**BEFORE THE**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company for :

approval of smart meter procurement and : M-2009-2123948

installation plan :

**INITIAL DECISION**

Before

Robert P. Meehan

Administrative Law Judge

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This Initial Decision approves Duquesne Light Company’s (Duquesne’s) smart meter procurement and installation plan, as modified by the Initial Decision.

1. HISTORY OF THE PROCEEDING

 On June 24, 2009, the Commission entered its Implementation Order, Docket No. M-2009-2092655, to assist Duquesne and the other Electric Distribution Companies (EDCs) in complying with the requirements of Act 129 of 2008, 66 Pa. C.S. §2807(f), et seq., which, among other matters, required EDCs to file with the Commission their respective smart meter procurement and installation plans.

 On August 14, 2009, Duquesne filed a petition seeking Commission approval of its Smart Meter Procurement and Installation Plan (SMP), pursuant to Act 129 and the Order. Duquesne also requested authorization to recover the prudently incurred costs of the Plan. Accompanying this Petition were Duquesne’s actual SMP Document and Budget, as well as the direct testimony of Duquesne witnesses Ruth A. DeLost and William V. Pfrommer.

 Petitions to Intervene were filed by: Pennsylvania Association of Community Organizations for Reform Now (ACORN); Citizen Power (Citizen); Constellation NewEnergy, Inc./Constellation Commodities Group, Inc. (Constellation); Department of Environmental Protection (DEP); Duquesne Industrial Intervenors (DII); Office of Consumer Advocate (OCA); and Office of Small Business Advocate (OSBA). The Commission’s Office of Trial Staff (OTS) is also a party to this proceeding.

 The Prehearing Conference was held on October 7, 2009, which, among other matters, set the procedural schedule for this proceeding. Pursuant to that schedule, a technical conference was held on October 27, 2009 in Harrisburg, PA. The evidentiary hearing was held on November 17, 2009 in Harrisburg, PA. Main and reply briefs were filed on December 8, and December 22, 2009. The Implementation Order directed that the Initial Decision in this matter be issued by January 29, 2010.

1. SUMMARY DESCRIPTION OF THE SMP

 This summary of the SMP was developed from Duquesne’s main brief in this proceeding.

 According to Duquesne the SMP was designed to meet the requirements of Act 129 and the Commission’s Implementation Order. The SMP builds upon Duquesne’s existing Advanced Meter Reading (AMR) system, which currently obtains interval reads on all large Commercial and Industrial (C&I) customers, and daily reads on over 90 percent of residential and small commercial customers. However, it is Duquesne’s position that the SMP is a “plan for a later plan,” because Duquesne believes it would be premature and imprudent to try to assess, evaluate and decide all the major components of its smart meter plan at this juncture. In lieu thereof, it has provided information known to date which, it believes, demonstrates compliance, either now or in the future, with Commission requirements with respect to smart meters.

 Duquesne sets forth in its plan framework for the analysis that will be conducted during the proposed Grace Period to ensure a compliant, fully functioning, efficient and cost-effective smart meter network that benefits Duquesne’s customers, Electric Generation Suppliers (EGSs), and the electric grid as a whole. Additional information will be provided in future filings, as described in the Plan. Duquesne commits to provide a smart meter network that meets all Commission requirements within the designated time frame.

1. Grace Period Analysis

 Duquesne’s plan details its network development and installation plan within the Grace Period. For planning purposes, the scope of work for the Grace Period is comprised of two major components: (a) Billing and Metering System Upgrades (Component 1); and (b) Smart Meter Technology Infrastructure (Component 2). For the Billing and Metering System Upgrades, Duquesne will focus on an upgrade to its existing billing and metering systems required to comply with smart meter requirements, utilizing the Oracle Utility’s Practice project implementation methodology to address application functionality, pricing options mandated by the Act, business transformation, data conversion, deployment, interfaces, IT infrastructure, project management, quality management, testing and training. Component 1 of the SMP is scheduled to begin upon approval of Duquesne’s SMP (estimated to be in April of 2010) and to be completed in December of 2011. Duquesne has requested that all aspects of its proposed Component 1, Billing and Metering System Upgrades be approved as part of this filing.

 With respect to Component 2, the Smart Meter Technology Infrastructure, Duquesne will focus on technical infrastructure, process and systems to support the rollout of smart meters by year end 2012, including an analysis of virtually all functions within Duquesne that will support smart meter operation and functionality. During this phase, Duquesne will perform a gap analysis between the current meter environment and the future smart meter environment, and will develop and implement solutions to result in a final functioning product, including selection of vendors, network design, customer education process, and internal training. Component 2 is scheduled to begin upon SMP approval (estimated to be in April of 2010) and will be completed in the last quarter of 2012. Duquesne requests that this proposed process be approved as part of this case. However, the results of the work of the Smart Meter Technology Infrastructure will be submitted to the Commission at a later time for review and further direction, in subsequent filings within the Grace Period.

 The SMP is further broken down by milestones. Duquesne will assess meter capabilities, in conjunction with its “smart meter capability cost benefit analysis and filing,” including the extended capabilities identified in the Implementation Order. Duquesne will perform a detailed analysis with respect to the milestone “assessment of needs and technological solutions and selection of technologies and vendors.” In conjunction with this milestone, Duquesne will analyze various communication media (*e.g.* bidirectional - meter to in home and meter to collector, licensed or unlicensed, mesh or tower technology, etc.) and networks (data and security segregated systems and network devices). Additionally, Duquesne will look at the hardware and software that will be necessary for the smart meter rollout, including servers and data storage. Duquesne will review the various meter types/forms (i.e. by service type, whether the meter needs to be a booster, hub, collector, etc.) in conjunction with the necessary software and security parameters. Duquesne will analyze the various components that are tied to the meters and metering infrastructure, such as modems, cellular devices, load control interface equipment, and Home Area Network devices, among other things. Duquesne will design the network in conjunction with the milestone “Establishment of network designs,” and will go through a detailed process to design, test and certify EDI[[1]](#footnote-1) transactions and direct access, working through the Electronic Data Exchange Working Group (EDEWG), in conjunction with the milestone “Establishment of plans to design, test and certify EDI transactions, Web Access and Direct Access capability.” Finally, once all of the analysis discussed above is complete, Duquesne will engage in the installation, testing and rollout of the network, and then the meters. All of this will be done in conjunction with consumer and employee education.

1. Future Filings

 Duquesne’s SMP proposes at least three additional filings with the PUC for approval. They are:

 July 1, 2010 – submit cost benefit analysis of meter capability

 Dec. 31, 2010 – submit the intended technology and design of the smart meter infrastructure

Dec. 31, 2011 – submit final details and smart meter implementation and schedule.[[2]](#footnote-2)

1. FINDINGS OF FACT

 1. Duquesne Light Company, the Petitioner, filed a petition for approval of its Smart Meter Plan on August 14, 2009.

 2. Duquesne’s SMP contains two components: Component 1, pertaining to billing and metering system upgrades; and Component 2, pertaining to smart meter technology infrastructure (DLC Ex. A, at 20).

 3. Component 1 has twenty listed milestones for that portion of the SMP beginning in April of 2010, and ending in October of 2011 (DLC Ex. A, at 26).

 4. There are 12 listed milestones for Component 2, commencing July 2, 2010, and ending December 31, 2012 (DLC Ex. A, at 34).

 5. Duquesne’s SMP provides for three additional filings to be made: July 1, 2010; December 31, 2010; and December 31, 2011 (DLC Ex. A, at 10, 14).

 6. During the Grace Period, Duquesne will furnish the same interval meters that are currently used by large C&I customers to collect hourly reads to any customer requesting interval metering. This is part of Duquesne’s current Tariff (DLC Ex. A, at 9-10; DLC Ex. C, at 11).

 7. The costs to be paid to Duquesne by any customer, including a residential customer, requesting an interval meter during the Grace Period is $1,305.00. This is the current rate that Duquesne charges per its Tariff when providing an interval meter upon request (DLC Ex. A, at 9; Ex. D, at 13).

 8. Duquesne proposes to implement a Smart Meter Charge (SMC) that provides for full and current cost recovery through a reconcilable automatic adjustment clause under Section 1307 (DLC Ex. A, at 37; DLC Ex. D, at 4; DLC Ex. WVP-1).

 9. The SMC is designed to recover smart meter plant in service and operating expenses on a forward looking basis with quarterly filings and an annual reconciliation, and will align revenues with the timing of expenditures (DLC Ex. A, at 37; DLC Ex. D, at 4).

 10. Duquesne anticipates that all incremental direct and indirect costs associated with implementing this new service will be captured in the SMC (DLC Ex. D, at 5).

 11. Duquesne estimates the costs of the SMP to be approximately $38,000,000. Of this amount, it is anticipated that $17,200,000 will be incurred for Component 1 and $20,800,000 will be incurred for Component 2 (DLC Ex. B).

 12. Duquesne seeks Commission approval of the SMP’s scheduled filings and estimated costs of Component 1 and all of Component 2 as filed with the exception of the last two milestones of Component 2. The costs for the last two milestones of Component 2 will be submitted in subsequent filings (DLC Ex. C-R, at 10).

 13. As part of its cost benefit analysis, Duquesne is willing to attempt to provide the benefits on a customer class basis (DLC Ex. A, at 10-15; DLC Ex. D-R, at 2-3).

 14. In allocating the costs of smart meter deployment, Duquesne proposes to distinguish between customers on single-phase meters and those on multi-phase meters. The cost for each type of meter will be directly assigned to the respective customer groups (DLC Ex. D, at 9).

 15. Duquesne’s SMP proposes to allocate costs determined to be common to both types of meters, *e.g.*, infrastructure to collect, back haul and store data, costs to bill customers, etc., to the customer groups based on the number of meters in each group (DLC Ex. D, at 9).

 16. As an alternative to Duquesne’s proposed common cost allocation, the OSBA proposes that the common costs among the customer classes in proportion to the meter costs be directly allocated to each customer class (OSBA St. 1, at 5).

 17. Duquesne proposes to recover the costs of the SMP through an adjustable SMC pursuant to Section 1307 of the Code, 66 Pa. C.S. §1307, with quarterly filings and an annual reconciliation (DLC Ex. A, at 37).

 18. The OTS proposes that the annual reconciliation be filed on August 1 of each year based on the preceding 12-month period ending on June 30 of each year, with the understanding that the initial reconciliation filing to be made on August 1, 2011 will be for a period longer than 12 months (OTS St. 1, at 6-7).

 19. Duquesne does not object to the OTS proposed uniform reconciliation filing and review schedule (DLC Ex. D-R, at 8).

 20. Duquesne proposes to use the cost rates contained in its most recent quarterly financial reports submitted to the Commission at the time of each quarterly SMC filing for the cost rates of debt and preferred stock to be used in the rate of return calculation of the SMC (Duquesne Ex. WVP-1, at Fourth Revised Page No. 109).

 21. The OTS proposes that Duquesne’s identified cost rate of debt and cost rate of preferred stock, obtained from the Company’s most recent quarterly Financial Report submitted to the Commission, should be blended proportionately to determine a composite debt cost rate to be used in the calculation (OTS St. 1, at 12).

 22. Duquesne accepts the OTS’s recommendation to blend proportionately its cost rate of debt and preferred stock (DLC Ex. E, at 2).

 23. Duquesne proposes to use the common equity return from its most recent proceeding that had an approved return on equity to determine the rate of return for the SMC. Its most recent approved return on equity was established in the Company’s transmission formula proceeding at FERC at Docket No. EL06-109-000, which established a base return on common equity of 10.9% (DLC Ex. D, at 7).

 24. The OTS proposes that the equity returns for the electric utilities as calculated by the Commission and presented in the Quarterly Earnings Report of jurisdictional utilities be used for the return on equity component of the rate of return calculation for the SMC (OTS St. 1, at 14).

 25. The OCA proposes alternate proposals for determining the equity return portion of the rate of return calculation for the SMC (OCA St. 2, at 5-7).

 26. First, the OCA proposes using the equity return established in Duquesne’s most recent base rate case occurring within three years of the date of any proposed change in the SMC (OCA St. 2, at 5).

 27. Second, the OCA proposes that if there are more than three years between Duquesne’s fully-litigated base rate case and the effective date of any SMC, then the OCA proposes using the equity returns in the Quarterly Earnings Report (OCA St. 2, at 5).

 28. Third, because of the OCA’s concerns about volatility and inconsistency of the returns in the Quarterly Earnings Report, it proposes that the Commission calculate the return on equity by applying the procedure used in setting an equity return for water utilities that impose a Distribution System Improvement Charge (DSIC), and that the procedure for calculating the return applicable to EDC Smart Meter Charges be the subject of a generic proceeding (OCA St. 2, at 5-6).

 29. Finally, the OCA proposes that until such time as the Commission establishes the appropriate equity rate of return through a generic proceeding, the return that should be used in calculating Duquesne’s SMC is that which was established in the most recent fully-litigated base rate proceedings among Pennsylvania EDCs, the 2006 rate cases of Metropolitan Edison Company (Met-Ed) and Pennsylvania Electric Company (Penelec). In those cases, the return on equity was set at 10.1% (OCA St. 2, at 7).

 30. Duquesne proposes that its capital structure, for purposes of the SMP and the SMC calculation include a common equity capitalization between 45% and 59% based on the proceeding at FERC at Docket No. EL06-109-000 (DLC Ex. D, at 7).

 31. Duquesne’s actual equity capitalization is 67.76% (OTS Ex. 1, Schedule 1, at 2).

 32. It is the position of the OTS that the Commission should use a representative capital structure for all EDCs in the recovery of smart meter costs that is based upon the barometer group in the Quarterly Earnings Report (OTS St. 1, at 15).

 33. It is the position of the OCA that an appropriate equity ratio for Duquesne can be established in a base rate case, and it proposes that the equity ratio utilized in the 2006 Met-Ed and Penelec cases be used for Duquesne’s capital structure for calculating the rate of return for the SMC. In the Met-Ed and Penelec cases the Commission approved a 51% equity ratio (OCA St. 2, at 8).

1. DISCUSSION

A. SMP Costs and Cost Recovery Issues

 Duquesne proposes to implement a Smart Meter Charge (SMC) that provides for full and current cost recovery through a reconcilable automatic adjustment clause under Section 1307. DLC Ex. D, at 4; DLC Ex. WVP-1; and DLC Ex. A, at 37. It is Duquesne’s position that the proposed SMC complies with the requirements of both Act 129 and the Commission’s Order. DLC Ex. D, at 14. According to Duquesne, the SMC is designed to recover smart meter plant in service and operating expenses on a forward looking basis with quarterly filings and an annual reconciliation, and will align revenues with the timing of expenditures. DLC Ex. D, at 4; and DLC Ex. A, at 37. It is proposed that all incremental direct and indirect costs associated with implementing this new service will be captured in the SMC. DLC Ex. D, at 5.

1. Estimated Costs of the SMP

Duquesne’s proposed SMP includes estimates of the costs thereof. With respect to the estimated costs of the proposed SMP, OCA witness Mudd testified, OCA St. 1, at 9-10, that:

The proposed costs for Component 1 and Component 2 total $37.6 million. Component 1, the billing system upgrade, comprises 46 percent of the costs, and Component 2, 54 percent of total costs. Within Component 2, the majority of estimated costs are associated with the final two milestones, implementation of network base software, network systems, and meter pilot hardware costs. However, the technologies, vendors and network systems architecture have not yet been established. I recommend that these costs not be approved until after the approval of an interim filing following completion of the milestone, Establishment of Network Designs, to be completed by March 31, 2011. The estimated costs may remain as placeholder costs for the Grace Period, but should be updated and approved prior to the Company moving ahead with equipment installation.

It is Duquesne’s position that the costs set forth in its SMP for the last two milestones of Component 2 were intended as an estimate. At this time, Duquesne seeks Commission approval of the SMP’s scheduled filings and estimated costs of Component 1 and all of Component 2 as filed with the exception of the last two milestones of Component 2. The costs for the last two milestones of Component 2 will be submitted in subsequent filings. DLC Ex. C-R, at 10.

2. Cost of the Meters

 The Commission’s Implementation Order does not require electric distribution companies (EDCs) to install smart meters at customer premises during the Grace Period. The Order does, however, require each EDC to provide a smart meter to those customers. Implementation Order, at 7.

 Duquesne proposes to satisfy this requirement by supplying requesting customers, including residential customers, with the same interval meter it now utilizes for its largest C&I customers, those with monthly demand in excess of 300 kW. DLC Ex. A, at 9; and DLC Ex. C, at 11. Duquesne proposes to charge customers who request an interval meter a base charge of $586 for the meter and $719 for the required communications equipment for a total of $1305. A customer wishing to have access to KYZ pulse data from the interval meter to interface with devices downstream from the meter will be charged an additional $197. Duquesne indicates that these charges reflect the Company’s costs in providing the equipment and functionality. DLC Ex. D, at 13.

 The OCA, noting that Duquesne’s installed advanced meter reading (AMR) technology does not easily lend itself to providing interval data for residential and small commercial customers, nevertheless suggests that Duquesne should explore less expensive alternatives to meeting residential customer requests for interval meters during the Grace Period. It is the position of the OCA that providing a meter at a cost to customers of more than $1,300 does not realistically allow for participation of residential customers in time-sensitive pricing programs that may become available during the Grace Period. OCA St. 1, at 11-12.

 Duquesne is willing to explore other options, but given Duquesne’s current AMR environment and supporting systems, this is the only option available at this time for providing interval meters to residential customers requesting the same. DLC Ex. C-R, at 11. The approximate $1300 charge is the current Tariff rate that Duquesne charges when providing an interval meter upon request. DLC Ex. D, at 13; and DLC Ex. A, at 9. Further, this is the cost incurred by Duquesne in order to provide this interval meter, consistent with the terms of the Implementation Order. DLC Ex. D, at 13; and Implementation Order, at 9-10. Duquesne will continue to explore whether there are other alternatives that would be less expensive. DLC Ex. C-R, at 11; and Tr. 107 (OCA witness Mudd acknowledges that Duquesne is exploring less expensive alternatives).

 OCA indicated at the hearing that there could perhaps be a cheaper alternative, as a consumer could buy an off-the-shelf device from Home Depot. Tr. 107-108. However, according to Duquesne, the important thing to remember is that, during the Grace Period, it has an automated meter reading system and full infrastructure in place. Therefore, procuring reads from an off-the-shelf device, as the OCA suggested, will have minimal communication capability, no backend system or network in place, and would not permit customer metering and billing. Tr. 107-108. It is Duquesne’s position that such devices have been tested by it and they could possibly be used as an educational tool for customers. However, these devices are not anywhere close to providing meter or bill quality data. DLC Main Brief, at 19-20. Nevertheless, Duquesne does commit to exploring other alternatives and reporting back to the Commission on this issue, if it is so ordered. DLC Ex. C‑R, at 11; Tr. 107.

 No other party to this proceeding has taken a position on this issue. The OCA is concerned that the cost to provide an interval meter to residential customers during the Grace Period may limit the extent to which the residential customers request such meters. Although the OCA has indicated that there may be less expensive devices that can be purchased by consumers at retail, there is no indication that such devices will be compatible with Duquesne’s system. Further, there is no suggestion that there are “smart meters” that can be obtained by Duquesne for the residential customers that would be compatible with its AMR and would be less expensive than the present interval meters it proposes to use. Additionally, the OCA has not presented any evidence on this issue that the cost to be charged by Duquesne for installing interval meters at the request of residential customers during the Grace Period is in excess of Duquesne’s actual costs for the meter and accompanying communications equipment, or in excess of its approved Tariff for the installation of such meters, or is otherwise unjust, unlawful, and unreasonable. In fact, the OCA’s position seems to accept, implicitly, that the cost to be charged is the actual cost.

 There is no basis on this record for rejecting or adjusting Duquesne’s proposal to install interval meters at the request of customers during the Grace Period at its actual cost for the meter and communication equipment. At the same time, and in an effort to encourage the use of the least costly technology to comply with Act 129 and the Implementation Order, Duquesne should be directed to investigate whether there are smart meters available from vendors that would be less expensive to residential and small commercial and industrial customers, and to report to the Commission and all parties the results of its efforts to locate less costly meters for residential and small commercial and industrial customers. The due date of this report should be the same as that for the submission of the intended technology and design of the smart meter infrastructure, December 31, 2010. Additionally, in the event any other party to this proceeding knows of, or becomes aware of less costly smart meters that could be installed for residential and small commercial and industrial customers, they are to provide that information to Duquesne for its consideration and evaluation.

3. Cost/Benefit Study

 Duquesne’s SMP proposes the submission of an analysis of the cost benefits of smart meter technology on or about July 1, 2010. With respect to Duquesne’s performance of such an analysis, the OCA’s position is that the costs and benefits should be evaluated on an incremental basis. The additional costs of implementing components of an SMP should be compared to the marginal benefit that is likely to result from the implementation. According to the OCA, the cost information for each additional capability of the smart meters should be detailed and itemized by cost category, such as equipment costs, installation, software costs, operation and maintenance expenses, and public education programs. Further, the OCA recommends that the resulting benefits be characterized by function, such as conservation, capacity cost savings, reliability, and reduced utility costs. These benefits, according to the OCA, should also be identified separately by customer class. OCA St. 1, at 8-9.

 It is Duquesne’s position that while cost benefit analysis is critical to the success of the Plan for both the Company and for stakeholders, it is premature to provide the analysis requested until the Company proceeds with its Plan and obtains the required information. DLC Ex. D-R, at 2. Additionally, Duquesne questions whether the benefits can be quantified at a customer class level because such quantification is difficult. According to Duquesne, the prices to use for energy, capacity, and energy conservation are difficult to quantify over time and change rapidly. Costs, on the other hand, are known and measurable. Nevertheless, Duquesne agrees to attempt to capture the necessary data, and will address this in supplemental filings. DLC Ex. D-R, at 2-3; DLC Ex. A, at 10-15.

 The Commission’s Implementation Order requires EDCs to submit a cost benefits study. In pertinent part, that Order provides, at 29-30:

In order to ensure that these additional smart meter functions are cost‑effective, we direct that each smart meter plan filing include cost data that quantifies the costs to meet the minimum requirements set forth in Act 129, the costs to meet all of the requirements set forth in Section C above, and the individual incremental costs of each added function, less any operating and capital cost savings...

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The deployment and operating costs to be presented shall include a breakdown of all incremental costs and any associated potential operational and maintenance cost savings for each functionality and configuration. All cost estimates must be supported by estimates from at least two vendors where available. To the extent that an EDC or another party demonstrates that a particular Commission imposed requirement is not cost‑effective, the Commission will have the option of waiving a particular requirement for that EDC or all EDCs. This waiver authority does not extend to the minimum requirements delineated in 66 Pa.C.S. § 2807(g). Any EDC that is unable to provide this cost data with its August 14, 2009 filing can petition the Commission for permission to file such data at a later date. Any such filing shall include a proposed filing date.

 I do not read the Implementation Order as imposing on any EDC to identify the benefits separately by class, as proposed by the OCA. Duquesne is willing to attempt to provide this information on a customer class basis, but is unsure it will be able to do so. Inasmuch as I do not believe the Commission has required Duquesne, or any EDC, to present the benefits by customer class, I am not adopting the OCA’s position as a requirement or condition of approval of Duquesne’s SMP. I would, however, encourage Duquesne to provide this information by customer class to the extent that it is able to do so.

 4. Cost Allocation

 With respect to allocating the costs of smart meter deployment, Duquesne proposes to distinguish between customers on single-phase meters and those on multi-phase meters. The cost of each type of meter will be directly assigned to the respective customer groups. As to costs determined to be common to both types of meters, *e.g.*, infrastructure to collect, back haul and store data, costs to bill customers, etc., will be allocated by Duquesne to the customer groups based on the number of meters in each group. DLC Ex. D, at 9.

 The OCA agrees with the direct allocation of the costs of the specific meters to the respective customer groups. However, with respect to the common costs of smart meter deployment, the OCA opposes Duquesne’s proposed allocation based on the number of meters. According to the OCA, single-phase meters account for more than 96% of the smart meters that will be deployed. Thus, Duquesne’s cost allocation method, the single-phase meter group (primarily residential and small commercial customers) will be responsible for more than 96% of the common costs of the Smart Meter program. However, the OCA asserts, it is far from clear that single-phase meter customers will receive anything close to 96% of benefits from the program. See OCA St. 3, at 5; OCA St. 3, Ex. DES-1. The OCA submits that as indicated in the Implementation Order, Smart Meter Plan costs are appropriately allocated to those customer classes who derive the benefits from such costs. Implementation Order, at 32. It is the position of the OCA that the number of meters is neither a measure of the benefits derived from the smart meter system nor the cause of the system costs. OCA Main Brief, at 30.

 The OCA proposes that the appropriate basis on which to allocate common costs is on the basis of energy and demand. It is the OCA’s position that this would be consistent with the following goal of Act 129, 66 Pa. C.S. §2806.1 et seq., preamble:

The General Assembly recognizes the following public policy findings and declares that the following objectives of the Commonwealth are served by this act:

(1) The health, safety and prosperity of all citizens of this Commonwealth are inherently dependent upon the availability of adequate, reliable, affordable, efficient and environmentally sustainable electric service at the least cost, taking into account any benefits of price stability over time and the impact on the environment.

The OCA also finds support for its position at page 32 of the Implementation Order where the Commission stated:

The Commission will require that all measures associated with an EDC’s smart metering plan shall be financed by the customer class that receives the benefit of such measures. In order to ensure that proper allocation takes place, it will be necessary for the utilities to determine the total costs related to their smart metering plans, as discussed in E.1. Once these costs have been determined, we will require the EDC to allocate those costs to the classes whom derive benefit from such costs. Any costs that can be clearly shown to benefit solely one specific class should be assigned wholly to that class. Those costs that provide benefit across multiple classes should be allocated among the appropriate classes using reasonable cost of service practices.

 The OCA believes that while the benefits of the SMP may be available to all customer classes, not all customer classes will benefit equally from the SMP. It is the OCA’s position that any expected smart benefits to be derived from customer participation in dynamic pricing programs, such as time-of-use, real time and critical time options, will likely be much higher among large C&I customers than among residential customers because of the nature of the large C&I customers. Large C&I customers are much more sophisticated electricity consumers and they often have staff that are dedicated to managing their firm’s energy use since the cost of energy to these firms will have significant impacts on the bottom line. OCA St. 3, at 6; OCA Main Brief, at 34.

 According to the OCA, the multi-phase meter group is responsible for 63% of total energy usage and either 53% or 54% of peak demand (depending on whether a 1‑Coincident Peak or 5‑Coincident Peak allocation method is used). As noted by the OCA, Duquesne proposes to allocate only 3.8% of the common costs to the multi-phase meter group because that is their share of the total number of meters. However the OCA asserts, single-phase meter customers are responsible for 37% of energy usage and 46% or 47% of peak demand, yet they will bear 96.2% of the total common costs because that is their share of the total number of meters. DLC Ex. D, Ex. WPV-2.

 The OCA also gave consideration to Duquesne’s application for Federal assistance under the American Recovery and Reinvestment Act (ARRA), which, according to the OCA included specific initial estimates of benefits accruing to each customer class. For Duquesne’s initial meter installation, large C&I customers are estimated to receive 67 to 69 percent of savings; medium C&I customers 27 to 28 percent of savings; and residential customers only 2.7 to 5.5 percent of the savings. OCA St. 3, at 7-8.

 The OCA then proposed to allocate the common cost of the SMP on the basis of energy use and demand, as there are both energy-related and capacity and transmission-related savings expected from the implementation of the smart meter system. It is the OCA’s proposal that an allocator for assigning the common costs be based on the arithmetic average of the percentage shares of each group’s energy use at the meter and each group’s contribution to Duquesne’s annual single coincident peak. In this way, the energy portion of the allocator will reflect class shares of expected energy savings and the coincident peak portion will reflect class shares of expected PJM capacity and transmission savings. OCA St. 3, at 8-9; OCA Main Brief, at 36. Citizen Power supports the OCA’s proposed common cost allocation proposal. Citizen Power Main Brief, at 7-8; Reply Brief, at 4-6.

 Duquesne, the OSBA and the DII all oppose the OCA’s cost allocation proposal.

 The OSBA supports common cost allocation proposed by Duquesne, that is, on the basis of the number of meters in each customer group. According to the OSBA, the common costs in this proceeding are the same as the costs described in the Implementation Order as “costs that provide benefit across multiple classes.” As the OSBA notes, these costs “should be allocated among the appropriate classes using reasonable cost of service practices.” Implementation Order, at 32. The OSBA’s initial position is that there is a “cost basis” for Duquesne’s allocation proposal. As the OSBA witness testified, costs of this nature, which are classified as “customer-related,” are allocated to each customer class based on a weighted or unweighted allocator. OSBA St. 1, at 5. On this point, the OSBA references Duquesne Ex. D‑R, at 6.

 According to the OSBA, the OCA’s cost allocation proposal ignores the fact that Section 2807(f)(2) mandates the deployment of smart meters to all customers over a 15-year period of time, regardless of how many of those customers will actually be able to save money by using those smart meters to adjust their consumption profiles. It is the OSBA’s position that since Duquesne will incur smart meter costs to fulfill this mandate, the costs should be allocated on the basis of traditional cost of service principles rather than on the basis of the OCA’s theoretical notion of which customers are more likely to use smart meters to reduce their electric bills.

 Although the OSBA’s initial position on this issue is in support of Duquesne’s proposed common costs allocation, it proposed an alternative allocation method for consideration. OSBA’s alternative cost allocation proposal is to allocate the common costs in proportion to the allocation of the meter costs. According to the OSBA, this alternate common cost allocation proposal would provide some relief to the residential and small C&I customers in the single-phase meter rate class group without the dramatic increase in costs proposed by the OCA for the small C&I and large C&I customers in the poly-phase meter rate class group and it would also be consistent with reasonable cost of service practices. OSBA St. 1, at 5; OSBA Main Brief, at 14-15.

 The DII support Duquesne’s proposed common cost allocation because it is squarely within the Commission's long-standing precedent for establishing rates based on a utility's cost of providing the service, and consistent with established precedent. *See, Lloyd v. Pa. Pub. Util. Comm'n.*, 904 A.2d 1010, 1020 (Pa. Commw. Ct. 2006). *See also, e.g., Pa. Pub. Util. Comm'n. v. Philadelphia Gas Works*, Docket Nos. R-2008-2073938, 2009 WL 884424 \*5 (Order entered Mar. 26, 2009); and *Pa. Pub. Util. Comm'n v. PPL Elec. Utilities Corp*., Docket No. 00049255, 2007 WL 2198189 \*7-10 (Order entered Jul. 25, 2007). DII Main Brief, at 5-6. The DII fully agree with Duquesne’s cost analysis and allocation proposal. DII St. 1‑R, at 8. In opposing the cost allocation proposal of the OCA, the DII note that the proposal is similar to value of service pricing, and has nothing to do with how Duquesne will incur costs associated with the SMP. DII St. 1-R, at 6.

 Duquesne’s position is that the common costs should be allocated based upon cost causation, using reasonable cost of services practices. DLC Ex. D-R, at 6. Duquesne argues that this is appropriate because all of the functions of the common infrastructure (collecting, back hauling, storing and maintaining data) are required equally for each meter, regardless of the benefits realized or the size of the customer. *Id*., at 5-6. Duquesne believes that cost allocation based upon number of meters, as opposed to benefits as OCA suggests, is appropriate as the costs are established based upon the number of meters, not hypothetical or proposed benefits. *Id*., at 6. Nevertheless, to address OCA’s position regarding cost allocation based upon benefits, Duquesne has committed to examine costs and benefits during the Grace Period; but any cost allocation based upon expected benefits, at this time, is speculative, unsupported and inappropriate as the necessary analysis has not yet been conducted and is unknown. DLC Ex. D‑R, at 6.

 It is my opinion that the common costs allocation proposals of both Duquesne and the OCA should be rejected. Duquesne’s proposal, based simply on the number of meters per class results, in my opinion, in an unreasonable allocation of common costs to the single-phase meter group, the members of which are primarily residential customers. The OCA’s proposal on the other hand is both theoretical and speculative as to which and how customers in the various classes will “benefit” from the SMP and, in my opinion, is not based on reasonable cost of service practices, and results in an unreasonable allocation of the common costs to the multi-phase meter group, the members of which are primarily the small and large commercial and industrial customers.

 It is my opinion that the OSBA’s alternate common cost allocation method which allocates the common costs among the customer classes in proportion to the meter costs directly allocated to each customer class should be adopted. I agree with the OSBA’s position that this cost allocation method would provide some relief to the residential and small C&I customers in the single-phase meter rate class group without the dramatic increase in costs proposed by the OCA for the small C&I and large C&I customers in the poly-phase meter rate class group and is consistent with reasonable cost of service practices.

 5. Cost Recovery

 The Commission’s Implementation Order provides, at 31, that:

The Commission will allow each EDC to develop a reconcilable adjustment clause tariff mechanism in accordance with 66 Pa.C.S. § 1307 and include this mechanism in its smart meter plan. Such a mechanism shall be designed to recover, on a full and current basis from each customer class, all prudent and reasonable smart meter costs less operating and capital cost savings realized by the EDC from the installation and use of smart meter technology. The mechanism shall be set forth in the EDC’s tariff, accompanied by a full and clear explanation as to its operation and applicability to each customer class. The tariff mechanism will be subject to an annual review and reconciliation in accordance with 66 Pa.C.S. § 1307(e). Such annual review and reconciliation will be scheduled to coincide with the submission of the “Smart Meter Progress” annual report outlined in Section B.1 above.

 As permitted by the Implementation Order, Duquesne proposes to recover the costs of its SMP through a SMC. As described in DLC Ex. A, at 37:

The proposed SMC is designed to recover smart meter plant in service (PIS) and operating expense on a forward looking basis with quarterly filings and an annual reconciliation. This forward-looking mechanism will align revenue with the timing of expenditures. Under the SMC, the rates paid by its customers in a given quarter will be based on the applicable smart meter revenue requirement (SMRR) projected for that quarter using estimated expenses and capital expenditures for the upcoming quarter associated with the meter and support system costs. The SMC rate will be a fixed rate per meter per month calculated by dividing the projected SMRR by the forecast meters and customer bills for the upcoming period.

 No party objects to the proposed SMC. Accordingly, Duquesne should be permitted to recover its SMP costs through an SMC.

 a. Annual Reconciliation and Quarterly Updates

 After the expiration of the Grace Period, Duquesne will continue to file smart meter progress reports on an annual basis. Under its SMP, these reports will be filed on or before December 31st of each year. DLC Ex. A, at 37. Duquesne proposes to submit its annual smart meter reconciliation adjustment to coincide with and support its annual smart meter progress reports (DLC Ex. D, at 8), on or before December 31st of each year. In the reconciliation, the actual revenue requirement will be calculated using actual PIS and expenses. Revenue collected in excess of the Company’s actual smart meter revenue requirement (SMRR) will be returned to customers through a credit against the projected SMRR in the quarter following the reconciliation calculation. Revenue deficits likewise will be recovered in the Company’s rates in the subsequent quarter. All over- and under-recovery calculations will include interest at 6%. DLC Ex. D, at 8. During the 12 months preceding the filing of the annual reconciliation report, Duquesne proposes that the rates paid by its customers in a given quarter will be based on the applicable SMRR projected for that quarter using estimated expenses and capital expenditures for the upcoming quarter associated with the meter and support system costs. The Smart Meter Charge rate will be a fixed rate per meter per month calculated by dividing the projected SMRR by the forecast meters and customer bills for the upcoming period. DLC Ex. D, at 4.

 No party opposes Duquesne’s proposed quarterly adjustment of the SMC, subject to an annual reconciliation. With respect to an annual reconciliation, it is Duquesne’s position (DLC Ex. D-R, at 4) that the reconciliation should reflect the actual timing of when an investment was placed in service and not an average rate base for the period as proposed by the OCA. OCA St. 2, at 9. The OCA agrees with Duquesne that at the time the annual reconciliation of the SMC occurs, the actual timing of the investment over the year should be reflected. As the OCA noted, whether the SMC is adjusted annually or quarterly, it is the annual reconciliation that should account for the actual timing of investment. OCA St. 2-S, at 2. Duquesne will accept annual reconciliation provided that it takes into account projected plant and actual in service dates. DLC Main Brief, at 24.

 In my opinion the consideration of actual, historic plant in service and projected plant in service during the annual reconciliation of the SMC would be similar or analogous to the consideration of historic and projected gas costs in a proceeding under Section 1307(f) of the Code, 66 Pa. C.S. §1307(f). Accordingly, Duquesne should be permitted, as part of the annual reconciliation to calculate the prospective SMC on the basis of historic and projected plant in service.

 Under Duquesne’s SMP, its annual reconciliation would be filed on or before December 31st of this year. Using the procedural schedule for such filings in Section 1307(e) of the Code, 66 Pa. C.S. §1307(e), the hearings would be held by March 1st of each year, and the Commission’s Order would be entered by May 1st of each year. The OTS accepts Duquesne’s proposed annual reconciliation. However, it proposes a different filing and procedural schedule than that embodied in Duquesne’s SMP.

 With respect to the annual reconciliation, the OTS is recommending that the Commission establish a uniform twelve-month reconciliation period ending on June 30th of each year for Duquesne and all other EDCs. OTS St. 1, at 6. Based on the establishment of this reconciliation period, the annual filing would be required on or before August 1st of each year, with the first filing (which, for the first filing, may encompass more than twelve months) to occur by August 1, 2011. OTS further recommends adoption of an annual Commission procedural review schedule that would require hearings be held by October 1st of each year; followed by the Commission’s Order to be issued on or before December 1st of each year; with a tariff effective date one month later on January 1st of the following year. Also, any resulting over-collections or under-collections determined by the reconciliation are to be incorporated into Duquesne’s SMC effective January 1st to be collected or refunded over the next twelve months. *Id.*

 It is the position of the OTS that a uniform filing and review schedule, such as it has proposed, will help promote administrative and judicial efficiency. According to the OTS, the procedural schedule of its recommendation is consistent with Section 1307(e) of the Code, 66 Pa. C.S. §1307(e). Additionally, the OTS believes that its proposed uniform schedule will help avoid conflicts with the annual Section 1307(f) purchased gas costs proceeding and the annual review of the EDCs Energy Efficiency and Conservation Plans. OTS St. 1, at 6-7; OTS Main Brief, at 7-9. Duquesne does not object to the OTS proposed uniform reconciliation filing and review schedule. DLC Ex. D-R, at 8.

 In my opinion the Commission should adopt the uniform reconciliation filing and review schedule proposed by OTS.

 With respect to Duquesne’s proposed quarterly adjustment of the SMC, the OTS accepts Duquesne’s use of January 1, March 1, July 1, and October 1 as the starting point for each quarter. The OTS proposes that Duquesne be required to submit its quarterly reports a minimum of 10 days prior to the commencement of the next quarter whether or not there is to be any change in the SMP. OTS St. 1, at 8-9. It appears reasonable to conclude that the OTS is implicitly accepting Duquesne’s proposal to adjust the SMC on a quarterly basis. Quarterly adjustments of the SMC would be similar to the quarterly adjustments made by local gas distribution companies to their purchased gas cost rates under 1307(f) of the Code, 66 Pa. C.S. §1307(f). Duquesne does not object to the OTS proposed quarterly report filing and adjustment schedule. The OCA continues to oppose quarterly adjustments to the SMC. OCA Main Brief, at 28.

 It is my opinion that the Commission should adopt the SMC quarterly report filing and adjustment schedule proposed by the OTS.

 b. Cost Rate of Debt and Preferred Stock

 According to the OTS, Duquesne proposes to use the cost rates contained in its most recent quarterly financial reports submitted to the Commission at the time of each quarterly SMC filing for the cost rates of debt and preferred stock to be used in the rate of return calculation of the SMC. OTS St. 1, at 12. The OTS notes that this is consistent with its recommendation in this and the other SMP cases. However, the OTS, referencing 52 Pa. Code §§71.1—71.9, further recommends that Duquesne’s identified cost rate of debt and cost rate of preferred stock (obtained from the Company’s most recent quarterly Financial Report submitted to the Commission) should be blended proportionately to determine a composite debt cost rate to be used in the calculation. OTS St. 1, at 12. This recommendation is appropriate and should be adopted by the Commission because it would allow for inclusion of Duquesne’s most current cost rate and best reflect Duquesne’s cost of capital used to finance the rollout of its smart meter technology. OTS Main Brief, at 12-13. Duquesne accepts the OTS’s recommendation on this. DLC Ex. E, at 2.

 No other party appears to have taken a position on this recommendation of the OTS. In light of Duquesne’s acceptance of the OTS recommendation and the absence of opposition to or rejection of the OTS proposal by any other party, it is my opinion that the Commission should accept the OTS proposal for determining Duquesne’s cost rates for debt and preferred stock in calculating the rate of return in the SMC.

 c. Return on Equity

 Duquesne proposes to use the common equity parameters from its most recent proceeding that had an approved return on equity to determine the rate of return. The most recent approved return on equity was established in the Company’s transmission formula proceeding at FERC at Docket No. EL06-109-000. The FERC order established a base return on common equity of 10.9% and a common equity capitalization between 45% and 59%. In combination, adjustments to the common equity share of capitalization due to the FERC order parameters will result in an offsetting adjustment to the debt capitalization component. DLC Ex. D, at 7. According to Duquesne, both the Commission and the OCA were parties to this FERC proceeding. DLC Main Brief, at 27. It is Duquesne’s position that its actual costs and capital structure should be used to the extent possible in order to best align recovery with actual costs and attributes of Duquesne. DLC Ex. E, at 4.

 The OTS and the OCA are the only parties to this proceeding opposing Duquesne’s proposed return on equity.

 It is the position of the OTS that the Commission should calculate a cost rate of common equity for the electric industry and present it in the Quarterly Earnings Report. The Commission and the EDCs would then use this published rate for the common equity cost rate component of the overall rate of return component of their respective SMP recovery mechanisms. This cost rate of common equity would be based upon the Commission’s established barometer group, which would also be used to determine the appropriate capital structure. OTS St. 1, at 13-14.

 According to the OTS, the combination of its recommendations that the Commission calculate both a uniform cost rate of common equity and a uniform capital structure, *infra.*, based on the Commission’s barometer group is appropriate because it properly matches the financial risk associated with the capital structure to the cost rate of common equity within the overall cost of capital calculation. Additionally, applying a Commission-calculated cost rate of common equity as a standard is an established Commission procedure that has been used in distribution system improvement charge (DSIC) proceedings for the water industry. OTS St. 1, at 14-15.

 The OTS rate of return on equity proposal is to apply this same principle to smart meter cost recovery. The OTS notes that a review of Commission publications indicates that the Commission’s Bureau of Fixed Utility Services currently calculates a market-indicated common equity cost range for the electric company barometer group. According to the OTS, from the standpoint of efficiency and uniform fairness for all EDCs, any alternative approaches to determining an appropriate cost rate of common equity that would require either the conduct of a generic proceeding(s) to establish a cost of common equity calculation methodology or the inclusion of mini base rate case rate of return litigation in each EDC’s smart meter proceeding, may be unduly burdensome and time consuming. For this and the other foregoing reasons, the instant OTS recommendation should be adopted by the Commission. OTS Main Brief, at 14-15.

 The OCA objects to Duquesne’s proposed return on equity for the reason that it was part of an overall settlement of Duquesne’s FERC proceeding, and not intended for use in Pennsylvania ratemaking purposes. Instead, the OCA proposes four alternate methods for calculating the return on equity for the rate of return on the SMC.

 First, if Duquesne has had a fully-litigated base rate case within three years of the effective date of the time Duquesne seeks to update its SMC, then the common equity return established in that case should be used for SMC purposes. Second, if more than three years have passed since the Company’s last fully-litigated rate case, Mr. Catlin proposed that the equity return should be based on the most recent “Report on the Quarterly Earnings of Jurisdictional Utilities” (Quarterly Earnings Report) prepared by the Commission’s Bureau of Fixed Utility Services (FUS). OCA St. 2, at 5-6. Third, because of concerns with inconsistency and volatility in electric utility equity returns in the Quarterly Earnings Reports, the OCA proposes that the Commission calculate the return on equity by applying the procedure used in setting an equity return for water utilities that impose a Distribution System Improvement Charge (DSIC), and that the procedure for calculating the return applicable to EDC Smart Meter Charges be the subject of a generic proceeding. Fourth, the OCA proposes that until such time as the Commission establishes the appropriate equity rate of return through a generic proceeding, the return that should be used in calculating Duquesne’s SMC is that which was established in the most recent fully-litigated base rate proceedings among Pennsylvania EDCs, the 2006 (decided in early 2007) rate cases of Metropolitan Edison Company (Met-Ed) (Docket No. R-00061366) and Pennsylvania Electric Company (Penelec) (Docket No. R-00061367). In those cases, the Commission authorized a return on equity of 10.1%. OCA St. 2, at 5-7.

 With respect to the return on equity to be used in the rate of return calculation in the SMP, the OCA recommends use of 10.1% in this proceeding because Duquesne has not had a litigated rate case since 2004 and there has been no generic proceeding to establish a method for calculating an appropriate rate of return applicable to smart meter charges. OCA Main Brief, at 25, 28.

 Duquesne agrees with OCA’s position insofar as it proposes using an actually determined ROE for a utility. However, Duquesne is not willing to limit the rate of return on equity to that determined in litigated rate cases. Rather, it proposes that any determined return on equity that results from fully-litigated or settled rate cases be used. DLC Ex. E, at 4-5. Although Duquesne questions whether the OCA’s proposed three-year time limit is appropriate, it appears willing to accept that time period as being reasonable. DLC Main Brief, at 27.

 Duquesne has not accepted the OCA’s proposal to use the rate of return found reasonable in a litigated rate case within three years of the date Duquesne proposes any update to the SMC. Duquesne modified the OCA’s recommendation by adding the reference to rate cases that are settled within three years of any SMC update. Having modified the OCA position, Duquesne then asserts that its FERC base rate case meets the OCA’s requirement. DLC Main Brief, at 27. The referenced FERC case does not meet the OCA’s position, as stated by the OCA. It only meets Duquesne’s modification to that position.

 In determining an appropriate return on equity to be used in the rate of return calculation of Duquesne’s SMC, all parties, including Duquesne, have proposed the use of a proxy figure. Duquesne has not had a fully-litigated base rate proceeding before the Commission in several years. Thus, there is no recent Commission-determined reasonable return on equity for Duquesne available for consideration here.

 Duquesne’s proxy is its 10.9% approved return on equity in a settled FERC proceeding in which, it asserts, the Commission and the OCA participated. The OTS’s proxy is the equity return published for electric utilities in the Commission’s Quarterly Earnings Report. The OCA’s preferred proxy is the 10.1% return on equity found in the most recently litigated base rate case of Pennsylvania electric utilities, *i.e.*, those of Metropolitan Edison Company and Pennsylvania Electric Company.

 I do not approve of the use of settled Pennsylvania EDC base rate cases for the reason that seldom do such cases result in a Commission determination on a reasonable return on equity. The parties to a settled base rate case can mathematically calculate the “indicated” return on equity resulting from the terms and agreements of the settlement. But rarely do such cases include a Commission determination on the return on equity. I do not accept Duquesne’s 10.9% return on equity from its settled FERC proceeding. In my opinion a figure accepted by an adjudicatory body in approving a settlement is not entitled to the same weight as a return on equity rate determined to be reasonable following full litigation of that issue.

 I do not accept the recommendation for a generic proceeding to determine a return on equity, as proposed by both the OTS and the OCA. I am not convinced that such a procedure would be appropriate for this charge.

 In my opinion, any Commission-determined rate of return on equity in a fully-litigated rate case of an EDC should be the preferred return on equity to be applied in the SMC. The OCA submits that if such a rate case were concluded within three years of the date Duquesne proposed to update its SMC, that would be the appropriate equity return to apply to the SMC. I think the three-year period referenced by the OCA can be used as a starting point. However, a period of time within three years of April 1, 2010, would include the time from and after April 1, 2007, and the volatility in the financial markets that occurred during that time. It is far from certain that an equity return found reasonable in the Spring of 2008 at the conclusion of a fully-litigated base rate case would be reasonable for an SMC charge as of April 1, 2010.

 It is my opinion that the return on equity to be used in Duquesne’s rate of return calculation of its SMC should be determined as follows: First, the primary consideration should be the return found reasonable in its most recent fully-litigated base rate proceeding, provided such proceeding was concluded within three years of the effective date of the time Duquesne seeks to update its SMC. Second, this return on equity should be compared to the equity returns for electric utilities in the Quarterly Earnings Report. If the equity returns in the Quarterly Earnings Report deviate more than 0.50% above or below the equity return from the most recent fully-litigated rate case, the lesser of the determined or published equity return shall be used for the rate of return calculation for the SMC for the next quarter. In the event Duquesne has not had a fully-litigated rate case within three years of the effective date of a change in its SMC, then the equity returns for electric utilities in the Quarterly Earnings Report shall be used as a proxy for the equity return in the rate of return calculation of the SMC, and continue to serve as a proxy for that calculation until such time as the Commission determines a reasonable return on equity for Duquesne in a fully-litigated rate case.

 d. Capital Structure

 Duquesne proposes using its actual equity capitalization so long as it falls within a zone of reasonableness of 45%-59%. DLC Ex. D, at 6-7. According to Duquesne its actual equity ratio is 67%, as shown on OTS Ex. 1. However, Duquesne proposes that 59% be used so long as its actual equity capital structure is above that level. DLC Main Brief, at 29.

 The OTS and the OCA disagree with the capital structure proposed by Duquesne in this proceeding. OTS Main Brief, at 15-16; OCA Main Brief, at 23-28. No other party has taken a position on this issue.

 It is the position of the OTS that the Commission should use a representative capital structure for all EDCs in the recovery of smart meter costs that is based upon the barometer group in the Quarterly Earnings Report. OTS St. 1, at 15. As such, the Commission would calculate the appropriate capital structure and publish it in the Quarterly Earnings Report. Until the next Quarterly Earnings Report establishes the capital structure for smart meter cost recovery, the Commission could identify the capital structure to be utilized in its Order resolving this proceeding. OTS Main Brief, at 15-16.

 The OTS asserts that the use of such a representative capital structure is important as it would be based upon the same barometer group that would be used to determine the appropriate cost rate of common equity – thus assuring that the representative capital structure properly matches the financial risk associated with the corresponding cost rate of common equity. OTS St. 1, at 15. Further, the OTS notes, some electric companies have capital structures that are not representative of the industry norm. OTS St. 1, at 15. As such, using a uniform representative capital structure will provide neither an advantage nor a disadvantage to any EDC or its ratepayers. OTS St. 1, at 15; OTS Main Brief, at 15-16.

 The OCA objects to Duquesne’s proposed 59% equity ratio because it, like Duquesne’s proposed return on equity of 10.9%, is from the same settled FERC proceeding. Additionally, the OCA references a provision in the settlement proceeding approving Duquesne’s merger with the Macquarie Consortium at Docket No. A-110150F0035., which provides, as follows:

Duquesne shall not request a capital structure for ratemaking purposes which is outside of a reasonable range of that used by comparable companies. In any future base rate proceeding, Duquesne must demonstrate that its claimed common equity ratio is reasonable and in the best interests of its customers. (Settlement, Paragraph III.B.3.a.)

 The evidence of the OCA is that the common equity ratios of comparable electric utilities range from a low of 46.4% to a high of 58.6%.[[3]](#footnote-3) OCA St. 2, at 4, 7-8; OCA St. 2, Schedules TSC-1 and TSC-2. It is the OCA position that the equity ratio proposed by Duquesne is outside the reasonable range used by comparable companies, and thus, not consistent with the terms of the Settlement in the Macquarie merger case. OCA St. 2, at 7-8; OCA Main Brief, at 26. As an alternative to the Company’s proposal, and for use until a more appropriate equity ratio for Duquesne can be established in a distribution base rate case, OCA recommends, as it did with the cost of equity, that the equity ratio utilized in the 2006 Met-Ed and Penelec cases be used. There the Commission approved a 51% equity ratio. OCA St. 2, at 8.

 I do not agree with the position of the OTS that the Commission develop a representative capital structure applicable to all EDCs in the recovery of smart meter costs. The OTS made no showing that the use of a representative capital structure would result in each EDC recovering its reasonable and prudent smart meter costs, a result permitted by Section 2807(f). Further, while the Commission has used hypothetical capital structures in rate cases, such a use has been predicated on evidence tending to show that the actual capital structure of a particular utility is so far beyond the range of a reasonable capital structure that the utility’s actual capital structure is unreasonable for ratemaking purposes. This is not the basis of the OTS recommendation. Rather the OTS makes its proposal for a representative capital structure to be consistent with its proposed use of the return on equity published in the Quarterly Earnings Report. In my opinion, this is not a sufficient basis to reject Duquesne’s proposed capital structure in this case.

 I also disagree with the OCA’s initial position. As this is not a base rate proceeding, the “limitation” in the Macquarie settlement petition is not applicable to Duquesne’s claimed capital structure in this case. For reasons similar to my rejection of the OTS proposal to use a representative capital structure, I reject the OCA alternate proposal to use the Met-Ed/Penelec capital structure. There is no showing that the use of a 51% equity ratio instead of Duquesne’s claimed 59% would permit Duquesne to recover all of its reasonable and prudent smart meter costs.

 Duquesne notes that OTS Ex. 1-R, which shows an equity ratio for Duquesne of 67%, demonstrates the reasonableness of its claim for the use of 59% equity ratio in this proceeding. Further, Duquesne proposes to continue to use a 59% equity ratio in smart meter proceedings, as long as its actual equity ratio is above that level. DLC Ex. D, at 6-7; DLC Main Brief, at 29. In my opinion, Duquesne has established the reasonableness of the use of its claimed 59% equity ratio for use in future smart meter cost recovery proceedings, and the Commission should permit the use of the 59% equity ratio so long as Duquesne’s actual equity ratio exceeds that level.

 6. Data Access

 It is Constellation’s position that the Commission must direct Duquesne to include in its final SMP the capabilities outlined by the Commission in its Implementation Order. Constellation Main Brief, at 9-12. Duquesne opposes this proposal. It is Duquesne’s position that the Commission’s extended meter capabilities were listed with the recognition that these capabilities go beyond the requirements of Act 129 and may be cost-prohibitive, and ultimately waived or amended. Implementation Order, at 16-17, 29-31; Duquesne Reply Brief, at 5-6.

 Constellation also requests that Duquesne be ordered to provide web access to price and consumption information. Constellation Main Brief, at 13-14. Duquesne is committed to using the Grace Period to working with the EDEWG and evaluating solutions to EDI and internet access to data and report to the Commission at the June 30, 2011 milestone report. DLC Ex. C-R, at 5.

 In its Implementation Order, the Commission noted that there are different means of providing customers with direct access to price and consumption information, *e.g.*, the use of home area networks (HANs) or through the internet. The Commission did not, however, require in that Order, the use of any particular technology to provide such access. Implementation Order, at 22-23. In my opinion, there is no basis in either Act 129 or the Implementation Order for directing Duquesne to use any particular technology for granting customers direct access to price and consumption information. Duquesne has committed to evaluating such access and to submitting a report on this matter to the Commission. Accordingly, at this time, I believe it would be premature to direct the use of a particular technology, and, therefore, reject Constellation’s position.

 It is also Constellation’s position that the Implementation requires Duquesne to provide meters to all customers capable of furnishing 15 minute interval data on a daily basis. According to Constellation, Duquesne’s SMP does not include a provision for providing this information to customers. Constellation St. 1, at 8. Constellation, however, does not request that Duquesne be directed to include such a capability in its approved SMP. It requests that Duquesne be ordered to provide such information on an hourly basis. At the least, Constellation requests that Duquesne be ordered to provide this information on a daily basis. Constellation St. 1, at 9-10; Constellation Main Brief, at 14-17.

 Duquesne does not agree with Constellation that such detail is necessary. It is Duquesne’s experience that such level of data is not utilized in the industry; PJM utilizes hourly data for the hourly pricing, demand peaks (1 Coincident Peak, 5 Coincident Peak), scheduling, and payment. DLC Ex. C-R, at 6-7; Tr. 98-99. Further, 15 minute interval data creates communication, backhaul, access and storage issues, as well as incrementally increases the costs of the supporting communication, network, and system infrastructure. Nonetheless, Duquesne intends to address this issue in its July 1, 2010 filing. DLC Ex. C-R, at 6-7; Tr. 97-98. Duquesne asserts that the Commission does not need to decide that issue in this proceeding as Duquesne has committed to analyze further the costs and benefits of the extended capabilities of which the 15 minute interval data is included, and will provide such information in its July 1, 2010 filing. Thus, Duquesne asserts, Constellation’s requested findings regarding 15 minute interval data, available on an hourly basis should be denied at this point as premature. Duquesne Main Brief, at 13, 18-19; Duquesne Reply Brief, at 8.

 In my opinion there is no basis for directing Duquesne to provide 15 minute interval data on an hourly basis, at this time. This is something that Duquesne will be studying and will be included in its July 1, 2010 filing. A determination to require such a provision in Duquesne’s SMP should be deferred pending evaluation of the information to be submitted by Duquesne. Additionally, I do not believe it necessary to include Constellation’s alternative request in any order granting approval to Duquesne’s SMP. The Implementation Order directs the provision of 15 minute interval data on a daily basis. However, depending on the results of the cost/benefit study, this is one of the additional smart meter technologies that has the potential of being waived by the Commission. Implementation Order, at 28-31.

 As I understand it, Constellation is withdrawing its request for monthly updates on the number of smart meters installed by customer class, and that it receive, no later than 48 hours, validated aggregate customer consumption data, by customer class for every hour of every day, in light of Duquesne’s position that this information is beyond the scope of this proceeding and is more appropriate to Duquesne’s POLR proceeding. Constellation St. 1, at 12; DLC Ex. C‑R, at 7. Constellation intends to pursue such matters in Duquesne’s recently filed POLR proceeding. Constellation Main Brief, at 17-19.

 The position of the DEP with respect to Duquesne’s SMP is that the Commission should require Duquesne to deploy smart meters that enable a HAN. DEP Main Brief, at 6-8. Duquesne’s position on DEP’s proposal is similar to its response to Constellation on this issue. Duquesne is evaluating this matter and it will be addressed in its report to the Commission. While that evaluation has yet to be completed, Duquesne plans to purchase meters that will enable communications with HAN devices. However, it is Duquesne’s position that since HANs are located inside the home and on the customer side of the electric meter, this device is one for customers to purchase directly or through their authorized third party. The HAN is not necessarily a monopoly service nor can it only be supplied by a utility. Rather, it’s an in-home device. However, the Commission does not need to decide this issue at this time. Duquesne Reply Brief, at 6-7.

 As I did with respect to Constellation’s request on this matter, I am rejecting the position of the DEP on requiring the installation of HAN smart meters, at this time.

 7. Milestones and Implementation Schedule

 It is the position of the DEP that the Implementation Order provides the Grace Period in which to evaluate smart meter technology and install the smart meter network. Thus, argues DEP, at the conclusion of the Grace Period, the smart meter network must be fully installed so that smart meters providing all the functions listed in Act 129 and those that have not been waived by the Commission can be installed. However, the DEP notes, Duquesne’s SMP and petition state that Duquesne will complete the installation of the smart meter network by October 1, 2012, complete the rollout of 8,000 smart meters by December 31, 2013 and complete system-wide deployment of smart meters by December 31, 2018. See Petition at 12 and Plan at 13. However, Duquesne’s Smart Meter Plan also states that the “dates are approximate” and that it is simply Duquesne’s “intent” to meet the 15 year deployment schedule provided by Act 129. DEP references Duquesne’s Petition at 10, and the SMP, DLC Ex. A, at 37. DEP Main Brief, at 8-9.

 Duquesne agrees with DEP that it is important for it to remain on schedule. However, it argues, the dates have been set forth in Duquesne’s Plan as “approximate,” because there are many matters that need analysis, evaluation, and decision making, referencing its Main Brief at 8-9, 11-12. Duquesne further notes that like any large scale project with numerous interdependent components, the schedule proposed in this plan will not be exact. Some matters will be resolved sooner than expected – others longer than expected. It is in everyone’s best interests, including customers, to allow some flexibility so that accurate and cost effective decisions are made rather than making a decision due to self-proposed dates. Duquesne agrees to abide by the schedule set forth in its Plan, with the caveat that if delay occurs that affects the schedule Duquesne has proposed, it will notify the Commission and, if appropriate, request any necessary relief. Duquesne Reply Brief, at 3-4.

 Intially, I note that the DEP did not present any witness proposing any change, modification, revision, etc., to Duquesne’s SMP. Its position in this proceeding was set forth for the first time in its Main Brief. This deprived all parties from testing the reasonableness of its position during the hearing or of addressing it in their respective Main Briefs. As a result, Duquesne was not able to address the DEP’s position until the filing of its reply brief. In rate proceedings, the Commission has held that proposed adjustments of a party appearing for the first time in briefs should be rejected because the other parties have been denied the opportunity to question and test the premises of the adjustment. *See, e.g.* *Pa. P.U.C. v. UGI Corporation*, 58 Pa. P.U.C. 155, 202 (1984); *Pa. P.U.C. v. Pennsylvania Power & Light Co.*, 57 Pa. P.U.C. 559 (1983); and *Philadelphia Electric Company*, Docket No. R-811626, May 21, 1982. For the same reasons, the adjustment proposed by the DEP with respect to the milestones and implementation schedule of Duquesne’s SMP should also be rejected.

 8. Stakeholder Involvement

 Referencing OCA St. 1, at 6-9, the DII have proposed that, with respect to the cost/benefit analysis to be preformed and submitted to the Commission by Duquesne on July 1, 2010, as part of its SMP under consideration here, that some provision be made for interested stakeholders to have an adequate opportunity to review and comment on the Company's cost benefit analysis. DII Main Brief, at 12-13. Duquesne’s response is that it has and will continue to consider stakeholder input through the SMP process, and will ensure to include stakeholders, including DII, at the appropriate points in the process. Duquesne Main Brief, at 31; DLC Ex. C‑R, at 10.

 Duquesne hasn’t rejected the DII request for the opportunity to review and comment on Duquesne’s cost/benefit analysis to be submitted to the Commission on July 1, 2010. At the same time, Duquesne hasn’t accepted that request. Although it agrees to include stakeholders at appropriate points in the process, it gives no indication as to what are the appropriate points in the process for stakeholder involvement. It is clear that it is the stakeholders among the customers who would have a direct interest in the cost/benefit analysis to be submitted by Duquesne, as it is the customers who will ultimately bear the costs of the various components and capabilities included in the SMP. Accordingly, I believe that they should have the opportunity to review and comment on the cost/benefit analysis to be submitted by Duquesne prior to any Commission action with respect to that analysis. At a minimum, I believe the stakeholders should be granted 60 days from the date of filing of the cost/benefit analysis in which to review and submit comments thereon to the Commission.

 9. Miscellaneous

 The Commission should approve Duquesne’s SMP, as adjusted, modified, or revised specifically in this Decision.

V. CONCLUSIONS OF LAW

 1. The parties to and subject matter of this smart meter plan proceeding are properly before the Commission.

 2. Duquesne, the party seeking affirmative relief from the Commission, has the burden of proof.

 3. Duquesne has failed to satisfy the burden of proving that its proposed SMP should be approved by the Commission, as filed.

 4. Adjustments, modifications, revisions to the proposed SMP made for the first time in briefs should be rejected.

 5. Any adjustment, modification, revision to the proposed SMP which were made by any party to this proceeding and accepted by Duquesne should be included in a revised SMP to be filed with the Commission

 6. The Commission should approve Duquesne’s acceptance of adjustments, modifications, revisions, etc., to the proposed SMP made by the several parties to this proceeding.

 7. Duquesne’s proposed SMP should be further modified in accordance with this Decision.

 8. Duquesne should be required to file a revised SMP consistent with its acceptance of modifications proposed by the several parties and as further modified by this Decision within 30 days of the Commission’s Order in this proceeding.

1. ORDER

 THEREFORE,

 IT IS ORDERED:

 1. That the Petition of Duquesne Light Company for approval of its smart meter procurement and installation plan is granted.

 2. That the smart meter procurement and installation plan of Duquesne Light Company is approved, subject to the following:

 a. That Duquesne Light Company’s acceptance of specific modifications to its smart meter procurement and installation plan is approved;

 b. That Duquesne Light Company’s estimated costs for Component 1 and Component 2 of its smart meter procurement and installation plan are approved, except as to those costs pertaining to the last two milestones of Component 2, the implementation of network base software, network systems, and meter pilot hardware costs;

 c. That Duquesne Light Company shall submit its estimated costs for the final two milestones of Component 2 of its smart meter procurement and installation plan in subsequent filings, subject to review and comment by all interested parties and approval of the Commission;

 d. That Duquesne Light Company include in the report to be submitted on December 31, 2010, a description of the efforts undertaken to locate and identify less expensive meters for use in its smart meter procurement and installation plan and vendors of any less expensive meters so found, along with a detailed explanation why any such meter is or is not acceptable or compatible with the smart meter procurement and installation plan, and, as to those meters found acceptable or compatible with the plan, whether Duquesne intends to install such meters as part of its plan;

 e. That Duquesne Light Company, having agreed to do so, shall attempt to identify in its cost/benefit analysis to be submitted on July 1, 2010, the benefits separately by customer class as proposed by the Office of Consumer Advocate;

 f. That Duquesne Light Company shall allocate the common costs of the smart meter deployment among the customer classes in proportion to the meter costs directly allocated to each customer class as proposed by the Office of Small Business Advocate;

 g. That Duquesne Light Company shall file its first smart meter procurement and installation plan reconciliation on August 1, 2011, for the initial period, which might be more than 12 months, ending on June 30, 2011, and thereafter on August 1 of each year, for the preceding 12-month period ending June 30 of each year;

 h. That Duquesne’s annual smart meter procurement and installation plan reconciliation may include in the calculation of the prospective smart meter charge the historic and projected plant in service;

 i. That, until such time as Duquesne Light Company has its return on equity determined by the Commission in a fully-litigated base rate proceeding, the return on equity for the rate of return calculation for the smart meter charge should be equity returns for electric utilities published by the Commission’s Bureau of Fixed Utility Services in the Quarterly Earnings Report;

 j. That, upon Duquesne Light Company’s return on equity being established by the Commission in a fully-litigated base rate proceeding, the return on equity for the rate of return calculation for prospective smart meter charges shall be as determined by the Commission; provided further;

 i. That the Commission’s determined return on equity is not more than three years prior to the effective date of any change in the smart meter charge;

 ii. That the Commission’s determined return on equity shall be compared to the equity returns for electric utilities as published in the Quarterly Earnings Report;

 iii. That if the equity returns in the Quarterly Earnings Report deviate more than 0.50% above or below the equity return from the most recent fully-litigated base rate case, the lesser of the determined or published equity return shall be used for the rate of return calculation for the SMC for the next quarter;

 k. That Duquesne Light Company’s capital structure for the rate of return calculation in the smart meter charge shall include a 59% equity ratio as long as its actual capital structure has an equity ratio greater than 59%.

 3. That any recommendation made by any party to this proceeding which was not accepted by Duquesne Light Company or included in Ordering Paragraph 2, above, is rejected.

 4. That, within 30 days of the entry of the Commission’s Order in this proceeding, Duquesne Light Company shall file a revised Smart Meter Plan complying with the terms of that Order.

 5. That, within 30 days of the entry of the Commission’s Order in this proceeding, Duquesne Light Company shall file a tariff or tariff supplement as may be required to implement the revised Smart Meter Plan, and designed to recover the approved costs thereof through a smart meter charge that shall be in compliance with the approval of the smart meter procurement and installation plan pursuant to Ordering Paragraph 2, above.

Date: January 21, 2010 

1. This acronym is undefined in either Duquesne’s main or reply brief. For the purpose of this Decision, I am presuming that it refers to “electronic data interchange.” [↑](#footnote-ref-1)
2. It is Duquesne’s position that these dates are approximate, in light of many factors, including Commission approval, uniform decisions, progress, etc. Thus, the filings will be made “on or about” the dates proposed. Tr. 105; DLC Ex. C-R, at. 9. [↑](#footnote-ref-2)
3. In its Main Brief, Duquesne incorrectly gives the figure of 58.9% for Aliant Energy in OCA Schedule TSC-2. [↑](#footnote-ref-3)