BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PETITION OF DUQUESNE LIGHT COMPANY
FOR APPROVAL OF ITS ENERGY EFFICIENCY AND CONSERVATION PLAN
PHASE III

Docket Nos. P-2015-_____
M-2015-_____

Direct Testimony

Witness: David Defide

Subject: EE&C Phase III Plan Development

DIRECT TESTIMONY OF DAVID DEFIDE

Q. Please state your full name and business address.

A. My name is David Defide. My business address is 411 Seventh Avenue, Pittsburgh Pennsylvania 15219.

Q. By whom are you employed and in what capacity?

A. I am employed by Duquesne Light Company ("Duquesne Light" or the "Company") as the Manager of Customer Programs.

Q. What are your current responsibilities as the Manager of Customer Programs?

A. As the Manager of Customer Programs, I am responsible for the development and implementation of Duquesne Light's energy efficiency, conservation and demand response programs, known as "Watt Choices." I also assist with the implementation of related customer programs such as smart meter deployment.

Q. Please state your educational and professional qualifications.

A. I received a Bachelor of Arts degree in Administration and Management in 1994 from LaRoche College. In 1997, I received a Master of Business Administration degree from Robert Morris University. I have been working for Duquesne Light Company since August 2009 as the Manager of Customer Programs. In that position, I currently manage a staff of three professionals. Prior to my work with Duquesne Light, for ten years I was the Chief Finance/Operating Officer for Conservation Consultants, Inc. Prior to working for Conservation Consultants, I was the Finance Director and Special Assistant to the

Executive Director for the Housing Authority City of Pittsburgh. Prior to this position, I worked for National City Bank as an Operations Supervisor.

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is two-fold. First, I will briefly explain Duquesne Light's energy efficiency plan requirements pursuant to Act 129 of 2008 ("Act 129") and the Public Utility Commission ("Commission") Implementation Order issued June 11, 2015 at Docket No. M-2014-2424864 as well as the Clarification Order issued August 20, 2015 under same docket. Second, I will explain the methodology used to design, develop, analyze, and implement Duquesne Light's Energy Efficiency and Conservation Phase III Plan ("EE&C Phase III Plan").

Q. Are you sponsoring any exhibits as part of your direct testimony?

A. Yes. Duquesne Light's Energy Efficiency and Conservation Phase III Plan is attached to the Company's Petition and has been marked as Exhibit 1.

Q. **Have you previously testified before the Pennsylvania Public Utility Commission?**

A. Yes. I provided direct testimony on behalf of Duquesne Light in *Petition of PECO Energy for an Evidentiary Hearing on the Energy Efficiency Benchmarks*, at Docket No. P-2012-2320334, in support of Duquesne Light's Energy Efficiency and Conservation Phase II Plan at Docket No. M-2012- 2334399, and in support of Duquesne Light's Energy Efficiency and Conservation Petition for Approval of Modifications to its Demand Response Programs at Docket No. M-2009-2093217.

I. BACKGROUND

Q. Please explain the Company's energy efficiency conservation and demand response obligations under Act 129 of 2008 ("Act 129").

A. Pursuant to Act 129 of 2008 ("Act 129") Electric Distribution Companies ("EDCs") with at least 100,000 customers are required to achieve consumption reductions of at least one percent (1%) by May 31, 2011, and at least three percent (3%) by May 31, 2013. 66 Pa.C.S§2806.1(c)(1),(2). Additionally, pursuant to section §2806.1(d), EDCs are required to achieve a four and one-half (4.5%) percent peak demand reduction of the one hundred (100) highest hours by May 31, 2013. These energy consumption and demand response targets applied to Phase I of the EEC&DR Program. Act 129 further required the Commission to evaluate the cost and benefits of the EE&C plans by November 30, 2013, and implement additional incremental consumption and peak demand reductions only if the benefits of the EE&C plans exceed the costs. 66 Pa.C.S. § 2806.1(c)(3). The energy consumption reduction target for the Phase II three-year energy efficiency consumption was 276,722 MWh. The Phase III five-year energy efficiency consumption target is 440,916 MWh and the demand reduction target is 42 MW. In compliance with the requirements of Act 129 and the Commission's Orders implementing Phase III, Duquesne has used the energy consumption and demand reductions established by the Commission to develop its energy efficiency and conservation plan, which is submitted herewith.

Q. Did the Commission order EDCs to develop and implement a plan to achieve additional energy efficiency conservation and demand response targets beyond those required by Act 129 for Phase II?

A. Yes. Having found the Phase I program to be cost effective, on August 3, 2012, the Commission entered its Energy Efficiency and Conservation Phase II Implementation Order ("*Phase II Implementation Order*"). The Commission's EE&C Phase II Order provided that Duquesne Light was required to achieve a 2.0% energy consumption target, or 276,722 MWhs, over a three year period spanning June 1, 2013 through May 31, 2016 ("Phase II"). *Phase II Implementation Order* at p. 24. The Statewide Evaluator (SWE) was directed by the Commission to provide a Demand Response (DR) Potential Study to analyze the cost effectiveness of the legislative peak demand reduction requirements and of potential improvements to the peak demand reduction program. In addition, SWE was tasked with performing an Energy Efficiency (EE) Potential Study to determine the cost effective consumption reduction potential in the Commonwealth. After issuing a Tentative Order and receiving Comments and Reply Comments from a number of interested parties, the Commission issued its Energy Efficiency and Conservation Phase III Implementation Order ("*Phase III Implementation Order*") on June 11, 2015. The Commission subsequently issued a Clarification Order on August 20, 2015, to clarify certain aspects of the *Phase III Implementation Order.*

Q. **Please summarize the Phase III consumption reduction and demand reductions that the Commission adopted for Duquesne Light.**

A. The Commission has adopted for Duquesne Light a consumption reduction for the five year Phase III period of 440,916 MWh and demand reduction target of 42 MW.

Q. Does Act 129 provide guidance on EDCs' allowable spending levels for their EE&C Plans ?

A. Yes. Act 129 provides that "[t]he total cost of any plan required under this section shall not exceed 2% of the electric distribution company's total annual revenue as of December 31, 2006." An EDC's total annual revenue is defined as "[a]mounts paid to the electric distribution company for generation, transmission, distribution and surcharges by retail customers." The Commission has interpreted this to include amounts paid to the EDC for generation service, including generation revenues collected by an EDC for an electric generation supplier that uses consolidated billing.

Q. Has the Commission provided further guidance on the definition of "EDC total annual revenue?"

A. Yes. On January 16, 2009, the Commission issued its EEC&DR Phase I Implementation Order at Docket No. M-2008-2069887 ("*Phase I Order*"). On pages 34-35 of the *Phase I Order*, the Commission stated:

> "…[T]he Commission interprets "amounts paid to the [EDC] for generation, transmission, distribution and surcharges by retail customer," set forth as the definition of EDC total annual revenue in 66 Pa. C.S. § 2806.1(m), **to include all amounts paid to the EDC for generation service, including generation revenues collected by an EDC for an EGS that uses consolidated billing**. This result will bring Duquesne's program budget closer to a level of parity with the other EDCs, and ensure that it has a more meaningful opportunity to comply with the EE&C provisions of Act 129."

The Commission retained its interpretation of EDC total annual revenues provided in Phase I, for Phase II and for Phase III.

Q. **What is Duquesne Light's budget for its Phase III EE&C Plan?**

A. Duquesne Light's total 2006 annual revenues were $723,299,451. EGS total generation and transmission revenues in Duquesne Light's service territory in December 2006 were $253,998,128. Combined, Duquesne Light and EGS 2006 annual revenues totaled $977,297,579. Applying simple arithmetic, 2% of $977,297,579 equals $19,545,951.58. Therefore, Duquesne Light's annual budget is $19,545,951.58, and the total five year program spending cap is $97,739,968.

II. EE&C PHASE III PLAN DEVELOPMENT

Q. How will Duquesne Light measure energy savings for the programs it proposes to implement?

A. Under Act 129, the Commission was required to implement an energy efficiency program that includes a process to monitor and verify data collection and plan results. In the Phase I Order, the Commission adopted the *Energy Efficiency and DSM Rules for Pennsylvania's Alternative Energy Portfolio Standard, Technical Reference Manual* ("TRM") as a component of the EE&C Program evaluation process. The Commission continued its use of the TRM for the Phase II and will do the same for Phase III programs. The TRM in Phase I and Phase II was updated annually and used to measure and verify applicable energy efficiency measures used by EDCs to meet the Act 129 consumption reduction targets. For Phase III the Implementation Order at page 97 states

that the Commission will apply the 2016 TRM for the entirety of Phase III but reserves the right to implement a mid-phase update if deemed necessary. Duquesne Light used the 2016 TRM to design and develop its EE&C Phase III Plan. The expected savings discussed later in this testimony are based on the 2016 TRM.

Q. **Duquesne Light's EE&C Phase III Plan must be cost effective. How did Duquesne Light determine if its EE&C Phase III plan is cost effective?**

A. Under Act 129, the Commission is required to use a Total Resource Cost ("TRC") test to analyze the costs and benefits of EDC energy efficiency and conservation plans. Act 129 defines the TRC as "a standard test that is met if, over the effective life of each plan not to exceed 15 years, the net present value of the avoided monetary cost of supplying electricity is greater than the net present value of the monetary cost of energy efficiency conservation measures." Under Act 129, EDCs must demonstrate that its Phase III EE&C Plan is cost effective using the TRC test. Use of the TRC test was specified in a series of four (4) Commission TRC Orders, issued sequentially, each partially modifying its predecessor.

1. *TRC Test Order*, June 18, 2009 Docket No. M-2009-2108601
2. *TRC Test Order*, July 28, 2011, Docket No. M-2009-2108601
3. *TRC Test Order*, August 20, 2012, Docket No. M-2012-2300653, M-2009-2108601
4. *TRC Test Order,* June 11, 2015, Docket No. M-2015-2468992

Duquesne Light measured the cost effectiveness of its EE&C Phase III Plan based on all of the applicable provisions of all of these TRC Test Orders. The results of the TRC are expressed as the net present value and benefit/cost ("B/C") ratio. Consistent with the

aforementioned TRC Test Orders, a B/C ratio greater than one indicates that the program is beneficial to the utility and its ratepayers on a total resource cost basis. Duquesne Light's proposed EE&C Phase III Plan overall B/C score is 1.9. Accordingly, the Plan is cost effective as a whole.

Q. Please describe the process used to develop Duquesne Light's EE&C Phase III Plan?

A. The Company's EE&C Phase III Plan development was primarily guided by its initial benchmarking study completed and provided in Phase I; experiences with Phase I and Phase II programs and measures, particularly in program years 6 and 7; stakeholder input; and best practices in energy efficiency. The Company reviewed the Statewide Evaluator's ("SWE") reports on Electric Energy Efficiency Potential for Pennsylvania, the Pennsylvania Saturation Studies for residential, commercial and industrial customers and the Demand Response Potential Study performed by SWE.

The Company conducted an extensive review of the performance of Phase I and Phase II programs and measures. Current EE&C Phase II programs were reviewed for cost effectiveness, energy savings, customer participation and interest. Based on the review, particular measures were selected for each customer segment for the Phase III Plan. As previously discussed, the savings expected from the programs selected were updated to reflect changes contained in the 2016 TRM. The Company also considered input received from stakeholders.

Finally, the Company cross referenced the information gathered against the requirements detailed in the Phase III Implementation Order and Clarification Order.

The Company added new programs and modified existing programs to ensure compliance with the Commission's final EE&C Phase III Plan requirements.

Q. You mentioned that the Company considered stakeholder input. Please describe the process used to gather stakeholder input on the Company's EE&C Phase III Plan.

A. In preparation for Phase III, a series of stakeholder meetings were held during the summer and fall to solicit input into the design of the Phase III Plan. Duquesne held ten sessions to solicit input with regard to what has worked well and what could be approved upon or modified in future Watt Choices programs. The sessions held were with the Commission Staff, Office of Consumer Advocate, Office of Small Business Advocate, CAUSE-PA, gas distributions companies, Hospital Association of Pennsylvania, universal services partners, and conservation service providers in the Commonwealth[1]. Subsequent stakeholders' meetings/discussions will continue throughout Phase III implementation.

Q. Did the stakeholder meetings influence the Company's EE&C Phase III Plan development?

A. Yes. As noted above multiple meetings were held during which robust discussions occurred leading to modifications to the draft plan.

Q. Will stakeholders have continued opportunities to influence the Company's EE&C Phase III Plan implementation?

[1] The Duquesne Light Industrial Intervenors were also invited to attend stakeholder meetings.

A. Yes. Duquesne's Phase III Plan proposes bi-annual stakeholders meetings during Phase III. In addition, at the Company's discretion additional stakeholders' meetings may occur during this phase.

III. EE&C PHASE III PLAN PROGRAMS

Q. What programs are proposed in the Company's EE&C Phase III Plan?

A. Generally, Duquesne Light's proposed EE&C Phase III Plan is designed to educate customers about energy efficiency and conservation and lower customer energy consumption. The Phase III Plan is largely comprised of home energy audits, building retrofits, lighting programs, appliance recycling and rebates program that have been customized to meet the needs of specific customer segments within Duquesne Light's service territory. The programs are organized to facilitate participation by three broad customer sectors: residential, commercial and industrial customers. Additionally, each of the three customer sectors are offered additional programs tailored to meet the specific needs of certain customer segments, such as low income customers, and governmental/educational/non-profit institutions.

Q. Please describe the Residential Energy Efficiency program ("REEP").

A. The REEP includes six (6) programs: 1) REEP Rebate Program; 2) Residential Whole House Retrofit Program ("WHRP"); 3) Residential Home Energy Reports ("HER"); 4) Residential Appliance Recycling Program ("RARP"); 5) Savings by Design New Constructions Program ("SBD"); and 6) the Residential Low Income Energy Efficiency

Program ("LIEEP"). These programs are explained in detail in Section 3 of the Company's Phase III EE&C Plan, but I will provide a brief summary:

REEP Rebate Program

The REEP rebate program encourages customers to make an energy efficient choice when purchasing and installing household appliances and equipment by offering educational materials on energy efficiency options and rebate incentives. Program educational materials and rebates are provided in conjunction with the Duquesne Light on-line home energy audit.

Residential Whole House Retrofit Program ("WHRP")

The WHRP provides resources to residential customers to encourage a comprehensive residential home energy audit, installation of conservation measures, and rebates for a range of eligible measures (Figure 13 in the Plan). The program provides up to a $250 home energy credit for installation of audit recommended measures. Direct installation measures are provided at no cost. The program also provides home energy use education, as well as information about available rebates and other program options.

Residential Home Energy Reports ("HER")

The HER program sends, via direct mail, home energy use reports that compare recipient customer's energy use to the use of 100 customers with similar home type and size. The HER provides for comparison the last two months of energy consumption by 1) the most efficient, top 20%, of the peer group, 2) the HER recipient, and 3) the entire peer group. The reports generate verifiable savings ranging from 1.5%-3.5% of total home energy use.

Residential Appliance Recycling Program ("RARP")

The Residential Appliance Recycling Program encourages residential customers in Duquesne Light's service territory to turn in their older refrigerators and freezers to be recycled. To encourage participation in this program, this program provides a check up to $50 for the removal of the old refrigerator or freezer.

Savings by Design Residential New Construction Program ("SBD")

The purpose of the Duquesne Light Savings by Design residential new construction program is to improve efficiency of newly constructed homes in Duquesne Light's service territory. The program objectives are to contribute toward achievement of Duquesne Light's energy savings goals and to influence residential new construction practices in Duquesne Light's service territory. The

program seeks to help advance improved building science and energy efficiency design/build practices in the region.

Residential Low Income Energy Efficiency Program ("LIEEP")

LIEEP is an income-qualified program providing services designed to assist low-income households to conserve energy and reduce electricity costs. LIEEP relies on several, low income segment-specific, contributing programs to achieve projected savings impacts and program cost-effectiveness. The Company intends to achieve the mandated 5.5% of its energy consumption reduction savings from this program.

Q. What are the projected consumption savings for the residential programs?

A. The Company expects to achieve 85,894,931 kWhs from the REEP rebate program; 8,815,961 kWhs from the Residential Appliance Recycling program; 24,146,105 kWhs from the Residential HER program; 1,750,916 kWhs from the WHRP; 409,000 kWhs from the SBD; and 16,550,885 kWhs from LIEEP.

Q. Are the residential energy efficiency programs described herein cost effective?

A. Yes. The residential programs offered are collectively cost-effective. Except for the Savings by Design and LIEEP, each program achieved a TRC score above 1. Specifically, the REEP rebate program B/C score is 1.6; the Residential Appliance Recycling program B/C score is 2.5; the Residential HER program B/C score is 1.4; and the WHRP B/C score is 1.4. The Savings by Design B/C is 0.3 and the LIEEP B/C score is 0.9. The overall residential energy efficiency B/C score in aggregate is 1.5.

Q. Are any of the residential customer programs currently in operation as part of Duquesne Light's Phase II programs?

A. Yes. Programs currently in place as part of Duquesne Light's Phase II program include: REEP Rebate Program; Residential HER; Residential Appliance Recycling Program; Whole House Retrofit Program, and the Residential LIEEP.

Q. Please describe the energy consumption reduction programs available for Small Commercial and Industrial customers.

A. Customers served under this sector are commercial and industrial customers having annual maximum monthly demand less than 300 kW. They will have the opportunity to participate in four (4) programs: Express Efficiency Program; Small Non-Residential Upstream Lighting Program; Small Commercial Direct-Install Program; and Multifamily Housing Retrofit Program. These programs are explained in detail in Section 3 of the Company's Phase III EE&C Plan, but I will provide a brief summary:

Express Efficiency ("EXP")

The Express Efficiency Program ("EXP") provides rebates to offset the higher cost of high-efficiency equipment when compared to standard efficiency equipment. The Program promotes customer indifference to the higher cost of high-efficiency equipment and customer adoption of high-efficiency equipment. Customers served under this sector are commercial and industrial customers having annual maximum monthly demand less than 300 kW.

Small Non-Residential Upstream Lighting

The Small Non-Residential Upstream Lighting Program will result in increased uptake of energy efficient lighting technologies by C&I end-use customers. Successes of residential upstream lighting programs demonstrate "instant rebates" are an effective means to promote energy efficiency lighting products. For time-strapped C&I business customers, onerous rebate application requirements and lengthy rebate processing lead times present significant and growing barriers to energy efficiency program participation.

Providing rebates, or customer incentives, directly to manufacturers and distributors addresses these significant barriers. The program will put in place processes required to satisfy C&I program documentary requirements to extend upstream lighting programs into the C&I sector.

Small Commercial Direct Install Program ("SCDI")

By providing for the direct-installation of energy efficient equipment retrofits to small and business customers, the Small Commercial Direct Install Program will produce cost-effective, long-term peak demand and energy savings. The program will be delivered in a staged delivery approach to provide program services in specific geographic areas at different time periods. This approach will allow for concentrated, directed, and service area wide program.

Multifamily Housing Retrofit Program

Program services include the administration of energy efficiency audits, technical assistance for measure level project review and bundling, property aggregation, contractor negotiation and equipment bulk purchasing. The multifamily market manager will integrate funding sources to include program and agency co-funding, performance contracting, grant funding and available financing options. Services also include processing rebate applications and other funding source documentary requirements as well as applicable project TRC screening.

Q. What are the projected energy consumption savings expected from the small commercial and industrial programs?

A. The Express Efficiency Program is projected to achieve 35,147,555 kWhs of energy savings. The Small Non-Residential Upstream Lighting Program is projected to achieve 19,464,329 kWhs of energy savings. The Small Commercial Direct Install Program is expected to achieve 10,934,231 kWhs of energy savings. The Multifamily Housing Retrofit Program is expected to achieve 8,912,014 kWhs of electric savings.

Q. **Are the energy efficiency programs available under the small commercial and industrial sector cost effective?**

A. Yes. All of the programs proposed score above 1 on the Commission's TRC test. The Express Efficiency Program B/C score is 2.2; the Small Non-Residential Upstream Lighting B/C score 2.2; the Small Commercial Direct Install Program B/C score is 1.8; and the Multifamily Housing Retrofit B/C score is 1.9. In total this sector has a B/C score of 2.1.

Q. Are any of the commercial programs currently in operation as part of Duquesne Light's Phase II programs?

A. Yes. The Small Commercial Direct-Install Program was introduced and successfully operated in Phase II. The Multifamily Housing Retrofit Program was introduced and successfully operated in Phase II.

Q. Please describe the energy reduction programs available under the large commercial and industrial efficiency program.

A. Customers served under this sector are commercial and industrial customers having annual maximum demand equal to or greater than 300 kW. They will have the opportunity to participate in three (3) programs: Commercial Efficiency Program; Large Non-Residential Upstream Lighting; and Industrial Efficiency. These programs are explained in detail in Section 3 of the Company's Phase III EE&C Plan, but I will provide a brief summary:

Commercial Efficiency Program ("CEP")

The CEP helps commercial customers to assess the potential for energy efficiency project implementation, cost and energy savings. Program services include project implementation oversight and savings impact measurement and verification. Program components include auditing of energy use, provision of targeted

financing and incentives, project management; training, and technical assistance. Energy audits provide business customers a readily available, objective source of information about their energy use and ways to save energy that, when implemented, will result in energy savings, reduced operating costs, lowered carbon emissions, and improved air quality.

Industrial Efficiency Program ("IEP")

The IEP helps industrial customers assess the potential for energy efficiency project implementation, cost and energy savings. Program services include project implementation oversight and savings impact measurement and verification. Program components include auditing of energy use, provision of targeted financing and incentives, project management training, and technical assistance. Energy audits provide business customers a readily available, objective source of information about their energy use and ways to save energy that, when implemented, will result in energy savings, reduced operating costs, lowered carbon emissions, and improved air quality.

Large Non-Residential Upstream Lighting Program

The program will provide incentives for efficient lighting products directly to lighting technology distributors to offset the higher cost, and thereby drive uptake of, the most efficient lighting equipment options. The program is delivered by a single contractor that provides program outreach to multiple commercial and industrial segment suppliers.

Q. What are the projected energy consumption reductions expected from the large commercial and industrial efficiency program?

A. The Commercial Efficiency Program is projected to achieve 50,575,285 kWhs of energy savings. The Large Non-Residential Upstream Lighting Program is projected to achieve 46,966,828 kWhs of energy savings. The Industrial Efficiency Program is projected to achieve 84,021,466 kWhs of energy savings.

Q. Are the energy efficiency programs proposed under the industrial sector cost effective?

A. Yes. All of the programs proposed within the industrial sector score above 1 on the Commission's TRC. The Commercial Efficiency Program B/C score is 1.9; the Large Non-Residential Upstream Lighting B/C score 2.2; and the Industrial Efficiency Program B/C score is 1.9. In total this sector has a B/C score of 2.0.

Q. Are any of the industrial programs currently in operation part of Duquesne Light's Phase II programs?

A. Yes. The Commercial Efficiency Program and the Industrial Efficiency Program are an evolution of Phase II programs serving the office buildings sectors, retail stores segment, primary metals, chemical products and other mixed industrial segments. Phase III programs will retain segment-specific market outreach approaches and simplify overall implementation management.

Q. **Earlier you indicated that the Company is required to achieve 3.5% of its energy consumption reduction savings from the governmental/educational/nonprofit sector. How will the Company achieve this target**?

A. To achieve the governmental/educational/nonprofit specific targets, the Company has developed specific programs for these customers including the Public Agency Partnership Program and the Community Education Energy Efficiency Program. These programs supplement the other commercial programs in the Phase II EE&C Plan and are intended to meet the needs of this subset of customers. These programs are explained in detail in Section 3 of the Company's Phase III EE&C Plan, but I will provide a brief summary:

Public Agency Partnership Program ("PAPP")

Through the PAPP, partnerships are established between Duquesne and selected local governmental agencies through the execution of a Memorandum of Understanding (MOU). The MOU establishes working groups comprised of Duquesne and agency representatives that identify project areas within agency departments (and jurisdictional agencies). Working groups define project scopes of service and establish project agreements to co-fund agreed to projects.

Community Education Energy Efficiency Program ("CEEP")

The Community Education Energy Efficiency Program is designed to help middle and high schools assess the potential for energy-efficiency project implementation, cost and energy savings, and potentially install measures and verifies savings. Program components include auditing of energy use, provision of targeted financing and incentives, project management and installation of retrofit measures, training, and technical assistance.

The governmental/educational/nonprofit program is anticipated to have results of 56,144,813 kWhs of energy savings which is more than adequate to achieve the 3.5% governmental/educational/nonprofit consumption reduction target.

Q. Are the programs proposed under the governmental/educational/nonprofit sector cost effective?

A. Yes. All of the programs proposed within the governmental/educational/nonprofit sector score above 1 using the Commission's TRC cost-effectiveness scoring methodology. The Public Agency Partnership Program B/C score is 1.9 and the Community Education Energy Efficiency Program B/C score is 1.3. In total this sector has a B/C score of 1.8.

IV. PHASE III DEMAND REDUCTION PROGRAM

Q. Is Duquesne Light proposing to operate a demand response program in its Phase III EE&C Plan?

A. Yes. Duquesne Light as part of its Phase III energy efficiency and conservation plan proposes a Demand Management Program (DMP) that will include two sub programs: 1) a direct load control program for residential and/or small commercial and industrial customers; and 2) a large C & I customer curtailment component, in order to achieve the required reduction of 42 MW.

Q. What are the projected system peak demand reductions associated with the two DMP program components?

A. The direct load control DMP program component for residential and/or small commercial and industrial customers is projected to reduce system peak demand by 2.2 MW. The large C & I customer curtailment DMP program component is projected to reduce system peak demand by 41.9 MW. Together the program components are projected to reduce system peak demand by 44.1 MW, approximately 105% of the mandated 42 MW of peak demand reduction from the DMP.

Q. What are the projected program costs associated with implementing the DMP components?

A. The direct load control DMP component for residential and/or small commercial and industrial customers projected implementation cost is $1,460,933. The large C & I

customer curtailment DMP component projected implementation cost is $8,278,786. Together the program components are projected to cost $9,739,719 to implement.

Q. **Are the DMP sub-programs available under the Phase III proposed Plan cost-effective?**

A. The DMP component for residential and/or small commercial and industrial customers is projected to have discounted lifetime costs of $1,051,180 producing $721,358 in discounted lifetime benefits, resulting in a Total Resource Cost (TRC) of 0.7. The large C & I customer curtailment DMP component is projected to have discounted lifetime costs of $5,951,821 producing $13,705,795 in discounted lifetime benefits, resulting in a Total Resource Cost (TRC) of 2.3. Together the both program components are projected to have discounted lifetime costs of $7,003,000 and produce $14,427,153 in discounted lifetime benefits, resulting in a Total Resource Cost (TRC) of 2.1. Accordingly, the proposed DR program is cost-effective.

Q. Is there any other information you would like to provide describing the DMP program discussed above?

A. Yes. Consistent with the *Phase III Implementation Order,* Duquesne Light will select a Conservation Service Provider ("CSP") to implement the demand response (DR) program by a competitive solicitation process. The results of the solicitation may include variations in program parameters that are not known at the time of the Plan filing and the writing of this testimony. For example, the winning bidder may develop a DR program

having only one of the two aforementioned program components (direct load control and/or a large C&I curtailment program).

Consistent with the *Phase III Implementation Order*, the proposed Phase III DR program(s) will impose provisions that participants with dual enrollment in both PA Act 129 DR programs and PJM Emergency Load Response Program (ELRP) shall have any applicable Act 129 DR incentives discounted 50%. Per the Order, this is imposed to "mitigate concerns about accounts receiving revenues from Act 129 for dispatch that were already mandated to reduce load under PJM's ELRP."[2]

Consistent with the *Phase III Implementation Order* the proposed DMP shall limit curtailment events called during the months on June through September, for the first six days that peak hour of PJM's day-ahead forecast for the PJM RTO is greater than 96% of the PJM RTO summer peak demand forecast. Each curtailment even shall last four hours and once six curtailment events have been called, the program will be suspended.

The timeline for implementing these programs can be found in Section 12 of the proposed EE&C Plan. DMP budgets, subject to the outcome of the competitive bidding process, are estimated at $9,739,719 in alignment with the *Phase III Implementation Order* budgetary allocation of 10% of each EDC's budget for peak demand reduction programs.

[2] Phase III Implementation Order, Section B.2. Additional Reductions in Peak Demand, page 43.

V. PROGRAM COST

Q. **What is the Company's Phase III spending cap?**

A. As I discussed previously, Duquesne Light's Phase III annual budget is $19,545,951.58, and the total five year program spending cap is $97,739,968.

Q. What is the cumulative cost of the Company's proposed EE&C Phase III Plan and what is the implementation strategy to acquire at least 15% of the consumption reduction target in each program year as directed by the Commission?

A. The Company's EE&C Phase III Plan has a budget cap of $97,739,968. This Plan includes programs that are being continued as previously implemented, modified based on previous years' experiences, plus newly added programs. The forecast ramp-rates by projected saving impacts across the five year period are found in the proposed plan in Figure 1 which provides for acquiring at least 15% of the consumption target in each of the Phase III program years.

Q. Please provide an overview of the EE&C Phase III Plan cost by customer sector.

A. As provided in Figure 4 of the EE&C Phase III Plan, residential energy efficiency programs comprise 30.2% of the plan cost, or $26,587,748. Commercial energy efficiency programs comprise 52.4% of the plan cost, or $46,070,976. Finally, industrial energy efficiency programs comprise 17.4% of the plan cost, or $15,254,418. These percentages exclude the demand response programs expenditures which are $9,739,719. Mr. Pfrommer describes how the Company will ensure that the programs are funded by

the customer sector that most benefits from the programs and measures offered in the Plan.

Q. Does this conclude your testimony?

A. Yes.