld Wholeael Andectation Indexed Price 45 Andeld Schweiner Damages 45 Andeld Schweiner Damages 45 Andeld Schweiner Schweiner Damages 47 Incomental Casts 70 Incomental Casts 70 Incomental Casts 70 Incomental Casts	361738-3940-01-02-03-46-45-46 91-0 19472 38-39-85-42-42-43-46-68-16/(07-81)	\$ 10,932,457 \$ \$ (4,168,493) \$ \$ 28,026,678 \$ \$ 10,041 \$ \$ 53,338,466 \$ \$ 11,454,885 \$ \$ 156,162,893 \$ \$ 112,362,597 \$ \$ 303,966,367 \$ \$ 553,36,856 \$ \$ 46,580,833 \$ \$ 101,917,600 \$ \$ 55,336,856 \$ \$ 55,336,856 \$ \$ 55,336,856 \$ \$ 55,336,856 \$ \$ 55,536,856 \$ \$ 55,556 \$ \$ 5	32,504,739 ( (1,978,797) ( 54,020,983 ( 10,109 ( 55,597,007 ( 14,322,696 ( 134,321,696 ( 134,318,037 ( 134,318,037 ( 134,318,037 ( 134,318,037 ( 137,903,354 ( 27,954,932 ( 165,838,286 ( 165,838,286 ( 7,0	<ul> <li>222,304,723</li> <li>44,405,693</li> <li>(5,183,284)</li> <li>84,345,771</li> <li>19,484</li> <li>109,838,400</li> <li>26,152,713</li> <li>345,674,338</li> <li>262,994,933</li> <li>262,994,934</li> <li>276,912,768</li> <li>276,912,768</li> <li>276,912,768</li> </ul>	Products           \$ 101,421,213           \$ 9,414,770           \$ (11,800,883)           \$ 25,327,769           \$ 0,131,789           \$ 9,903,510           \$ 134,965,580           \$ 99,138,406           \$ 116,993,590           \$ 25,4128,664           \$ 789,645,286           \$ 40,767,518           \$ 26,452,286	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389 \$ 2,172,813 \$ (10,835) \$ 2,431,457 \$ 1,391,616 \$ 18,820,731 \$ 11,659,538 \$ 7,639,821 \$ 42,100,944 \$ 100,122,319 \$ 14,569,338 \$ 16,218,956	Education and Management \$ 1,349,650 \$ 247,938 \$ - \$ 526,096 \$ - \$ 775,202 \$ 159,759 \$ 2,376,582 \$ 1,564,592 \$ 1,643,336 \$ 5,497,606 \$ 1,410,762 \$ 3,909,591	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 849,185 \$ 273,344 \$ 3,724,013 \$ 2,251,3900 \$ 2,723,344 \$ 3,724,013 \$ 2,723,347 \$ 2,723,347 \$ 2,723,347 \$ 2,723,347 \$ 2,723,347 \$ 2,724,347 \$ 2,745,347 \$ 2,745,447 \$ 2,745,447\\\$ 2,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,745,447\\\$ 3,7	5 21,054,254 \$ \$ 7,411,019 \$ \$ 5 \$ 1,622,842 \$ \$ 1,622,842 \$ \$ 1,023,200 \$ \$ 2,244,527 \$ \$ 46,023,423 \$ \$ 46,023,423 \$ \$ 22,770,418 \$ \$ 22,5178,034 \$ \$ 27,033,800 \$ \$ 22,5178,034 \$ \$ 7,688,695 \$ \$ 10,051,106 \$ \$ 7,688,695 \$ \$ 13,38	Banker         Annal Banker           91,946,7202         9,93,56           25,99,7202         7,66,411           1,07,17,771         9,176,64           4,21,2142         80,500           4,21,2142         80,500           5,364,600         33,824           1,476,410         9,103,400           1,476,410         9,103,400           1,376,410         9,103,400           1,375,410         9,103,400           1,375,440         9,103,400           1,375,440         9,103,400           1,375,440         9,103,400           1,375,440         9,103,400           1,375,440         9,103,400           1,375,440         9,103,400           1,375,440         9,103,400           1,375,440         9,103,400           1,375,440         9,103,400           1,375,440         9,103,400           1,305,400         9,803,400           1,305,400         9,803,400           1,305,400         9,803,400           1,401,404         9,803,400           1,401,404         9,803,400           1,401,404         9,803,400           1,401,404,400         9,803,400
costs	<ol> <li>Anded Wholesel Electric Capadry Costi</li> <li>Anded Wholesel Electric Capadry Energy and Energy Andrea Casting and Bob Andrea Casting Capadry Energy Energy Capadry Energy English English</li></ol>	26-17-38-39-49-41-42-43-44-45-46 29-47 38-17-38-39-42-42-43-444-45-48//(27-18)	\$ 10,932,457 \$ \$ (4,166,493) \$ \$ 28,026,678 \$ \$ 10,041 \$ \$ 11,454,885 \$ \$ 114,544,885 \$ \$ 115,612,893 \$ \$ 112,542,767,47 \$ \$ 003,908,367 \$ \$ 004,272,14 \$ \$ 003,908,367 \$ \$ 101,917,690 \$ B Res \$ 101,917,690 \$	12,50(,73) { 12,50(,73) { 12,57,73} { 12,77,73} { 12,77,73} { 12,77,73} { 12,77,74} { 12,72,54,732 { 12,75,45,72} { 12,75,45,7	<ul> <li>222,304,723</li> <li>44,05,693</li> <li>44,05,693</li> <li>(5,183,246)</li> <li>(5,183,246)</li> <li>(19,484)</li> <li>(19,584,691)</li> <li>(19,584,691)</li> <li>(25,26,252,004,593)</li> <li>(26,294,933)</li> <li>(25,26,294,933)</li> <li>(25,26,294,933)</li> <li>(25,26,294,933)</li> <li>(25,26,294,933)</li> <li>(25,26,294,933)</li> <li>(25,26,215,203)</li> <li>(25,294,584,671)</li> <li>(25,20,295,632,632)</li> <li>(25,26,294,933)</li> <li>(25,26,215,203)</li> <li>(25,294,584,671)</li> <li>(25,202,596,452)</li> <li>(25,202,596,453)</li> <li>(25,202,596,45</li></ul>	Products \$ 101,421,213 \$ 101,421,213 \$ 101,421,213 \$ 101,421,213 \$ 101,421,213 \$ 101,421,213 \$ 101,421,213 \$ 101,421,213 } \$ 101,421,213 \$ 101,421,213 } \$ 101,421,213 }	\$ 5,014,020 \$ 1,269,749 \$ 7,632,389 \$ 7,632,389 \$ 2,1272,813 \$ (10,035) \$ 2,2431,474 \$ 1,391,616 \$ 2,431,474 \$ 1,391,616 \$ 2,431,474 \$ 1,391,616 \$ 1,45,95,988 \$ 7,639,821 \$ 4,210,944 \$ 10,212,319 \$ 14,569,388 \$ 16,218,5956 \$ 30,788,295 <b>B</b> <b>B</b> <b>B</b> <b>B</b> <b>B</b> <b>B</b> <b>B</b> <b>B</b>	Education and Management \$ 1,349,650 \$ 247,338 \$ \$ 526,096 \$ 556,096 \$ 1,564,592 \$ 1,564,592 \$ 1,564,592 \$ 1,564,592 \$ 1,564,336 \$ 14,40,762 \$ . \$ .	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 273,334 \$ 489,185 \$ 273,334 \$ 2,513,900 \$ 2,241,391 \$ 2,24	S 21,054,254         S           S 21,054,254         S           S 7,41,019         S           S 11,52,74         S           S 11,52,74         S           S 11,52,74         S           S 10,23,200         S           S 20,265,272         S,246,257           S 20,270,2418         S           S 20,700,216         S           S 20,700,216         S           S 10,051,106         S           S 7,063,695         S           S 10,051,106         S           S 20,665,57         S           S 10,051,106         S           S 21,054,2264         S	Busing         Figure 3           9144672         9           9144672         9           9144672         9           9154672         9           915471         9           10779         9           10780         9           10190         8           10100         8           10100         8           10100         8           10100         8           10100         8           10100         8           10100         8           10100         8           10100         8           10100         8           101000         8           101000         8           101000         8           101000         8           101000         8           101000         8           101000         8           101000         8           101000         8           101000         8           101000         8           1010000         8           1010000         8           101000000         8     <
costs Securitada New Je	17 Andel Molecule Electric Capacity Costs 18 Andel Molecule Interu Capacity Costs 19 Electric Intergra and Capacity Remain Relation Induced Prace Effects (DRIPE) 19 Electric Intergra and Capacity Remain Relations (DRIPE) 19 Electric Intergra and Electric Casts 4 Andel Molecule Valsifily Costs 4 Andel Molecule Valsifily Costs 4 Andel Andel Prist Prist Charlos Costs 4 Andel Andel Prist Prist Charlos Costs 4 Andel Co Innuison Damages 10 Electric Intergra 10 Electric Intergra 10 Electric Intergra 11 Electric Intergra 12 Provide Prist Prist Prist Prist Prist Prist Prist 12 Andel Molecule Electric Capacity Costs 13 Andel Formation (DRIP) 43 Andel Formation (Electric Capacity Costs 13 Andel Formation (Electric Capacity C	36:37:38:39:40:42:427:42:441:54:65 47:48 [36:37:39:39:40:42:42:40:441:34:48]/[7:48]	\$ 10,932,457 \$ \$ (4,166,493) \$ \$ 28,026,678 \$ \$ 10,041 \$ \$ 33,338,466 \$ \$ 11,454,885 \$ \$ 114,544,885 \$ \$ 114,544,885 \$ \$ 112,362,767,47 \$ \$ 300,727,214 \$ \$ 300,727,214 \$ \$ 300,727,214 \$ \$ 300,727,214 \$ \$ 300,833 \$ \$ 101,917,690 \$ <b>Res</b> \$ 10,917,690 \$ \$ 10,910 \$	32,504,739 ( 1,978,797) ( 5,597,007 ( 5,597,007 ( 14,222,666 ( 120,651,970 ( 14,322,666 ( 120,651,970 ( 132,380,372 ( 134,318,037 ( 134,318,037 ( 137,903,354 ( 137,903 ( 137,903 ( 137,903 ( 137,904 (	5 222,304,723 5 44,05,693 5 (5,183,246) 5 (3,183,246) 5 (3,184,900) 5 (3,184,900) 5 (3,184,900) 5 (3,184,900) 5 (3,184,900) 5 (3,194,194) 5 (3,194	Products  S 101,421,213 S 0,414,770 S (11,800,837) S 25,327,769 S 00,877 S 50,131,769 S 00,877 S 50,131,769 S 104,965,530 S 19,903,510 S 19,903,510 S 19,903,500 S 134,965,530 S 0,903,510 S 104,921,213 S 101,421,213 S 101,421,213 S 0,9414,703	\$ 5,014,020 \$ 1,269,749 \$ 2,472,813 \$ (10,855) \$ 2,431,474 \$ 1,391,655 \$ 1,4820,731 \$ 14,569,588 \$ 169,252 \$ 109,223,189 \$ 14,569,388 \$ 162,218,956 \$ 30,782,956 \$ 30,782,9566 \$ 30,7856,9566\$ \$ 30,7856\$ \$ 30,7856\$ \$ 30,7566\$ \$ 30,7566\$ \$ 30	Education and Management \$ 1,349,650 \$ 247,938 \$ \$ 526,096 \$ \$ 526,096 \$ \$ 775,202 \$ 1,97,59 \$ 2,376,582 \$ 1,643,382 \$ 1,643,385 \$ 1,643,385 \$ 1,643,316 \$ 1,643,915 \$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,645,915\$\$ 1,655,9	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 273,334 \$ 489,185 \$ 273,334 \$ 3,724,013 \$ 2,513,900 \$ 2,241,391 \$ 2,2513,900 \$ 2,241,391 \$ 2,2513,900 \$ 2,241,391 \$ 2,2513,900 \$ 3,455,000 \$ 3,455,0000 \$ 3,45	\$ 21,054,254 § \$ \$ 7,41,019 \$ \$ 2, \$ \$ 5, \$ \$ 11,62,244 § \$ \$ 5, \$ \$ 11,62,244 § \$ \$ 5, \$ \$ 2, 246,527 \$ \$ 24,527,034 \$ \$ 22,270,241 \$ \$ 22,270,241 \$ \$ 24,4452,007 \$ \$ 24,4452,007 \$ \$ 24,4452,007 \$ \$ 24,4452,007 \$ \$ 24,452,007 \$ \$ 24,527 \$ \$ 27,453,80 \$ \$ 24,527 \$ \$ 24,52	Basem         A Data           914474         9 0.4547           9144747         9 0.75681           9144747         9 0.75681           10250170         9 72681           10250170         9 72681           10250170         9 72681           10250170         9 72681           10250170         9 72681           10250170         9 72681           10250170         9 72681           10250200         9 82827           10250200         9 82827           10250200         9 82827           10250200         9 82827           10250200         9 82827           10250200         9 82827           10250200         9 82827           10250200         9 82827           10250200         9 82827           10250200         9 82827           10250200         9 82827           102502000         9 82827           102502000         9 82827           102502000         9 82827           102502000         9 82827           102502000         9 82827           102502000         9 82827           10250200000         9 82878
costs New Je	37 Andeld Wholesel Enterit Capany Costs  38 Andeld Wholesel Enterit Capany Costs  38 Rest Version March Casa Costs  38 Rest Version March Casa Costs  39 Rest Version March Casa  43 Andeld Wholesel Volatiliy Costs  43 Andeld Son March Casa Costs  10 Rest Angel  44 Andelma Star Costs  10 Rest Angel  44 Andelma Star Costs  10 Rest Angel  44 Andelma Star Costs  10 Rest Angel  45 Andeld Son March Cass  10 Rest Angel  45 Angeld Costs  10 Rest Angel  46 Angel  47 Angel  48 Angel  48 Angel  48 Angel  49 Angel  49 Angel  49 Angel  49 Angel  49 Angel  40 Ministration  49 Angel  40 Ministration  40 Angel  40 Ministration  40 Angel  40 Ministration  40 Angel  40 Ministration  40 Angel  40 Angel  40 Ministration  40 Angel  40 Ministration  41 Angel  40 Ministration  41 Angel  42 Angel  43 Angel  44 Angel  44 Angel  45 Angel  46 Angel  46 Angel  46 Angel  47 Angel  47 Angel  48 Angel  49 Angel  49 Angel  40 Ministration  40 Ministration  40 Angel  40 Mini	2617-38-39-48-41-42-43-44-48-48 27-48 28-17-38-39-6-41-42-43-44-6-44(3)/7-48	\$ 10,932,457 \$ \$ (4,166,493) \$ \$ 28,026,678 \$ \$ 10,041 \$ \$ 53,238,466 \$ \$ 11,454,885 \$ \$ 12,82,7677 \$ \$ 303,772,744 \$ \$ 303,772,744 \$ \$ 303,868,867 \$ \$ 10,931,760 \$ \$ 10,931,760 \$ \$ 10,932,457 \$ \$ (1,168,493) \$ \$ 28,003,751 \$ \$ 2,003,751 \$	21,204,739 (2) 45,020,983 (2) 45,020,983 (2) 55,557,007 (2) 55,557,007 (2) 55,557,007 (2) 55,557,007 (2) 55,557,007 (2) 55,557,007 (2) 14,322,607 (2) 14,322,607 (2) 137,903,354 (2) 137,903,354 (2) 137,903,354 (2) 137,903,354 (2) 137,903,354 (2) 137,903,354 (2) 137,903,354 (2) 137,903,354 (2) 132,204,739 (2) 132,204,739 (2) 132,204,739 (2) 132,504,739 (2) 134,504,734 (2)	<ul> <li>222,304,723</li> <li>44,65,693</li> <li>(5,183,244)</li> <li>(5,183,244)</li> <li>(5,183,244)</li> <li>(5,183,244)</li> <li>(5,183,244)</li> <li>(5,163,244)</li> <li>(5,163,244)</li> <li>(5,163,244)</li> <li>(5,163,244)</li> <li>(5,163,244)</li> <li>(5,163,244)</li> <li>(5,163,244)</li> <li>(5,120,009)</li> <li>(5,20,009)</li> <li>(5,20,009)</li> <li>(5,20,009)</li> <li>(5,20,009)</li> <li>(5,20,009)</li> <li>(5,212,244)</li> <li>(5,212,144)</li> <li>(5,212,144)</li> <li>(5,212,144)</li> <li>(5,212,144)</li> <li>(5,212,144)</li> <li>(5,212,144)</li> <li>(5,212,244,713)</li> <li>(5,133,244)</li> <li>(5,133,244)</li> </ul>	Products \$ 101,421,213 \$ 9,414,770 \$ (1,800,883) \$ 25,327,769 \$ 50,131,789 \$ 30,377 \$ 50,131,789 \$ 30,377 \$ 50,131,789 \$ 39,933,840 \$ 134,965,580 \$ 9,933,840 \$ 129,935 \$ 0,75,18 \$ 25,452,266 \$ 0,75,518 \$ 26,452,266 \$ 0,75,518 \$ 26,452,266 \$ 0,75,518 \$ 20,457,518 \$ 20,457,518 \$ 20,457,518 \$ 20,452,210 \$ 101,421,213 \$ 101,421,42	\$ 5,014,020 \$ 1,269,749 \$ 2,472,813 \$ (10,855) \$ 2,431,474 \$ 1,391,653,580 \$ 2,431,474 \$ 1,369,598 \$ 1,639,598 \$ 16,218,956 \$ 10,212,319 \$ 14,569,338 \$ 16,218,956 \$ 30,782,957 \$ 30,7857 \$ 30,785757 \$ 30,785757575757575757575757575757575757575	Education and Management \$ 1,349,650 \$ 247,938 \$ \$ 526,078 \$ 526,078 \$ 5775,202 \$ 159,759 \$ 2,376,582 \$ 1,564,592 \$ 1,564,592 \$ 1,643,365 \$ 1,643,365 \$ 1,643,365 \$ 1,643,365 \$ 1,643,365 \$ 1,643,955 \$ 3,909,591 \$ 3,900,591 \$ 3,900,	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 57,66,240 \$ 1,556,5 \$ 449,185 \$ 244,9185 \$ 3,724,013 \$ 2,513,300 \$ 2,241,391 \$ 2,241,391 \$ 2,241,391 \$ 2,241,391 \$ 2,241,391 \$ 2,241,391 \$ 1,662,411 \$ 3,485,083 \$ 1,725,288 \$ 1,725,288 \$ 1,725,288 \$ 241,816 \$ 241,816 \$ 5,557,400 \$ 241,816 \$ 241,816 \$ 5,557,400 \$ 241,816 \$ 241,816 \$ 241,816 \$ 5,557,400 \$ 241,816 \$ 3,557,558 \$ 241,816 \$ 241,816 \$ 241,816 \$ 3,557,558 \$ 241,816 \$ 241,816 \$ 3,557,558 \$ 241,816 \$ 3,557,558 \$ 241,916 \$ 3,557,558 \$ 3,557,558\$ \$ 3	S 21,054,254         S           S 21,054,254         S           S 7,41,019         S           S -         S           S 11,622,842         S           S 22,054,254         S           S 23,054,166         S           S 7,054,056         S           Detect Install         En           S 21,054,216         S           S 21,054,216         S           S 7,410,107         S           S 7,412,017         S           S 11,022,842         S           S 1,179,840         S	Busing         1 Para           91.44572         5 9.3547           92.44572         5 9.3547           92.44572         5 9.3548           1.077.07         1 77548           1.077.07         1 77548           1.077.07         1 77543           1.077.07         1 771453           1.077.07         2 80.43           1.077.08         2 80.43           1.077.08         2 80.43           1.077.09         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43           1.077.00         2 80.43
costs New Je	<ol> <li>Anded Wholesel Electric Capaby Costi</li> <li>Anded Wholesel Electric Capaby Section 4 Section Maded Price Effects (DBPF)</li> <li>Bachter Wholesel Varial Cas Costi</li> <li>Bachter Wholesel Valatily Costi</li> <li>Anded Francisco Bachteria</li> <li>Ander Ander Bachter</li></ol>	8437383948-01-02-03-04-05-05 044 (04973839748-01-02-04-04-05-05)(03-04)	\$ 10,212,427 \$ \$ \$ 1,212,427 \$ \$ \$ 2,126,678 \$ \$ \$ 10,414, 93 \$ \$ \$ 10,414, 93 \$ \$ \$ 10,414, 948 \$ \$ \$ 11,444,485 \$ \$ 11,444,485 \$ \$ \$ \$ \$ \$ 11,444,485 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	21,204,739 ( 1,278,797) ( 54,020,983 ( 55,557,007) ( 55,577,007) ( 55,577,007) ( 55,577,007) ( 55,577,007) ( 55,577,007) ( 55,577,00	<ul> <li>222,304,723</li> <li>44,65,693</li> <li>(5,183,244)</li> <li>84,456,771</li> <li>19,544</li> <li>26,552,714</li> <li>26,552,715,358</li> <li>26,259,49,333</li> <li>26,552,705,200,599</li> <li>20,949,433</li> <li>29,542,502,502</li> <li>20,929,49,333</li> <li>20,945,944</li> <li>276,012,808</li> <li>20,949,933</li> <li>20,945,944</li> <li>276,012,804</li> <li>276,012,703</li> <li>522,204,723</li> <li>544,405,663</li> <li>544,505,661</li> <li>544,505,661</li> <li>544,505,661</li> <li>544,505,661</li> <li>544,505,661</li> <li>544,505,661</li> <li>544,505,661</li> <li>545,761,358</li> <li>545,761,358</li> <li>245,509,200</li> </ul>	Products \$ 101,421,213 \$ 9,414,770 \$ (11,800,883) \$ 23,327,769 \$ 0,0377 \$ 50,131,789 \$ 0,903,510 \$ 134,965,580 \$ 40,767,518 \$ 29,9138,406 \$ 739,456,286 \$ 40,767,518 \$ 254,228,66 \$ 40,767,518 \$ 26,452,286 \$ 40,767,518 \$ 20,837 \$ 20,837 \$ 20,837 \$ 101,421,213 \$ 101,421,421 \$ 1	\$ 5,014,020 \$ 1,260,749 \$ 7,621,389 \$ 2,172,813 \$ (10,85) \$ 2,412,72,813 \$ (10,85) \$ 2,431,474 \$ 13,91,616 \$ 13,820,731 \$ 14,569,508 \$ 7,659,821 \$ 14,269,508 \$ 14,269,508 \$ 30,788,295 \$ 3	Education and Management \$ 1,349,650 \$ 227,338 \$ 227,338 \$ 227,338 \$ 227,338 \$ 227,338 \$ 227,338 \$ 227,338 \$ 227,542 \$ 159,759 \$ 159,759 \$ 159,759 \$ 159,759 \$ 159,759 \$ 159,759 \$ 2,376,582 \$ 1,4140,762 \$ 3,909,591 \$ 3,909,591 \$ 3,909,591 \$ 3,909,591 \$ 247,938 \$ 247,938 \$ 247,938 \$ 3,909,591 \$ 3,909,591 \$ 2,247,938 \$ 2,247,938 \$ 2,247,938 \$ 2,247,950 \$ 2,376,950 \$ 3,500 \$ 3,50	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ 244,816 \$ 253,654 \$ 2763,240 \$ 253,354 \$ 244,391 \$ 2,541,3900 \$ 2,241,391 \$ 2,241,391 \$ 2,241,391 \$ 1,662,411 \$ 3,455,784 \$ 1,662,411 \$ 3,455,784 \$ 1,725,288 \$ 1,725,288 \$ 1,725,288 \$ 241,816 \$ 766,240 \$ 525,210 \$ 3,724,013 \$ 2,513,900 \$ 2,513,900 \$ 3,724,013 \$ 2,513,900 \$ 3,724,013 \$ 2,513,900 \$ 3,724,013 \$ 2,513,900 \$ 2,515,901 \$ 2,515,900 \$ 2,515,900 \$ 2,515,900 \$ 2,515,900 \$ 2,515,900 \$ 2,515,900 \$ 2,515,900 \$ 2,515,900 \$ 3,515,900 \$ 3,515,9000\$ \$ 3,515,900\$ \$ 3,515,900\$ \$ 3,515,900\$ \$ 3,515,9	S         21,054,254         5           S         7,41,019         5           S         3         5         7,82,019           S         11,62,842         5         5           S         2,246,527         5         10,23,200         5           S         2,246,527         5         2,2246,527         5           S         2,2246,527         5         2,22,7418         5           S         2,22,74,843         5         5         7,73,840         5           S         2,22,74,814         5         5         7,73,840         5           S         2,22,74,814         5         5         7,83,805         5           S         2,10,54,126         5         7,84,865         5         7,83,805         5           S         1,27,98,400         5         7,74,800         5         5         7,61,10,109         5           S         2,10,54,254         5         7,41,10,29         5         5         4,62,07,433         5         5         4,62,07,433         5         5         4,62,07,433         5         5         4,62,07,433         5         5         5,22,72,04,84         5<	Busing         A Data           9144647         6           9144677         7           9144677         7           9144678         7           9144678         7           9144678         9           9144678         8           9144686         8           9147         8           9147         8           9147         8           917         9     <
costs Internetion New Je	17 Andel Molecule Electric Capacity Costs 18 Anded Molecule Interu Capacity Costs 18 Electric Energy and Capacity Remain Relations indiced Price Effects (DRPF) 18 Electric Energy and Capacity Remain Relations (DRPF) 18 Andel PF 18 FF Crickan Casts 14 Andel Molecule Valsifily Costs 14 Andel Molecule Valsifily Costs 14 Andel Andel PF 18 FF Crickan Casts 14 Andel Andel PF 18 FF Crickan Casts 14 Andel PF 18 FF Crickan Casts 15 Andel Molecule Electric Energy and Electric Ancilary Costs 15 Andel Molecule Electric Energy and Electric Ancilary Costs 15 Andel PF Costs 15 Andel Molecule Electric Energy and Electric Ancilary Costs 15 Andel FF Costs 15 Andel Molecule Electric Energy and Electric Molecule Interact Elects (DRPF) 13 Andel Molecule Tharmanican and Databation Casss 13 Andel Molecule (Transmission and Databation Cass 13 Andel FF Costs (Tyl)	363738-39-49-43-43-49-44-45-65 49-48 [36:3739:39-64-43-49-44449-48]/(7-48)	\$ 10,212,437 \$ \$ \$ 10,212,437 \$ \$ \$ 10,415,407 \$ \$ \$ 2,20,647 \$ \$ \$ 2,00,647 \$ \$ \$ 3,313,646 \$ \$ \$ 11,464,846 \$ \$ 11,464,846 \$ \$ 11,464,846 \$ \$ 11,464,846 \$ \$ 11,464,846 \$ \$ 11,464,846 \$ \$ 11,464,846 \$ \$ 11,464,846 \$ \$ 11,464,846 \$ \$ 10,217,14 \$ \$ 90,000,000 \$ \$ 11,21,20,210 \$ \$ \$ 10,217,14 \$ \$ 90,000,000 \$ \$ \$ 10,217,14 \$ \$ 90,000,000 \$ \$ \$ 10,217,14 \$ \$ \$ 90,000,000 \$ \$ \$ \$ 10,217,14 \$ \$ \$ 90,000,000 \$ \$ \$ \$ 10,217,14 \$ \$ \$ 10,422,47 \$ \$ \$ \$ \$ 4,448,400 \$ \$ \$ 10,422,47 \$ \$ \$ \$ 4,448,400 \$ \$ \$ 10,422,47 \$ \$ \$ \$ 4,448,400 \$ \$ \$ 10,422,47 \$ \$ \$ \$ 4,448,400 \$ \$ \$ 10,422,47 \$ \$ \$ \$ \$ 4,448,400 \$ \$ \$ 10,422,47 \$ \$ \$ \$ 3,146,423,40 \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ 10,412,400 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	21,204,739 ( 1,1378,779) 54,020,838 ( 1,1378,779) 54,020,838 ( 1,1378,779,707) 14,322,666 ( 155,035,707) 14,312,666 ( 135,035,238 ( 134,318,037) 14,312,661 ( 134,318,037) 14,312,611 ( 137,931,354 ( 7,2755,932) 165,583,286 ( 7,2755,932) 165,583,286 ( 7,2755,932) 165,583,286 ( 112,701,017) 22,504,739 ( 112,701,017) 54,010,027 ( 54,010,027) ( 54,010,027) ( 54,010,027) ( 55,036,272) ( 55,036,272) ( 155,036,272) ( 112,701,017) ( 11	<ul> <li>222,304,723</li> <li>44,65,693</li> <li>(5,183,244)</li> <li>84,456,771</li> <li>19,544</li> <li>26,552,714</li> <li>26,552,715,358</li> <li>26,529,49,333</li> <li>26,552,705,200,599</li> <li>20,594,593</li> <li>51,535,264</li> <li>20,545,593</li> <li>20,545,593</li> <li>20,545,593</li> <li>20,545,593</li> <li>20,545,593</li> <li>20,565,593</li> <li>20,56</li></ul>	Products \$ 101,421,213 \$ 9,414,770 \$ (11,800,883) \$ 23,327,769 \$ 0,0377 \$ 50,131,789 \$ 0,903,510 \$ 134,965,580 \$ 40,767,518 \$ 29,9138,406 \$ 739,456,286 \$ 40,767,518 \$ 254,228,66 \$ 40,767,518 \$ 26,452,286 \$ 40,767,518 \$ 20,837 \$ 20,837 \$ 20,837 \$ 101,421,213 \$ 101,421,421 \$ 1	\$ 5,014,020 \$ 1,260,749 \$ 7,621,389 \$ 2,172,813 \$ (10,85) \$ 2,412,72,813 \$ (10,85) \$ 2,431,474 \$ 13,91,616 \$ 13,820,731 \$ 14,569,508 \$ 7,659,821 \$ 14,269,508 \$ 14,269,508 \$ 30,788,295 \$ 3	Education and Management \$ 1,349,650 \$ 247,938 \$ \$ 526,096 \$ \$ 1,59,759 \$ \$ 1,564,592 \$ 1,564,592 \$ 1,564,592 \$ 1,564,592 \$ 1,564,592 \$ 1,564,592 \$ 1,4140,702 \$ 3,909,591 3 1,4140,702 \$ 3,909,591 \$ 1,4140,702 \$ 1,4140,702 \$ 1,4140,702 \$ 2,376,852 \$ 3,500,951 \$ 3,500,951	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,554 \$ (1,556) \$ 899,185 \$ 273,344 \$ 3,724,013 \$ 2,2513,900 \$ 2,241,391 \$ 2,2513,900 \$ 2,241,391 \$ 2,2513,900 \$ 2,241,391 \$ 1,62,411 \$ 3,455,003 \$ 3,455,003 \$ 3,455,003 \$ 3,455,003 \$ 1,725,288 \$ 241,816 \$ 262,410 \$ 1,725,288 \$ 241,816 \$ 2,726,218 \$ 2,726,218 \$ 766,240 \$ 2,345,000 \$ 5,252,210 \$ 5,762,240 \$ 5,726,218 \$ 766,240 \$ 5,762,240 \$ 2,418,16 \$ 2,418,16 \$ 2,418,16 \$ 2,418,16 \$ 3,455,000 \$ 2,418,16 \$ 3,455,000 \$ 3,455,000 \$ 5,252,210 \$ 3,724,013 \$ 3,724,013 \$ 3,724,013 \$ 3,724,013 \$ 3,724,013 \$ 3,724,013 \$ 3,724,013 \$ 3,724,013 \$ 3,455,000 \$ 2,253,900 \$ 3,455,000 \$ 2,241,910 \$ 3,455,000 \$ 3,455,000\$ \$ 3,455,000\$ \$ 3,455,000\$\$ 3,455,000\$ \$ 3	S 21,054,254         5           S 21,054,254         5           S 14,029         5           S 15,224         5           S 11,029,264         5           S 11,029,265         5           S 11,029,260         5           S 11,023,2200         5           S 2,246,257,75         5           S 2,246,242,31         5           S 2,274,014         5           S 2,724,016,06         5           S 2,724,024         5           S 10,051,106         5           S 1,729,800         5           S 1,729,800         5           S 2,74,014         5           S 1,741,017         5           S 1,741,017         5           S 1,162,72,842         5           S 1,162,72,842         5           S 1,162,72,842         5	Basems         O taxa Particular           91.54.74         5         9.54.74           91.54.74         5         9.76.61           10.77.74         5         7.76.61           10.77.74         5         9.76.61           10.77.74         5         9.76.61           10.77.74         10.77.64         9.77.64           11.77.74         10.77.64         9.77.74           11.77.74         10.77.84         9.77.74           11.77.74         10.77.84         9.77.74           11.77.74         10.77.84         9.77.74           11.77.74         10.77.84         9.77.74           11.77.74         10.77.84         7.77.84           11.77.74         10.77.84         7.77.84           11.77.74         10.77.84         7.77.84           11.77.84         10.78.74         7.86.84           11.77.74         10.77.74         10.77.74           11.77.74         10.77.74         10.77.74           11.77.74         10.77.74         10.77.74           11.77.74         10.77.74         10.77.74           11.77.74         10.77.74         10.77.74           11.77.74         10.77.74         10.
costs Internetion New Je	<ol> <li>Anded Wholesel Electric Capaby Costi</li> <li>Anded Wholesel Electric Capaby Section 4 Section Maded Price Effects (DBPF)</li> <li>Bachter Wholesel Varial Cas Costi</li> <li>Bachter Wholesel Valatily Costi</li> <li>Anded Francisco Bachteria</li> <li>Ander Ander Bachter</li></ol>	55-17-18-19-40-11-47-49-44-45-45 27-48 (56-17-18-19-16-41-47-44-44-46-10)-17-18 (56-17-18-19-16-41-47-44-44-46-10)-17-18 (56-19-18-19-16-41-47-44-44-46-10)-17-18	\$ 10,212,427 \$ \$ \$ 1,212,427 \$ \$ \$ 2,126,678 \$ \$ \$ 10,414, 93 \$ \$ \$ 10,414, 93 \$ \$ \$ 10,414, 948 \$ \$ \$ 11,444,485 \$ \$ 11,444,485 \$ \$ \$ \$ \$ \$ 11,444,485 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	21,204,739 ( 1,278,797) ( 54,020,983 ( 55,557,007) ( 55,577,007) ( 55,577,007) ( 55,577,007) ( 55,577,007) ( 55,577,007) ( 55,577,007) ( 55,577,00	<ul> <li>222,304,723</li> <li>44,605,693</li> <li>(5,132,244)</li> <li>(5,132,244)</li> <li>(5,132,244)</li> <li>(5,132,244)</li> <li>(10,313,466)</li> <li>(10,313,466)</li></ul>	Products \$ 101,421,213 \$ 9,414,770 \$ (11,800,883) \$ 23,327,769 \$ 0,0377 \$ 50,131,789 \$ 0,903,510 \$ 134,965,580 \$ 40,767,518 \$ 29,9138,406 \$ 739,456,286 \$ 40,767,518 \$ 254,228,66 \$ 40,767,518 \$ 26,452,286 \$ 40,767,518 \$ 20,837 \$ 20,837 \$ 20,837 \$ 101,421,213 \$ 101,421,421 \$ 1	\$ 5,014,020 \$ 1,269,749 \$ 7,621,289 \$ 2,172,213 \$ 2,172,213 \$ 2,172,213 \$ 2,172,213 \$ 1,122,172,113 \$ 1,125,114 \$	Education and Managemetal \$ 1,349,650 \$ 247,338 \$ 247,338 \$ 252,066 \$ 755,202 \$ 159,759 \$ 159,759 \$ 159,759 \$ 2,376,582 \$ 1,440,762 \$ .4,140,762 \$ .4,140,762 \$ .3,909,591 \$ 3,909,591 \$ 3,909,591 \$ 3,909,591 \$ 247,938 \$ .22,76,582 \$ .247,938 \$ .25,666 \$ .247,938 \$ .25,013 \$ .255,013 \$ .275,012 \$ .275,012	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 849,185 \$ 273,344 \$ 3,724,013 \$ 2,2513,900 \$ 2,241,911 \$ 2,2513,900 \$ 2,241,911 \$ 2,243,917 \$ 1,762,288 \$ 1,775,288 \$ 1,775,288 \$ 1,775,288 \$ 241,816 \$ 766,240 \$ 2,523,900 \$ 3,274,013 \$ 2,523,900 \$ 3,99,128 \$ .	S         21,054,254         5           S         7,41,019         5           S         3         5         7,82,019           S         11,62,842         5         5           S         2,246,527         5         10,23,200         5           S         2,246,527         5         2,2246,527         5           S         2,2246,527         5         2,22,7418         5           S         2,22,74,843         5         5         7,73,840         5           S         2,22,74,814         5         5         7,73,840         5           S         2,22,74,814         5         5         7,83,805         5           S         2,10,54,126         5         7,84,865         5         7,83,805         5           S         1,27,98,400         5         7,74,800         5         5         7,61,10,109         5           S         2,10,54,254         5         7,41,10,29         5         5         4,62,07,433         5         5         4,62,07,433         5         5         5,42,72,434         5         2,27,72,418         5         2,27,72,418         5         2,27,72,418	Busing         A Data           9144647         6           9144677         7           9144677         7           9144678         7           9144678         7           9144678         9           9144678         8           9144686         8           9147         8           9147         8           9147         8           917         9     <
costs Securitada New Je	<ul> <li>21 Anded Wholesel Entert Caparity Cats</li> <li>23 Anded Wholesel Entert Caparity Cats</li> <li>24 Anded Wholesel Entert Caparity Cats</li> <li>24 Anded Wholesel Varia Cats</li> <li>25 Enter Transpare Caparity Entert Cats</li> <li>24 Anded Wholesel Variation Cats</li> <li>24 Anded Wholesel Variation Cats</li> <li>25 Anded Wholesel Variation Cats</li> <li>24 Anded Wholesel Variation Cats</li> <li>25 Anded Wholesel Variation Cats</li> <li>26 Anded Konster Cats</li> <li>27 Anded PST Enter Cats</li> <li>28 Anded Konster Cats</li> <li>29 Anded Konster Cats</li> <li>29 Anded Konster Cats</li> <li>20 Anded Konster Cats</li> <li>20 Anded Konster Cats</li> <li>20 Anded Konster Cats</li> <li>21 Bacit Cats</li> <li>22 Bacit Cats</li> <li>23 Anded Konster Cats</li> <li>23 Anded Konster Cats</li> <li>24 Anded Konster Cats</li> <li>24 Anded Konster Cats</li> <li>25 Bacit Cats</li> <li>26 Anded Konster Cats</li> <li>27 Anded Konster Cats</li> <li>28 Anded Konster Cats</li> <li>28 Anded Konster Cats</li> <li>29 Anded Konster Cats</li> <li>20 Anded Konster Cats</li> <li>20 Anded Konster Cats</li> <li>20 Anded Konster Cats</li> <li>21 Bacit Cats</li> <li>21 Bacit Cats</li> <li>22 Bacit Cats</li> <li>23 Anded Konster Cats</li> <li>24 Ander Konster Cats</li> <li>25 Bacit Cats</li> <li>26 Anded Konster Cats</li> <li>26 Anded Konster Cats</li> <li>27 Bacit Cats</li> <li>28 Bacit Cats</li> <li>29 Anded Konster Cats</li> <li>29 Anded Konster Cats</li> <li>20 Bacit Cats</li> <li>20 Anded Konster Cats</li> <li>20 Bacit Cats</li> <l< td=""><td>en jaarnaarinen oon oo oo oo oo oo</td><td><ul> <li>1.031/247</li> <li>1.031/247</li> <li>1.041/247</li> <li>1.041/247</li></ul></td><td>21,250,4739 ≤ 11,078,2797 ≤ 54,020,083 ≤ 55,557,007 ≤ 14,322,666 ≤ 114,322,666 ≤ 114,322,661 ≤ 114,322,661 ≤ 112,701,017 ≤ 112,701,017 ≤ 123,204,739 ≤ 112,701,017 ≤ 124,318,045 ≤ 112,701,017 ≤ 125,243,760 ≤ 112,701,017 ≤ 125,243,760 ≤ 125,245,760 ≤ 125,245,7</td><td><ul> <li>222,304,723</li> <li>44,605,693</li> <li>(5,133,294)</li> </ul></td><td>Products 5 101,421,213 5 0,414,770 5 (11,800,880) 5 2,20877 5 0,313,789 5 0,303,789 5 0,303,789 5 0,303,789 5 0,313,789 5 0,313,78 5 0,14,293,290 5 2,54,12,265 5 0,213,84,665 5 0,213,84,665 5 0,213,84,665 5 0,213,84,66 5 0,213,84,66 5 0,213,85,580 5 12,366,523 5 12,366,523 5 12,366,422 5 13,77,18 5 101,421,213 5 101,421,421 5 101,421 5 101,421,421 5 101,421 5 101,421 5 101,421</td><td>\$ 5,014,020 \$ 1,269,749 \$ 1,269,749 \$ 1,269,749 \$ 1,269,749 \$ 1,03351 \$ 1,103351 \$ 1,103351 \$ 1,103351 \$ 1,2431,474 \$ 1,393,616 \$ 1,243,956 \$ 32,769,328 \$ 1,212,956 \$ 30,786,235 \$ 30,786,255 \$ 30,</td><td>Education and Management S 1,349,550 S 247,37 S 256,096 S 2,73 S 256,096 S 159,735 S 1,643,532 S 1,643,532 S 1,643,532 S 1,643,532 S 1,643,950 S 1,544,952 S 257,6382 S 1,564,952 S 1,574,952 S 1,574,95</td><td>\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 899,185 \$ 273,344 \$ 3,724,013 \$ 2,513,300 \$ 2,241,391 \$ 2,513,300 \$ 2,241,391 \$ 2,513,300 \$ 3,455,083 \$ 1,725,288 \$ 3,455,083 \$ 1,725,288 \$ 241,816 \$ 241,816 \$ 241,816 \$ 3,724,013 \$ 2,52,310 \$ 3,724,013 \$ 3,744,013 \$ 3,744,013\$ 3,744,013\$ 3,744,013\$ 3,745,013\$ 3,7</td><td>S 21,054,254         §           S 21,054,254         §           S 7,41,019         §           S 11,622,824         §           S 10,232,200         §           S 10,232,200         §           S 2,446,254,315         §           S 2,446,224,315         §           S 2,446,224,315         §           S 7,403,306         §           S 7,403,306         §           S 7,403,406         §           S 7,403,406         §           S 10,051,106         §           S 7,403,406         §           S 10,051,106         §           S 10,051,106         §           S 11,027,842         §           S 11,027,842         §           S 21,054,234         §           S 11,027,842         §           S 4,032,743         §           S 4,032,743         §           S 4,032,743         §           S 4,032,743         §           S 11,027,842         §           S 11,027,842         §           S 11,027,842         §</td><td>Busing         Parta           9144672         9           9144672         9           9144672         9           9144672         9           9144672         9           9144672         9           9144672         9           91410         866,65           91410         866,65           91410         866,65           91731252         208,635           91731252         208,645           91731252         208,642           91731252         208,642           91731252         208,642           91731252         208,642           91731252         208,642           91731252         208,642           91731252         208,642           91731252         208,642           91731252         208,6427           91731252         91364           91731252         91364           91731252         91364           91731252         91364           91731252         91364           91731252         91364           91731252         91364           91731252         91364           917</td></l<></ul>	en jaarnaarinen oon oo oo oo oo oo	<ul> <li>1.031/247</li> <li>1.031/247</li> <li>1.041/247</li> <li>1.041/247</li></ul>	21,250,4739 ≤ 11,078,2797 ≤ 54,020,083 ≤ 55,557,007 ≤ 14,322,666 ≤ 114,322,666 ≤ 114,322,661 ≤ 114,322,661 ≤ 112,701,017 ≤ 112,701,017 ≤ 123,204,739 ≤ 112,701,017 ≤ 124,318,045 ≤ 112,701,017 ≤ 125,243,760 ≤ 112,701,017 ≤ 125,243,760 ≤ 125,245,760 ≤ 125,245,7	<ul> <li>222,304,723</li> <li>44,605,693</li> <li>(5,133,294)</li> </ul>	Products 5 101,421,213 5 0,414,770 5 (11,800,880) 5 2,20877 5 0,313,789 5 0,303,789 5 0,303,789 5 0,303,789 5 0,313,789 5 0,313,78 5 0,14,293,290 5 2,54,12,265 5 0,213,84,665 5 0,213,84,665 5 0,213,84,665 5 0,213,84,66 5 0,213,84,66 5 0,213,85,580 5 12,366,523 5 12,366,523 5 12,366,422 5 13,77,18 5 101,421,213 5 101,421,421 5 101,421 5 101,421,421 5 101,421 5 101,421 5 101,421	\$ 5,014,020 \$ 1,269,749 \$ 1,269,749 \$ 1,269,749 \$ 1,269,749 \$ 1,03351 \$ 1,103351 \$ 1,103351 \$ 1,103351 \$ 1,2431,474 \$ 1,393,616 \$ 1,243,956 \$ 32,769,328 \$ 1,212,956 \$ 30,786,235 \$ 30,786,255 \$ 30,	Education and Management S 1,349,550 S 247,37 S 256,096 S 2,73 S 256,096 S 159,735 S 1,643,532 S 1,643,532 S 1,643,532 S 1,643,532 S 1,643,950 S 1,544,952 S 257,6382 S 1,564,952 S 1,574,952 S 1,574,95	\$ 1,725,288 \$ 241,816 \$ 766,240 \$ 523,654 \$ (1,556) \$ 899,185 \$ 273,344 \$ 3,724,013 \$ 2,513,300 \$ 2,241,391 \$ 2,513,300 \$ 2,241,391 \$ 2,513,300 \$ 3,455,083 \$ 1,725,288 \$ 3,455,083 \$ 1,725,288 \$ 241,816 \$ 241,816 \$ 241,816 \$ 3,724,013 \$ 2,52,310 \$ 3,724,013 \$ 3,744,013 \$ 3,744,013\$ 3,744,013\$ 3,744,013\$ 3,745,013\$ 3,7	S 21,054,254         §           S 21,054,254         §           S 7,41,019         §           S 11,622,824         §           S 10,232,200         §           S 10,232,200         §           S 2,446,254,315         §           S 2,446,224,315         §           S 2,446,224,315         §           S 7,403,306         §           S 7,403,306         §           S 7,403,406         §           S 7,403,406         §           S 10,051,106         §           S 7,403,406         §           S 10,051,106         §           S 10,051,106         §           S 11,027,842         §           S 11,027,842         §           S 21,054,234         §           S 11,027,842         §           S 4,032,743         §           S 4,032,743         §           S 4,032,743         §           S 4,032,743         §           S 11,027,842         §           S 11,027,842         §           S 11,027,842         §	Busing         Parta           9144672         9           9144672         9           9144672         9           9144672         9           9144672         9           9144672         9           9144672         9           91410         866,65           91410         866,65           91410         866,65           91731252         208,635           91731252         208,645           91731252         208,642           91731252         208,642           91731252         208,642           91731252         208,642           91731252         208,642           91731252         208,642           91731252         208,642           91731252         208,642           91731252         208,6427           91731252         91364           91731252         91364           91731252         91364           91731252         91364           91731252         91364           91731252         91364           91731252         91364           91731252         91364           917
costs Securitada New Je	<ul> <li>21 Anded Wholesel Electric Capatry Costs</li> <li>28 Redet Wholesel Electric Capatry Semi electronic Macdel Prece Electry (DRFF)</li> <li>29 Electric Tenry and Capatry Semi electronic Macdel Prece Electry (DRFF)</li> <li>24 Anded Wholesel Volatily Costs</li> <li>25 Anded Wholesel Costs</li> <li>26 Ander Costs</li> <li>27 Browned Cost</li> <li>28 Ander Costs</li> <li>29 Ander Electric Tenry and Electric Ancelary Costs</li> <li>29 Ander Electric Capatry (Costs)</li> <li>20 Ander Microson and Durrhuborts</li> <li>21 Ander Costs</li> <li>31 Andel Electric Capatry (Costs)</li> <li>32 Anderd Wholesel Electric Capatry (Costs)</li> <li>32 Anderd Wholesel Electric Capatry (Costs)</li> <li>33 Anderd Konstein Guina and Durrhuborts</li> <li>34 Anderd Konstein Guina and Durrhuborts</li> <li>35 Anderd Konstein Guina and Durrhuborts</li> <li>35 Anderd Konstein Guina and Durrhuborts</li> <li>35 Anderd Konstein Guina and Durrhuborts</li> <li>36 Anderd Konstein Guina and Durrhuborts</li> <li>37 Anderd Konstein Guina and Durrhuborts</li> <li>36 Anderd Konstein Guina and Durrhuborts</li> <li>36 Anderd Konstein Guina and Durrhuborts</li> <li>37 Anderd Konstein Guina and Durrhuborts</li> <li>36 Anderd Konstein Guina and Durhuborts</li> &lt;</ul>	en jaarnaarinen oon oo oo oo oo oo	<ul> <li>1.02124.07</li> <li>1.0214.07</li> <li>1.0214.07</li> <li>1.0214.07</li> <li>1.0244.07</li> <li>1.0244.0</li></ul>	21,264,739 6 11,978,779 7 54,020,883 6 55,597,007 6 14,322,666 1 14,322,666 1 14,322,667 1 14,322,667 1 14,322,645,707 6 14,322,645,707 6 14,328,707 1 14,328,707 1 14,328,7	5 222,304,723 5 44,005,603 5 81,456,771 5 19,484 5 26,152,713 5 19,484 5 26,152,713 5 19,484 5 26,504,303 5 26,504,303 5 26,504,304 5 26,052,703 5 26,052,703 5 20,909,644 5 20,909,644 5 20,909,644 5 20,909,645 5 222,304,723 5 44,005,603 5 44,005,603 5 44,576,1382,164 5 222,304,723 5 44,576,1382,164 5 235,606,920 5 34,576,1382,164 5 34,576,1382,164	Products	\$ 5,014,020 \$ 1,269,749 \$ 1,269,749 \$ 1,269,749 \$ 1,269,749 \$ 1,03351 \$ 1,103351 \$ 1,103351 \$ 1,103351 \$ 1,2431,474 \$ 1,393,616 \$ 1,243,956 \$ 32,769,328 \$ 1,212,956 \$ 30,786,235 \$ 30,786,255 \$ 30,	Education and Managements 5 1,349,650 5 247,938 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5 .	\$ 1,725,288 \$ 262,200 \$ 766,240 \$ 253,654 \$ (1,556) \$ 289,185 \$ 273,334 \$ 2,513,900 \$ 2,73,334 \$ 2,513,900 \$ 2,723,314 \$ 2,241,390 \$ 2,241,3167 \$ 1,662,411 \$ 1,725,288 \$ 242,3167 \$ 1,662,411 \$ 3,485,083 \$ 2,752,288 \$ 242,3167 \$ 2,662,411 \$ 3,485,083 \$ 2,553,300 \$ 2,552,210 \$ 3,724,013 \$ 3,725,013 \$ 3,72	S 21,054,234         S           S 21,054,234         S           S 7,11,012         S           S 11,622,847         S           S 11,622,847         S           S 10,232,200         S           S 10,232,200         S           S 10,232,200         S           S 2,345,237         S           S 4,002,412         S           S 7,043,800         S           S 1,122,842         S           S 4,005,1100         S           S 3,005,777         S           S 4,005,1100         S           S 1,005,1000         S           S 1,005,1000         S	Basems         A Data Basems         A Data Basems           91.454.75         5         3.54.75           91.54.76         5         3.56.15           91.54.77         5         3.76.16           1.25.77.77         5         3.76.16           1.37.76.10         5         3.86.55           1.37.76.10         5         3.87.20           1.37.76.10         5         3.87.20           1.37.76.10         5         3.87.20           1.37.76.10         5         3.87.20           1.37.76.10         5         3.87.20           1.37.76.10         5         3.87.20           1.37.76.10         5         3.87.20           1.37.76.10         5         3.87.20           1.37.76.10         5         3.87.20           1.37.76.10         5         3.87.20           1.37.76.10         5         3.87.20           1.37.77.70         1.77.77         1.77.20           1.37.77.77         1.77.60         1.84.20           1.37.77.77         1.77.60         1.94.20           1.37.77.70         1.77.60         1.94.20           1.37.77.70         1.77.20         1.94.20
costs New Je		0-41 [B1373:31:31:45-43-43-43-43-43-43-43-43-43-43-43-43-43-	1 1.0312.407 5 6 1 4.1312.407 5 6 1 4.1312.407 5 6 1 4.1312.407 5 6 1 2.1312.407 6 1 5 1 2.1312.407 6 1 5 1 2.1312.407 5 1 1 2.1312.407 5 1 1 2.1312.407 5 1 1 2.1312.407 5	21,204,739 c) 11,278,779 c) 54,020,883 c) 55,597,007 c) 14,322,666 c) 155,597,007 c) 143,222,666 c) 155,048,707 c) 153,048,707 c) 153,048,707 c) 153,048,707 c) 153,048,707 c) 153,048,707 c) 154,010,707 c) 154,010,707 c) 154,010,707 c) 154,010,707 c) 154,010,707 c) 154,010,707 c) 10,048,707 c) 10,048,	5 222,304,723 5 44,005,639 5 44,005,639 5 43,456,713 5 109,838,400 2 6,152,713 5 109,838,400 2 26,152,713 5 235,608,920 5 245,761,386 2 25,008,920 5 202,94,230 1 204,554,254 2 25,008,920 5 202,94,233 1 204,554,354 2 25,008,920 5 232,304,723 5 44,005,693 5 445,761,383,164 5 235,008,920 5 445,761,383,164 5 235,008,920 5 445,761,383,164 5 235,008,920 5 445,761,383,164 5 345,384,316 5 345,364,335 5 345,500,920 5 345,570,335 5 345,570,395 5 345,570,595 5 345,570,595 5	Products	5 5.014.020 5 1.016,700 5 7.012,389 5 7.1272,813 5 (10.085) 5 2.431,474 5 1.391,616 5 1.629,508 5 1.459,508 5 1.459,508 5 1.452,856 5 1.6218,356 5 1.6218,356 5 1.6218,356 5 3.0746,020 5 3.003,709 5 3.003,700 5 3.003,700 5 3.003,700 5 3.003,700 5 3.003,700 5 3.003,700 5 3.0000,7000,7000,7000,7000,7000,7000,700	Education and Managements 5 1,349,650 5 247,938 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5 .	\$ 1,725,288 \$ 262,200 \$ 766,240 \$ 253,654 \$ (1,556) \$ 289,185 \$ 273,334 \$ 2,513,900 \$ 2,73,334 \$ 2,513,900 \$ 2,723,314 \$ 2,241,390 \$ 2,241,3167 \$ 1,662,411 \$ 1,725,288 \$ 242,3167 \$ 1,662,411 \$ 3,485,083 \$ 2,752,288 \$ 242,3167 \$ 2,662,411 \$ 3,485,083 \$ 2,553,300 \$ 2,552,210 \$ 3,724,013 \$ 3,725,013 \$ 3,72	S 21,054,234         S           S 21,054,234         S           S 7,11,012         S           S 11,622,847         S           S 11,622,847         S           S 10,232,200         S           S 10,232,200         S           S 10,232,200         S           S 2,345,237         S           S 4,002,412         S           S 7,043,800         S           S 1,122,842         S           S 4,005,1100         S           S 3,005,777         S           S 4,005,1100         S           S 1,005,1000         S           S 1,005,1000         S	Busing         1 Parage           91.46.17.0         9 .36.17.0           91.46.17.0         9 .37.66.11           91.46.17.0         9 .37.66.11           1.13.77.11.00         9 .37.66.11           1.14.77.11.00         1 .30.77.11           91.71.12.32         2 .30.6.21           91.71.12.32         2 .30.6.21           91.71.12.32         2 .30.6.21           91.71.12.32         2 .30.6.21           91.71.12.32         2 .30.6.21           91.71.12.32         2 .30.6.21           91.71.12.32         2 .30.6.21           91.71.12.32         2 .30.6.21           91.71.12.32         2 .30.6.21           91.72.73.62.07         7 .30.6.72           91.73.73.74         2 .30.6.21           91.74.73.74         2 .30.6.21           91.74.77.77         2 .30.6.21           91.74.77.77         2 .30.6.21           91.74.77.77         2 .30.6.21           91.74.77.77         2 .30.6.21           91.74.77.77         2 .30.6.21           91.74.77.77         2 .30.6.21           91.74.77.77         2 .30.6.21           91.74.77.77         2 .30.6.21           91.74.77.77         2 .30.6.21

Exhibit BJB-3

Jersey Central Power and Light Energy Efficiency and Conservation Program CBA Workpapers

\*Confidential - will be provided after execution of NDA

Table BJB-2.1 Nominal Economic Im	pacts of JCP&L EE&C Portfolio
Tuble Dod 2.1 Hollina Economic In	

	Value Added	Value Added
Program	to GDP	to GDP
	(NPV\$)	(Nominal\$)
Home Optimization & Peak Demand Reduction	198,311,518	321,862,148
Efficient Products	36,299,016	49,256,857
Existing Homes	5,285,565	5,640,522
Home Energy Education and Management	6,847,791	10,226,819
Direct Install	73,325,753	127,537,557
Energy Solutions for Business	272,456,219	462,941,999
Multifamily	3,756,540	3,954,735
Total Portfolio	596,282,401	981,420,637

Program	Total Direct Jobs	Total Indirect & Induced Jobs	Total Jobs
Home Optimization & Peak Demand Reduction	201	2,625	2,827
Efficient Products	122	115	237
Existing Homes	30	26	56
Home Energy Education and Management	33	48	81
Direct Install	639	560	1,199
Energy Solutions for Business	2,573	2,016	4,589
Multifamily	16	-8	8
Total Portfolio	3,614	5,381	8,996

# Jersey Central Power and Light Energy Efficiency and Conservation Program Emissions Avoided Results Summary

Subprogram	CO <sub>2</sub> Emissions Reduction (tons)	SO <sub>2</sub> Emissions Reduction (tons)	NOx Emissions Reduction (tons)
Efficient Products	1,837,556	1,277	907
Existing Homes	212,175	63	141
Home Energy Education and Management	30,892	18	15
Multifamily	45,985	22	27
Direct Install	415,125	267	217
Energy Solutions for Business	1,797,355	1,166	928
Home Optimization & Peak Demand Reduction	5,491	1	4
Total	4,344,579	2,814	2,239

# Exhibit BJB-5

# Exhibit BJB-6

Jersey Central Power and Light Energy Efficiency and Conservation Program Cost to Achieve Results

Sector	Total
Residential	0.325
Commerical and Industrial	0.395
Multi-Family	1.238

# Jersey Central Power and Light Energy Efficiency and Conservation Program JCP&L EE Target Development

Sales Data Type	Year	Sales (kWh)	Baseline (kWh)	Program Year	Goal (%)	Goal (MWh)
Actual	2018	20,785,610,806				
Actual	2019	19,927,808,262				
Forecast	2020	19,572,733,517				
Forecast	2021	19,286,067,889	20,095,384,195	1	0.50%	100,477
Forecast	2022	19,494,281,861	19,595,536,556	2	0.74%	145,007
Forecast	2023		19,451,027,756	3	0.97%	188,675

Jersey Central Power and Light Energy Efficiency and Conservation Program Quantitative Performance Indicators

QPI Metric	Program Year 1	Program Year 2	Program Year 3
Annual Energy Savings (kWh)	139,244,824	194,442,032	232,379,606
Annual Demand Savings (kW)	7,832	9,903	12,915
Lifetime Energy Savings (kWh)	1,967,635,847	2,517,284,882	2,798,243,934
Lifetime of Persisting Demand Savings (kW)	108,671	132,110	141,540
NPV of UCT Net Benefits (\$)	131,242,986	157,534,160	164,291,642
Low-Income Lifetime Savings (kWh)	5,625,000	9,375,000	11,250,000
Small Business Lifetime Savings (kWh)	60,966,565	274,349,542	304,832,825