With respect to the Vice Chairman's third question, the Companies believe that rate design can and should vary among customer classes. The Companies plan to continue to implement time of day, demand based and seasonal pricing based upon customers' unique characteristics in order to send them appropriate price signals. Sound rate design, both for large and small customers, needs to be guided in principle by cost causation. In the case of the Companies' delivery systems, the costs should be allocated to customer classes based on their level of use of the system (i.e. Cost of Service Study). Rates to recover commodity based costs (i.e. generation charges), should reflect the market in which the Companies obtain the supply. However, unless and until the Companies' existing generation rate caps are eliminated, customers are not likely to conserve significantly since their retail price for generation is disconnected from the underlying wholesale cost of such generation.

OCA addressed the Vice Chairman's questions in the following manner. OCA noted that if fixed charges are set higher at a given overall revenue level, and if these increases are accompanied by lower energy charges, consumers will have less incentive to conserve.

With respect to the Vice Chairman's first question regarding revenue decoupling models, OCA noted four significant concerns:

1) Unless revenue decoupling is based on a complicated methodology that considers weather, it will insulate utility revenues from variations due to weather as well as other factors. This would be a significant reduction of risk to the utility, and should be accompanied by a reduction in the return on equity or change in capital structure.

2) Revenue decoupling will tend to increase the complexity of regulation, particularly in unbundled states.

3) Revenue decoupling is not an end it itself. If tried, it should be part of a comprehensive conservation and energy efficiency program.

4) Revenue decoupling will result in rates increasing because of reduced consumption. This is a very mixed and confusing signal to customers, as it may at first appear that the less you use the more you pay. Any revenue decoupling thus requires significant consumer education.

In general, to the extent that customers have discretionary usage, high customer charges discourage conservation and are frustrating to consumers. It is important to recognize, though, that simply increasing usage charges will not necessarily have the effect of incenting conservation efforts by many low income customers. Low-income energy consumption can be divided into two different categories: (a) discretionary consumption; and (b) nondiscretionary consumption. Nondiscretionary consumption is by far the biggest block of the two. Energy usage in low-income households, however, is generally driven by factors largely outside of the ability of the household to control. The age and efficiency of the dwelling unit, the size of the dwelling unit, the number of household members, and the extent to which household members are home during the day are all factors that are beyond the household's ability to control. Moreover, the condition of the physical structure, including not only the structural integrity of the unit but factors such as the location of an apartment within a multifamily structure, the condition of the HVAC system in any particular home, and the orientation of a home or apartment *vis a vis* direct sunlight, are all factors beyond a household's ability to control. The largest use of electricity in the average U.S. household is for appliances (including refrigerators and lights), which consume approximately two thirds of all the electricity used in the residential sector. Refrigerators consume the most electricity (14 percent of total electricity use for all purposes), followed by lighting (9 percent). Low-income households are significantly conserving

already in these two areas, however. While low-income households have less efficient usage for lighting and electric appliances due to older and less efficient equipment, the primary driving force behind total consumption of electric appliance and lighting is the number of square feet in the home.

Pennsylvania needs to be very careful about the impact on low-income customers from raising rates as a mechanism to create incentives for pursuing energy conservative behavior. A careful balancing is needed. Moving substantial cost recovery into fixed charges would eliminate the incentive that does exist for low-income customers to pursue those measures that are both technically and economically available, and that can affect their discretionary use. In addition, moving substantial cost recovery into fixed charges would disproportionately place the recovery of a utility's cost of service on low-use customers. These low-use customers tend, also, to be low-income customers. Due to the large non-discretionary usage of low-income households, and the substantial barriers that impede conservation investments by these households, going too far in the other direction also would not be appropriate.

With respect to the Vice Chairman's third question, OCA noted that rate designs do vary among customer classes. However, larger customers may in a better position than smaller customers to shape their load and alter their energy usage, and it would therefore be more economical for larger customers to install sophisticated meters.

MEIUG and PICA and IECPA addressed the Vice Chairman's questions in the following manner. The first principle of rate design should be that, to the extent feasible, rates should reflect cost of service. This means that residential rates should generally include a customer charge and a kWh charge. In the case of POLR supply service, the cost of power includes both an energy cost component and a capacity charge in the form of a kW demand charge. It would be contrary to economic pricing principles to ignore the underlying wholesale pricing structure in the development of POLR supply

rates. To ensure that such principles are addressed, demand charges should be reflected in POLR default service pricing. Rate designs should vary by customer class. There are substantial cost differences that must be recognized in the design of rates for individual customer classes.

With respect to the Vice Chairman's first question, MEIUG and PICA and IECPA state that the first principle of rate design should be that, to the extent feasible, rates should reflect cost of service. This means that residential rates should generally include a customer charge and a kWh charge. If residential customers are demand metered, it is also appropriate, based on generally accepted and reasonable cost of service methodologies, to incorporate a kW demand charge in the rate design, reflecting the maximum 15 minute demand during the month or during the on-peak period (if time differentiated pricing is implemented). If rates are set based on cost of service, customers will receive proper and efficient price signals that will guide their consumption. Such rates do not either discourage or encourage conservation, but rather, encourage efficient and economic use of energy. While it is true that, all else being equal, higher kWh rates will result in lower consumption (and thus 'conservation"), it does not follow that this is an optimal outcome. If off-peak energy, for example, is lower cost than on-peak energy, efficiency is not promoted by raising the off-peak rate simply to discourage usage. If rates are based on cost, including cost based fixed charges where justified, customers will face prices that are consistent with the costs of providing each component of electric service, and these customers will make rational consumption decisions.

With respect to the Vice Chairman's second question, MEIUG and PICA and IECPA believe that it is appropriate to design rates based on cost of service. In the case of POLR supply service, the cost of power includes both an energy cost component and a capacity charge in the form of a kW demand charge. It would be contrary to economic pricing principles to ignore the underlying wholesale pricing structure in the development of POLR supply rates. This means that demand charges should be reflected

in POLR default service pricing. In particular, where the utility continues to collect stranded costs from customers via a CTC charge, the combined CTC and generation rate should reflect both demand and energy charges.

With respect to the Vice Chairman's third question, MEIUG and PICA and IECPA state that rate designs should vary by customer class. There are substantial cost differences that must be recognized in the design of rates for individual customer classes. Customers on large power rates typically have much higher load factors than residential and small commercial customers. They also take service at primary and transmission voltages, which means that it costs less to obtain the POLR supply for these customers. It would be both economically inefficient and inequitable to ignore these cost differences among customer classes in the design of rates. Though, ideally, each rate should be comprised of customer, demand, and energy charges, residential and small commercial customers do not usually have demand meters and therefore, it is not feasible to include a demand charge for these rates. For larger customers with demand meters, it is appropriate to include a demand charge in the rate design, reflecting the underlying cost structure of the service.

PennFuture addressed the Vice Chairman's questions in the following manner. Fixed charges for distribution services discourage conservation of energy, compared to recovering the same revenue through energy charges; fixed charges are not appropriate vehicles for recovering most distribution costs, since many distribution costs vary with load limits and energy use. Demand charges for distribution service discourage conservation of energy, compared to recovering the same revenue through energy charges. Large commercial and industrial distribution rates should reflect the contribution of load to sizing of equipment and aging of distribution equipment, with most of the costs recovered through energy and coincident-peak charges, rather than fixed customer charges or demand charges driven by the customer's own peak.

With respect to the Vice Chairman's first question, PennFuture believes that fixed charges for distribution services discourage conservation of energy, compared to recovering the same revenue through energy charges. The greater the portion of the bill recovered through fixed charges, the lower the energy charges, the less the customer saves from energy conservation, the lower the incentive to conserve. The effect on the level of energy charges is most pronounced for residential and small or medium commercial customers, where fixed charges tend to be the largest percentage of total distribution revenues. Fixed charges are not appropriate vehicles for recovering most distribution costs, since many distribution costs vary with load levels and energy use. Distribution costs are driven by a combination of the following factors:

- the coincident peak load on each piece of equipment;

  high short-term loads, even if they are below peak, because they contribute to the heating that reduces the load-carrying capacity of the equipment in the peak hour and keeps the equipment from cooling off overnight;

  energy use, especially in the hours and days immediately preceding high peaks. Summer energy use in particular tends to shorten the life of distribution equipment by overheating and degrading the insulation.

If the Commission wishes to decouple revenues from sales levels, the most direct way to do so would be to set up a decoupling mechanism (also frequently called a revenue adjustment mechanism (RAM)). Typically, a RAM would consist of the following components, all set by the Commission:

A base distribution revenue target for each company (or perhaps each class).

- Rules describing how that target would change with various indices, potentially including customer

number, inflation, and some measure of economic activity. The objective would be to approximate the revenues that the company would normally expect to receive. In the short run sales tend to increase with customer number, usage trends and the local economy. In the longer term, inflation tends to increase utilities' costs, leading these companies to file rate cases. If the Commission intends that the decoupling delay rate-case filings, perhaps as part of performance-based ratemaking, inflation may be a significant consideration. If the Commission is content with more-frequent rate filings, inflation should probably not be reflected in the adjustments to the target. Decoupling will automatically provide a form of weather normalization; if the Commission wants to avoid that outcome, it can adjust the revenue target for actual weather.

- The conditions under which the decoupling plan would be terminated, which might include a severe economic downturn, or dramatic changes in energy use per customer.

The rules for the computation of the RAM balance, including the time period of each computation (e.g. monthly, quarterly), whether the RAM will be computed by class or in total, and whether interest will accrue on the balance. The importance of interest will depend in large part on how long the balance is allowed to accrue.

The Commission could determine in advance how the RAM balance would be rolled into rates (through a periodic rate adjustment or through deferral to the next rate case), or it can leave that issue to be determined once the magnitude of the balance and other factors are known. For example, if power costs are high, and the RAM balance is positive (i.e. ratepayers owe the shareholders), the Commission might prefer to defer an adjustment. If the RAM balance is negative, the Commission may choose to flow it through in a time of high power costs, to moderate total bills. Or if power costs drop, that might be a good time to flow through a positive balance. Proper design of a RAM is not

simple. The Commission might decide in this docket to initiate a proceeding to develop a decoupling mechanism for the Companies; attempting to develop the mechanism within a rate case is probably ill-advised.

With respect to the Vice Chairman's second question, PennFuture states that demand charges greatly reduce the incentive to conserve, and should be phased out. Like customer charges, demand charges for distribution services discourage conservation of energy, compared to recovering the same revenue through energy charges. Demand charges are determined by the customer's individual maximum demand, not contribution to high cost peak hours. Therefore, demand charges are not very effective at reflecting costs or at encouraging customers to shift loads off high-cost hours. Those costs that are driven by peak demands and energy are best reflected in peak period or super-peak energy charges, not demand charges. In addition, demand charges in time-of-use rates should be reduced, and the cost recovery should be transferred to peak-period energy charges. This approach will encourage customers to reduce usage in high-cost, high-load periods, when transmission and distribution equipment is heavily loaded. For customers without time-of-use meters, distribution costs should continue to be recovered through energy charges rather than being transferred to demand or customer charges.

With respect to the Vice Chairman's third question, PennFuture believes that properly designed, real-time market prices charged to large C&I customers by the Companies or competitive suppliers will give large customers an incentive to conserve equal to the cost of market supply. The supply service charges do not include the incremental costs on the distribution system due to increased load. Hence, large C&I distribution rates should also be structured to reflect the contribution of load to the sizing and aging of distribution equipment, with most of the costs recovered through energy and coincident-peak charges, rather than fixed customer charges or demand charges driven by the customer's own peak. Some distribution equipment close to the large customer, and typically sized to accommodate the customer's load, might be charged on a non-

coincident billing demand. The fact that distribution charges are a smaller share of the bill for the large C&I customers than for smaller customers means that appropriate distribution rate design is less important for the larger customers, but there is no reason not to structure all rates as efficiently as practical.

The Commercial Group addressed the Vice Chairman's questions in the following manner. The importance of sending a price signal to conserve energy is generally a positive objective but must be balanced with the importance of setting rates based on cost and minimizing cross-subsidies. Revenue decoupling mechanisms should be avoided. Such mechanisms add complexity to the ratemaking process, transfer revenue risk from utilities to customers, and are a form of single-issue ratemaking that can result in rate increases determined solely by usage reductions, without regard to other factors, some of which could, if properly considered, move rates in the opposite direction from the single-issue change. While it is important to retain equitable relationships across rate classes, rate designs should vary among customer classes. This is generally a function of the differing costs to serve various customer classes, as well as the metering technology required to send an improved price signal.

In commercial customer classes, setting fixed charges below fixed costs and recovering the shortfall from the energy charge has the undesirable result of causing larger and higher-load-factor customers to pick up the fixed-cost responsibilities of smaller and lower-load-factor customers. This is particularly problematic given that the relative differences in electricity usage among commercial (and industrial customers) are driven largely by the differing requirements of their respective businesses, as opposed to individual consumption preferences. Further, in the specific case of designing *distribution* charges for commercial customers, such a policy would create a separate subsidy problem associated with substituting energy charges for demand charges. So also, assuming charges are properly aligned with costs at the outset, shifting cost recovery responsibility from demand charges to energy charges will simply result in a

cross-subsidization within the rate schedule, as higher-load factor customers are forced to pick up the fixed costs of lower-load-factor customers.

With respect to the Vice Chairman's first question, the Commercial Group states that the question implies that in the absence of fixed charges, energy charges would be higher. However, this is not always the case, as distribution rates for commercial and industrial customers are often structured without an energy component. This is appropriate, as distribution costs are strictly customer-related and demand-related. The fixed charge component of a customer's bill should correspond to the fixed, customer-related costs as much as practicable, and the demand-related costs should be recovered through a demand charge, when the use of demand metering is cost-effective. If the cost of demand metering is not justifiable, such as in the case of most residential customers, an energy charge can be substituted as a second-best alternative. All things equal, lower energy charges will result in a weaker incentive to conserve. To the extent that fixed charges are viewed as resulting in lower energy prices, then a somewhat weaker incentive may result. However, given that fixed charges are typically not a significant portion of overall revenues, it is not clear that the weaker price signal is at all material. Further, regulated utilities typically offer a range of DSM programs to counteract the price signal effect. The importance of sending a price signal to conserve energy must also be balanced with the importance of setting rates based on cost and minimizing cross-subsidies.

In commercial customer classes, setting fixed charges below fixed costs and recovering the shortfall from the energy charge has the undesirable result of causing larger and higher-load-factor customers to pick up the fixed-cost responsibilities of smaller and lower-load-factor customers. This is particularly problematic given that the relative differences in electricity usage among commercial (and industrial customers) are driven largely by the differing requirements of their respective businesses as opposed to individual consumption preferences.

A grocery store might be pursuing vigorous energy efficiency measures, but still be consuming twenty times the electric power of a gas station, due to the nature of the business. It would not be reasonable to artificially reduce the fixed charge paid by the gas station below the fixed cost to serve it, and transfer the revenue shortfall to the energy rate paid by the grocery store in order to send a stronger conservation price signal to the grocer. Further, in the specific case of designing *distribution* charges for commercial customers, such a policy would create a separate subsidy problem associated with substituting energy charges for demand charges. Revenue decoupling mechanisms should be avoided. Such mechanisms add complexity into the ratemaking process, transfer revenue risk from utilities to customers, and are a form of single-issue ratemaking that can result in rate increases determined solely by usage reductions, without regard to other factors, some of which could, if properly considered, move rates in the opposite direction from the single-issue change.

With respect to the Vice Chairman's second question, the Commercial Group believes that demand-based charges are intended to recover demand-related costs and should not be artificially reduced so that energy charges can be increased to encourage conservation. First of all, demand charges send their own price signal regarding the impact on the system of demand-related usage. Second, assuming charges are properly aligned with costs at the outset, shifting cost recovery responsibility from demand charges to energy charges will simply result in a cross-subsidization within the rate schedule, as higher-load factor customers are forced to pick up the fixed costs of lower-load-factor customers. The irony here is that high-load-factor commercial and industrial customers already pay significantly higher total energy bills than their low-load-factor counterparts with equal demand. As a result, they are often keenly aware of the impact of energy costs to their business, and are among the most aggressive in pursuing energy conservation opportunities. Shifting added costs to these customers in order to send a stronger price signal is not in the public interest.

With respect to the Vice Chairman's third question, the Commercial Group states that while it is important to retain equitable relationships across rate classes, rate designs should vary among customer classes. This is generally a function of the differing costs to serve various customer classes, as well as the metering technology required to send an improved price signal. For example, the added cost of advanced meters can be justified by the improved price signal that is sent by TOU rates for larger C&I customers. This can provide an incentive for C&I customers to be especially aware of energy conservation opportunities during on-peak hours when energy is more expensive.

OSBA addressed the Vice Chairman's questions in the following manner. In theory, any fixed charge will diminish a conservation price signal simply because the charge is unavoidable. However, whether or not the hypothetical conversion of a fixed distribution charge into a variable or usage-based charge would lead to more conservation is unclear. While demand charges are not completely unavoidable, *energy* conservation measures may leave a customer's monthly demand relatively unaffected. All else being equal, one would expect that larger C&I customers would be least affected by distribution-related conservation price signals.

With respect to the Vice Chairman's first question, OSBA states that in theory, any fixed charge will diminish a conservation price signal simply because the charge is unavoidable. However, whether or not the hypothetical conversion of a fixed distribution charge into a variable or usage-based charge would lead to more conservation is unclear. While the resulting price signal would be stronger, the *incremental* increase in that price signal may or may not be significant. Also, the actual weight given to distribution charges will vary by rate class, and by customer within each rate class. However, for most customers, the decision to conserve is more likely to be driven by potential savings in generation costs than by distribution costs, due to the much greater (relative) weight given to generation charges on a customer's monthly bill.

Consider the case where a utility's fixed distribution charges were to be abandoned in favor of usage-based charges, *and* usage per customer were to decline due to a conservation response. In such circumstances, the utility would experience revenue erosion. A revenue decoupling mechanism is intended to sever the link between a utility's kWh sales and revenues, and provide some measure of revenue stability. Generally, with a revenue decoupling mechanism in place, a utility would be allowed to track and to recover lost usage-related revenues from ratepayers in a subsequent period(s). In practice, however, the mechanism does more than keep the utility 'whole. By severing the link between sales and revenues, a revenue decoupling mechanism drastically reduces a utility's underlying business risk. For example, a utility's sales (and earnings) would no longer be impacted by weather or economic conditions. Therefore, if the Commission were to adopt a revenue decoupling mechanism, it should also implement a commensurate reduction in the utility's allowed return on equity.

With respect to the Vice Chairman's second question, OSBA states that to some extent, a demand-based distribution charge is similar to the fixed charge. While demand charges are not completely unavoidable, *energy* conservation measures may leave a customer's monthly demand relatively unaffected. If so, the incentive to conserve energy would be theoretically diminished, compared to the case where demand charges were eliminated in favor of energy charges. Such charges are a remnant of the pre-restructuring era, and are generally inconsistent with today's market prices for generation service.

With respect to the Vice Chairman's third question, OSBA states that it is unaware of any electric utility that recovers its distribution revenue requirement solely from kWh-based charges within each of its rate schedules. OSBA agrees that, all else being equal, one would expect that larger C&I customers would be least affected by

distribution-related conservation price signals, given the much smaller weight given to distribution charges on such customers' bills.

Constellation addressed the Vice Chairman's questions in the following manner. Fixed distribution charges for residential and small or medium commercial customers may or may not influence a customer's decision to voluntarily conserve energy. Demand charges may have the effect of encouraging energy conservation. Rate design principles should lead to distribution and energy (and other) charges perhaps being a different proportion of the total bill.

With respect to the Vice Chairman's first question, Constellation believes that fixed distribution charges for residential and small or medium commercial customers may or may not influence a customer's decision to voluntarily conserve energy. A larger piece of a customer's bill is the energy charge and because the energy charge is the larger piece of the bill, it will likely be the driver for customer energy conservation. In essence, the amount of the total bill and the accuracy of the price signals contained in the bill are the elements that will drive customers to conserve energy.

With respect to the Vice Chairman's second question, Constellation states that demand charges may have the effect of encouraging energy conservation. Large industrial customers are typically aware that one way to reduce their monthly energy bills is to control their peak demand. Many of the larger customers use energy conservation programs to 'clip their peaks' to provide these savings. However, the large industrial customers may be more educated about their energy consumption patterns than small to medium sized customers. The industrial customers most likely have hourly integrated meters and energy systems that in real time give them valuable information concerning their energy usage. In addition, the large industrial customers may utilize on-site generation or reduction of particular high energy consumption processes to reduce their demand charges. The small to medium size customers cannot be aware of their real time

energy usage and prices if they only have a monthly meter. Further, smaller customers may not have processes that could be curtailed to provide a major savings on their energy bill. Demand based rates need not necessarily be phased out if customers are provided real time usage. Requiring the installation of hourly integrated meters, with the ability to measure demand, would most likely lead to energy conservation.

With respect to the Vice Chairman's third question, Constellation believes that different customer classes may respond to different price signals for energy and distribution depending on their ability to modify their energy consumption. Rate design principles should lead to distribution and energy (and other) charges perhaps being a different proportion of the total bill. Sending the proper price signals to customers is important in promoting energy conservation. It is the size of the total bill and the ability to receive accurate price signals that drives changes to customer consumption resulting in energy conservation. The most critical element is delivering the price signal to the customer.

OTS responded to the Vice Chairman's directed questions. As summarized at Page 7 of the OTS Exceptions, they stated the following:

> Q. Do fixed charges for residential and small commercial customer distribution services discourage conservation of energy? If so, what other revenue decoupling models can be implemented that would optimally meet the dual needs of providing incentives for consumers to conserve energy, while providing reasonably stable revenues for utilities?
>
> A. OTS believes that the average customer is more concerned with the total bill, and not necessarily with the components of their bill. Therefore increasing the total bill will likely cause the average customer to conserve. The key is customer education and the recovery of fixed charges. OTS St. 3-SR, at 23-24.

Q. Do demand charges remove the incentive for customers, especially small to medium size Commercial and Industrial customers to conserve energy? If so, should demand based rates be phased out?

A. As described above, a higher total bill will promote customer conservation. This phenomenon is true whether such increase is the result of higher demand or energy charges. OTS believes a lower demand charge does not necessarily result in lower energy use as a customer might simply switch energy usage from the peak to the off-peak period. OTS St 3-SR, at 24-25.

Q. Can and should rate designs vary among customer classes. For example, larger Industrial and Commercial ("C&I") customers generally have a much smaller percentage of their revenues attributable to distribution services. Given this dynamic, does the commodity design of supply service rates provide adequate incentive for larger C&I customers to conserve energy?

A. OTS believes that there should be different rate designs among customer classes since each class of customer puts different demands on the system. OTS St. 3-SR at 25.

PENNSYLVANIA
PUBLIC UTILITY COMMISSION
Harrisburg, PA 17105

Public Meeting held July 17, 2008

Commissioners Present:

James H. Cawley, Vice Chairman
Robert F. Powelson
Tyrone J. Christy
Kim Pizzingrilli
Wayne E. Gardner, Absent

Pennsylvania Public Utility Commission	R-00072711
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v.	
Aqua Pennsylvania, Inc.	

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OPINION AND ORDER

BY THE COMMISSION:

I. Introduction

Before the Pennsylvania Public Utility Commission (Commission) for consideration and disposition is the Recommended Decision (R.D.) of Administrative Law Judges (ALJs) Charles E. Rainey, Jr. and Guy M. Koster, issued on June 18, 2008, in the above-captioned general rate increase proceedings.

On July 3, 2008, Exceptions to the Recommended Decision were filed by the following Parties: Aqua Pennsylvania, Inc. (Aqua or the Company), the Aqua Large Users Group (Aqua LUG),[1] the Office of Consumer Advocate (OCA), the Office of Small Business Advocate (OSBA) and the Office of Trial Staff (OTS). On July 10, 2008, Reply Exceptions were filed by the following Parties: Aqua, the OCA, the OSBA and the OTS. In addition, on July 10, Aqua LUG filed a Letter in Lieu of Reply Exceptions.

[1] Aqua LUG is composed of the Building Owners and Managers Association of Greater Philadelphia, GlaxoSmithKline, Jefferson Health System, and Villanova University.

II. History of the Proceedings

The procedural history of this case was described in detail in the Recommended Decision (at 1-3). The following summary is taken from that description.

On November 21, 2007 Aqua filed Supplement No. 82 to Tariff Water – Pa. P.U.C. No. 1, to become effective January 21, 2008, containing proposed changes in rates, rules, and regulations calculated to produce $41,700,000 in additional annual revenues. By Order entered January 10, 2008, the Commission suspended the filing until August 21, 2008, so that an investigation could be held to determine whether the proposed changes are lawful, just and reasonable. 66 Pa. C.S. § 1308(d). The case was assigned to the Office of Administrative Law Judge for hearings culminating in the issuance of a Recommended Decision. The matter was subsequently assigned to the ALJs.

On November 30, 2007 Complaints were filed by the OCA and the OSBA. On December 11, 2007 a Complaint was filed by James M. McMaster, Esquire. On December 21, 2007 a Complaint was filed by Aqua Large Users Group (Aqua LUG). On January 7 2008, a Complaint and Petition to Intervene were filed by Masthope Property Owners Council (Property Owners). On January 10, 2008, the OTS filed a Notice of Appearance. On January 11, 2008, a Complaint was filed by Philadelphia Suburban Association of Plumbing Heating Cooling Contractors (PSA). On January 17 2008, Complaints were filed by the Boroughs of Athens, Sayre and South Waverly. On January 18, 2008, a Complaint was filed by the Hedgerow Homeowner's Association (HHA).

In addition, Complaints were filed by the following individual consumers: Richard J. Gage, Gregory E. Hindle, Miki Suzanne Borich, John R. Carty. William G. Toole, III, John C. Celluci, Esquire, Marie Shively. Quang Dinh, Paul R. Cress, Peter

Crane, Frederick Reece, Margaret C. Hindenach, Rodney and Shanya Pressley, Susan O. Vansomeren, Stephen Calderaro, Lisa Curran, Paul Barry, Werner G. Schmidt, Jr. Ernest J. DiFilippo, Ronald Zeibig, Frank J. Toti, Jr. Richard P. Odato, Theodore C. Dmytryk, Anne W Banse, Daniel Consenza, Rodney Pierre Lomax, Michael Hemphill, Charles W Coombs, Jr. Bernard L. Zaber, Kathleen Newlin, John Dillon, Joseph J. Silva ,Thurston C. Jones, Sr. and Thomas J. Detelich.

Pursuant to 52 Pa. Code §5.81, all of the Complaints were consolidated for purposes of hearing and adjudication.

A Prehearing Conference was held on January 29, 2008. During the Prehearing Conference the Property Owners' Petition to Intervene was granted.

Public input hearings were held in Shavertown, West Chester, Lansdowne, and Rydal, Pennsylvania. On March 21, 2008, the OCA proposed corrections to the transcripts of the public input hearings. By Order dated March 26, 2008, the OCA's proposed corrections to the transcripts were granted.

Evidentiary hearings were held on April 15, 16 and 21, 2008. On April 28, 2008, the OCA proposed corrections to the transcripts. By Order dated May 5, 2008, the OCA's proposed corrections to the transcripts were granted.

On April 25, 2008, Joint Petitions for Settlement were filed between Aqua and (a) the PSA, (b) the HHA, and (c) the Property Owners.

In their Recommended Decision, issued on June 18, 2008, the ALJs granted Aqua's Petition to Reopen the Record for the purpose of admitting evidence regarding the impact of an increase in the wholesale water rate that the Bucks County Water and Sewer Authority (BCWSA) charges Aqua for purchased water.

The ALJs recommended, *inter alia*, that Aqua's proposed Supplement No. 82 to Tariff Water Pa. P.U.C. No. 1 be rejected. R.D. at 76. The ALJs stated that the rates contained in that Tariff were not just and reasonable, or otherwise in accordance with the Pennsylvania Public Utility Code (Code) and the Commission's Regulations. *Id.* The ALJs recommended that the Commission issue an Opinion and Order permitting Aqua to file a tariff allowing recovery of no more than $40,222,060 in additional operating revenue (approximately 96.5% of the $41,700,000 originally sought by Aqua).

Exceptions, Reply Exceptions, and a Letter in Lieu of Reply Exceptions were filed as previously noted.

III. Description of the Company and General Principles

A. The Company

Aqua is a regulated Pennsylvania public utility and is a wholly owned subsidiary of Aqua America, Inc. Aqua furnishes water service to approximately 404,947 customers in a service territory covering portions of twenty-two counties across the Commonwealth. Its principal executive offiees are located in Bryn Mawr, Pennsylvania. Aqua MB at 1.

B. The Rate Increase

On November 21, 2007 Aqua filed Supplement No. 82 to Tariff Water-Pa. P.U.C. No. 1, requesting an increase in its total annual operating revenues of $41.7 million, or approximately 13.6% over the level of revenues anticipated for the future test year ending June 30, 2008. Various revisions and updates were made by Aqua during the course of the proceeding. Schedules setting forth Aqua's final revenue, expense and rate base claims are attached to its Main Brief at Appendix A. Aqua's updated purchased water expense claim is attached to its Petition to Reopen the Record. Aqua Exhibit 1-D, Sch. 3 and 4, *see also,* Aqua MB at 1-2.

C. Burden of Proof

Section 1301 of the Code, 66 Pa. C.S. § 1301, provides: 'every rate made, demanded, or received by any public utility. or by any two or more public utilities jointly. shall be just and reasonable, and in conformity with regulations or orders of the commission. The burden of proof to establish the justness and reasonableness of every element of the utility's rate increase rests solely upon the public utility. 66 Pa. C.S. § 315(a). 'It is well-established that the evidence adduced by a utility to meet this burden

must be substantial. *Lower Frederick Twp. v. Pa. PUC*, 48 Pa. Cmwlth. 222, 227 409 A.2d 505, 507 (1980). *See also, Brockway Glass Company v. Pa. PUC*, 63 Pa. Cmwlth. 238, 437 A.2d 1067 (1981).

In rate proceedings, the burden of proof does not shift to the parties challenging a rate increase. *Pa. PUC v. Aqua Pennsylvania, Inc.* Docket No. R-00038805 (August 5, 2004) (*Aqua 2004*). The burden of proof instead remains with the public utility throughout the rate proceeding. Nevertheless, the Commission has stated that, where a party proposes an adjustment to a ratemaking claim of a utility. the proposing party bears the burden of presenting some evidence or analysis tending to demonstrate the reasonableness of the adjustment. *See, e.g. Pa. PUC v. PECO*, Docket No. R-891364 (May 16, 1990); *Pa. PUC v. Breezewood Telephone Company*, Docket No. R-901666 (January 31, 1991).

As we proceed in our review of the various positions espoused in this proceeding, we are reminded that we are not required to consider expressly or at great length each and every contention raised by a party to our proceedings. *University of Pennsylvania, et al. v. Pa. PUC*, 86 Pa. Cmwlth. 410, 485 A.2d 1217.(1984). Moreover, any exception or argument that is not specifically addressed herein shall be deemed to have been duly considered and denied without further discussion.

D. Summary of Result

As will be further delineated herein, based upon our careful review and consideration of the evidentiary record as developed in this proceeding, including the Recommended Decision of the ALJs, the Exceptions and Replies of the Parties, we conclude that Aqua is entitled to an opportunity to earn income available for a return of $113,701,782 (see attached Tables I – III). In furtherance of such objective, Aqua is authorized to establish rates that will produce not in excess of $341,248,824 in

jurisdictional operating revenues. The increase in annual operating revenues authorized herein of $34,427,517 is approximately 82.6% of the $41,700,000 originally sought and an increase of approximately 11.2% over revenues generated through current rates.

IV Rate Base

A. Cash Working Capital

1. Positions of the Parties

Aqua's proposed rate base, representing its claimed measure of value at future test year end, is $1,340,051,344. Aqua MB at 5. This figure includes a cash working capital (CWC) claim of $0. CWC 'represents the utility's need for cash to meet current obligations arising out of the rendition of services for which revenues have not yet been received. *Pa. PUC v. Borough of Schuylkill Haven*, Docket No. R-00943156 (July 6, 1995). Using the lead/lag method, Aqua calculated the CWC requirement associated with operating and maintenance expenses and prepaid taxes, and then calculated the offset for long-term interest accrued prior to payment, which exceeded the CWC requirement. *Id.* According to Aqua, this claim is consistent with this Commission's holding in *Pa. PUC v. Pennsylvania Power & Light Co. (PP&L Order)*, 85 Pa. P.U.C. 306 (1995) and *Pa. PUC v. Pennsylvania Power Co. (Penn Power Order)*, 85 PUR 4th 323 (1987).

The OCA recommended a rate base reduction of $2,323,196 because 'ratepayers in large part fund the average daily amount held by Aqua to meet its debt service requirements. OCA RB at 2. According to the OCA's witness,

> Positive CWC represents funds provided by investors that should be included in rate base so that the Company earns a return on it. Negative cash working capital represents funds supplied by ratepayers that should be recognized as a rate base offset.

OCA St. No. 1 at 5. According to the OCA, the *Penn Power Order* does not preclude a negative CWC in a proper case. Rather, the OCA argues that the Commission stated that

it was 'not prepared' to adopt an overall negative CWC in that proceeding. OCA RB at 1.

2. ALJs' Recommendation

The ALJs recommended adopting Aqua's approach. R.D. at 9. They quoted the following from our *PP&L Order:*

> We are not persuaded by the OCA's arguments to abandon our usual practice of setting cash working capital requirements at zero rather than approving negative adjustments when no positive claim has been made by the Company.

85 Pa. P.U.C. at 322. The ALJs were not persuaded that, in this proceeding, the Commission should abandon its usual practice of setting CWC requirements at zero when no positive claim has been made by the Company. R.D. at 10.

3. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the ALJs' recommendation to be reasonable, appropriate and otherwise in accord with the record evidence, it is adopted.

V Revenues

A. Corrections to Aqua's Development of P*ro Forma* Present-Rate Commercial Class Revenue for Bensalem and Monroe Manor

1. Positions of the Parties

The OTS identified errors in Aqua's calculations, and Aqua made the necessary corrections. These corrections increased Aqua's present rate revenue by $139,337 Aqua RB at 5.

2. ALJs' Recommendation

The ALJs recommended adjusting Aqua's present rate revenue by $139,337 R.D. at 10.

3. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the ALJs' recommendation to be reasonable, appropriate and otherwise in accord with the record evidence, it is adopted.

B. Revenue Annualization for Customer Additions

1. Positions of the Parties

Aqua increased its historic test year book revenues by $396,900 to annualize the net effect of customer gains and losses. Aqua estimated the change in customers during the historic test year based on the average annual rate of change over

the prior four years. Aqua MB at 10. The four-year average, in turn, was calculated using data from detailed bill analyses from the years ended June 30, 2003, through June 30, 2007. According to Aqua, bill analyses provide accurate data because they identify and correct various anomalies that affect the customer count from year to year, such as inactive or reclassified accounts, which are embedded in the information obtained directly from customer billing records. *Id.*

The OCA proposed an increase in Aqua's historic test year revenue of approximately $552,687 because it believed Aqua's methodology significantly understated customer growth. The OCA MB at 17. OCA argued that customer growth should be calculated based upon actual customer data from the historic test year rather than data from years outside the historic test year. *Id.* at 19-20.

2. ALJs' Recommendation

The ALJs recommended adopting Aqua's proposed revenue annualization for customer additions. The ALJs agreed with Aqua that the use of a four-year average identifies and corrects anomalies that affect the customer count from year to year. The ALJs, therefore, found that Aqua's approach produces a more reliable customer growth estimate than the OCA's approach. R.D. at 11.

3. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the ALJs' recommendation to be reasonable, appropriate and otherwise in accord with the record evidence, it is adopted.

C. Rental Income

1. Positions of the Parties

Aqua claimed rental income of $759,203 for leasing space to affiliates (Aqua Services Company and Aqua Customer Operations) in its Bryn Mawr headquarters. Aqua charged its affiliates $24 per square foot. According to Aqua, the comparable rental rate for space in the Bryn Mawr area is $21.43. Aqua MB at 17

Aqua changed its rental income calculation after making substantial renovations to its headquarters in January 2006. Before the renovation, the annual rental calculation was based on the assumption that each employee of an affiliated entity occupied the same number of square feet of office space as an employee of Aqua. After the renovation, the annual rental calculation was based on the amount of space actually used by employees of affiliated entities. Aqua MB at 17 As a result of the new methodology, Aqua received approximately 31% less in rent than it did using the prior methodology. OCA MB at 20-21.

The OCA claimed that Aqua's new approach ignores shared common space; janitorial services; maintenance and security of the building, parking lot, and grounds; and furniture and fixtures. The OCA, consequently, argued that Aqua's pre-renovation methodology should continue to be used. In addition, the OCA argued that Aqua's rental rate of $24 per square foot should be increased to reflect inflation, because it has not been adjusted since 2005. OCA MB at 24-25. The OCA proposed an adjustment that would increase operating revenues by $693,963.

2. ALJs' Recommendation

The ALJs recommended adopting Aqua's rental income claim. The ALJs found that Aqua's proposal was rationally based on the premise that Aqua's affiliates should be charged for the space they actually occupy. They concluded that the record evidence showed that shared common areas are not typically included in the rentable space on which a landlord charges a square footage rate. R.D. at 13.

The ALJs noted that the OCA did not dispute that the current rental rate for buildings of a comparable size in the area is $21.43 per square foot. Aqua calculated its rental rate at $24 per square foot. The ALJs concluded that this provided enough headroom above the market rate to cover expenses such as janitorial, security and maintenance services. R.D. at 13.

3. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the ALJs' recommendation to be reasonable, appropriate and otherwise in accord with the record evidence, it is adopted.

VI. Expenses

A. Payroll Expense

1. Number of Employees

a. Positions of the Parties

Aqua made an annualized non-union payroll expense claim of $11,271,579 based on the future test year ending June 30, 2008. Aqua Exh. 1-A(a) at 21 Rev. That amount represented a $1,251,510 increase over the non-union payroll expense recorded on Aqua's books during the historic test year ending June 30, 2007. *Id.* Aqua made an annualized union payroll expense claim of $15,427,806 based on the future test year. *Id.* That amount represented a $1,905,550 increase over the union payroll expense recorded on Aqua's books during the historic test year. *Id.* Aqua's total proposed increase in union and non-union payroll expense was $3,157,060 ($1,251,510 + $1,905,550). *Id.*

Aqua calculated its payroll expense claim by starting with its historic test year payroll expense of $10,020,069 for non-union employees and $13,522,256 for union employees. Aqua then made adjustments to annualize the effect of wage rate increases, salary increases, employee positions added, and employee positions eliminated.

Aqua's payroll expense claim is based on its payroll costs during the historic test year as opposed to the number of employees. For example, if one employee left a particular position as of July 30, 2006, and another employee filled that same position from September 1, 2006, through July 30, 2007. Aqua would list two employees in the position during the course of the historic test year. However, payroll expenses would be attributed to one month for the first employee in the position and ten months for the second employee in the position, and no payroll expenses would be attributed to the

one month that the position was vacant. Aqua MB at 23-24. Therefore, the number of employees during the historic test year listed by Aqua exceeded the number of positions. *Id.* According to Aqua, during the historic test year there were 369 union and 260 non-union employees for a total of 629 employees listed in Aqua's records. Aqua St. No. 2-R at 3; Aqua MB at 24. Part-time and summer employees were included in the tally. *Id.*

The OCA proposed a $1,767,025 decrease in Aqua's annualized non-union payroll expense claim and a $1,971,834 decrease in Aqua's annualized union payroll expense claim, for a total decrease of $3,738,859 in annualized payroll expenses. OCA St. No. 1-S at 17. Sch. LKM-9S at 2-3. The OCA's proposed adjustment was based on the number of employees on Aqua's books on June 30, 2007. OCA St. No. 1-S, Sch. LKM-9S at 2-3. The OCA noted that on June 30, 2007, Aqua's books showed 337 union and 221 non-union employees for a total of 558 employees. The OCA, therefore, contended that Aqua had not substantiated 32 employees included in its union payroll expense claim (369 – 337) and 39 employees included in its non-union payroll expense claim (260 – 221). *Id.*

b. ALJs' Recommendation

The ALJs recommended adopting Aqua's methodology, noting that Aqua had used the same methodology in many prior cases. The ALJs concluded that the OCA's methodology, which only looks at the number of employees at a fixed point in time, does not reflect Aqua's payroll expenses over the course of a year. Accordingly, the ALJs recommended that the OCA's methodology be rejected. R.D. at 15.

c. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the recommendation to be reasonable, appropriate and in accord with the record evidence, it is adopted.

2. Capitalization Rate

a. Positions of the Parties

The capitalization rate represents the percentage of gross payroll that is used in the process of completing projects that involve capitalized assets or, for ratemaking purposes, projects that are included in rate base. OTS St. No. 2 at 6; OTS MB at 17. Aqua proposed a capitalization rate of 24.58%. Aqua MB at 26. This is the same capitalization rate Aqua actually experienced during the twelve months ended June 30, 2001. *Id.* According to Aqua, its capitalization rate increased during the period from mid-2002 through 2007 when its meter exchange program was in effect. *Id.*

Aqua's future test year gross payroll claim was $37,636,715. OTS St. No. 2 at 6. Therefore, the amount of payroll Aqua proposed to capitalize was $9,251,104 ($37,636,715 x 24.58%).

The OTS proposed a capitalization rate of 26.63%. OTS MB at 19. Its proposal was based on (a) the actual capitalization ratios that Aqua experienced during a seven year period (the years ending December 31, 2001, through December 31, 2007), and (b) an analysis of Aqua's actual capital spending and projected capital budgets over a ten year period (the years ending December 31, 2003, through December 31, 2012). *Id.* at 17. The OTS argued that this approach is more accurate than using a single data point.

Id. Applying this capitalization rate, the OTS recommended a payroll capitalization of $10,022,657 ($37,636,715 x 26.63%).

The OCA proposed a capitalization rate of 30.38%, which was Aqua's historic test year capitalization rate. OCA MB at 36. According to the OCA, Aqua's responses to interrogatories showed that over the period from 2002 through 2007 Aqua's capitalization rate increased while meter exchange capital expenditures decreased. *Id.* at 35. Consequently, the OCA argued that the meter exchange program was not the primary cause for the increase in Aqua's capitalization rate. *Id.* at 36. Applying a capitalization rate of 30.38%, the OCA recommended a payroll capitalization of $11,434,034 ($37,636,715 x 30.38%).

b. ALJs' Recommendation

The ALJs recommended adopting the OTS' capitalization rate. R.D. at 16-17. They found it reasonable based on data covering a period of time, rather than data from a single point in time. In addition, they concluded that Aqua failed to show that the actual capitalization rate for the twelve month period ending June 30, 2001, reflects Aqua's projected capital budgets. Similarly, they rejected the OCA's proposal because it did not reflect Aqua's projected capital budgets or trends in Aqua's capitalization rates.

The ALJs recommended that Aqua's payroll charged to operating and maintenance expense be reduced by $771,553 and an additional $771,553 be included in Aqua's claimed rate base. R.D. at 18. The $771,553 figure was derived by subtracting the amount of payroll Aqua proposed to capitalize from the amount of payroll that the OTS recommended for capitalization ($10,022,657 $9,251,104 = $771,553.) *Id.* at 19.

c. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the recommendation to be reasonable, appropriate and in accord with the record evidence, it is adopted.

3. Incentive Compensation

a. Positions of the Parties

Aqua claimed a total of $3,892,985 in incentive compensation expenses. OTS St. No. 2 at 10. The OTS proposed that these expenses be equally split between Aqua's ratepayers and its shareholders because both shareholders and customers benefit from Aqua's Incentive Compensation Plan. According to the OTS, shareholders benefit from the Incentive Compensation Plan by realizing a higher return on their investment due to increased dividends and/or stock prices. OTS St. No. 2 at 13.

Aqua argued that the costs of its Incentive Compensation Plan should be borne solely by ratepayers because:

> (1) the incentive compensation is part of the standard pay package necessary to attract and retain appropriate personnel; (2) any 'splitting' would only serve to prevent the Company from earning its authorized rate of return on equity: (3) the plan is structured to produce benefits for customers; and (4) the plan was recommended by, later endorsed by, and for 18 years fully approved in the Company's base rates by the Commission.

Aqua St. No. 2-R at 16-17 Aqua noted that in its 2001 base rate case, the Commission rejected the argument that Incentive Compensation Plan expenses should be disallowed.

Pa. PUC v. Philadelphia Suburban Water Co. Docket No. R-00016750 (August 1, 2002) (*Philadelphia Suburban 2002*). Aqua argues that there is no reason to change the rate-making treatment of its Plan at this time. Aqua MB at 28.

b. ALJs' Recommendation

The ALJs recommended approving Aqua's approach. R.D. at 19. The ALJs noted that we stated in *Philadelphia Suburban 2002, supra,* at 27-28:

> Since no Party filed Exceptions to the ALJ's recommendation on this issue, and finding the ALJ's recommendation to be otherwise reasonable, and in accord with the record evidence, it is adopted. As noted by the ALJ, the Commission has previously recognized that incentive compensation plans which are designed to improve the level of customer service by achieving 'operational effectiveness' obviously are in the best interest of the company's ratepayers, and should be supported through rates.
>
> We find that PSWC has sustained its burden of establishing that its incentive compensation plan is focused on improving operational effectiveness, including customer service, and, therefore, should be recognized for ratemaking purposes. It is a reasonable incentive program that conditions a portion of an employee's compensation on the achievement of appropriate performance standards.

The ALJs here found that Aqua again met its burden of establishing that its Incentive Compensation Plan is focused on improving operational effectiveness, including customer service. The OTS, in contrast, did not present sufficient evidence to show that shareholders benefit any more today than they did in the past. The ALJs, therefore, concluded that Aqua's Incentive Compensation Plan should be fully recognized for ratemaking purposes as it has been in the past. R.D. at 19.

c. Exceptions and Replies

The OTS excepts to the ALJs' recommendation. The OTS argues that Aqua must prove the reasonableness of every element of its claim, and the ALJs improperly shifted the burden of proof to the OTS. OTS R.Exc. at 5. The OTS further argues that it did introduce evidence sufficient to demonstrate that both shareholders and ratepayers benefit from the Company's Incentive Compensation Plan. *Id.* The OTS also argues that the Recommended Decision implicitly admitted that shareholders benefit from the Incentive Compensation Plan. The OTS, therefore, argues that it is equitable, and in the public interest, for both ratepayers and shareholders to share the costs of administering this program. *Id.* at 5.

Aqua's Reply Exceptions note that the OTS attempts to distinguish its proposal from that in *PSWS 2002* on the grounds that the OTS recommends disallowing half, rather than all, of the costs of the incentive compensation plan. Aqua argues that this is a distinction without a difference. Aqua R. Exc. at 11. Aqua further argues that the Commission has never 'tried to parse the degree of customer benefit that an incentive plan produces and permit recovery of some – but not all – of the utility's costs. *Id.* at 12. Additionally, citing *Butler Twp. Water Co. v. Pa. PUC*, 81 Pa. Cmwlth. 40, 473 A.2d 219 (1984), Aqua argues that in other contexts, the Commonwealth Court has disallowed attempts to 'share' costs by disallowing 50% of claimed costs.

d. Disposition

We shall deny the OTS' exception. Based on our review of the record in this case, we are not persuaded to change the existing treatment of the Incentive Compensation Plan. In *Philadelphia Suburban 2002, supra*, we found Aqua's Incentive Compensation Plan is focused on improving operational effectiveness. The record here

does not demonstrate that there have been any significant changes in Aqua's Incentive Compensation Plan since that time.

4. Incentive Compensation – Future Test Year Increase

a. Positions of the Parties

Aqua's claim for incentive compensation payments increased by 4% the same percentage as the non-union salary increases granted in April 2007 and 2008. Aqua MB at 31. OCA MB at 30. Aqua asserted that awards under the Incentive Compensation Plan are based largely on a percentage of the employee's salary. Therefore, according to Aqua, its claim for Incentive Compensation Plan payments should increase by the same percentage as salary. Aqua MB at 31.

The OCA argued that Aqua's proposed 4% increase to the Incentive Compensation Plan should be rejected. According to the OCA, base wages and salaries will almost certainly be paid, whereas incentive compensation is uncertain and speculative. If an employee does not achieve certain targets or goals, that employee does not receive incentive compensation. Therefore, incentive compensation plan expenses should not increase at the same rate as base wages and salaries. OCA MB at 30.

The OTS also initially opposed Aqua's proposed 4% increase to the Incentive Compensation Plan. OTS St. No. 2-S at 4. It appears, however, that the OTS subsequently withdrew its opposition to this proposal. OTS St. No. 2-SR at 10-12.

b. ALJs' Recommendation

The ALJs recommended adopting Aqua's position. They found that Aqua had sustained its burden of establishing the reasonableness of increasing incentive

compensation by the same percentage as salaries and wages. R.D. at 20. The ALJs found that incentive compensation combined with salaries and wages represents the total compensation package to employees. Further, the ALJs agreed with Aqua that the Commission rejected an identical claim by the OCA in *Philadelphia Suburban 2002, supra.* Therefore, the ALJs rejected the adjustment proposed by the OCA.

c. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the recommendation to be reasonable, appropriate and in accord with the record evidence, it is adopted.

B. Purchased Water Costs and General Price Level Adjustment

1. Positions of the Parties

On May 6, 2008, Aqua filed a Petition to Reopen the Record (the Petition) pursuant to 52 Pa. Code § 5.571. This Petition alleged that Aqua purchases water from the Bucks County Water and Sewer Authority (BCWSA), which recently approved an increase in wholesale water rates. Aqua sought permission to introduce evidence regarding the impact of that increase on Aqua.

As initially filed with the Commission, Aqua's claimed operating expenses included the costs incurred in purchasing water from BCWSA, adjusted by a projected inflation rate of 2.176%. Petition at 2. Eight days after the conclusion of evidentiary hearings in this proceeding, the BCWSA increased its wholesale water rate by 24.8%. *Id.* As a result, Aqua stated that its historic test year purchased water costs would increase by $1,459,500 and its net purchased water expense claim would increase by $1,330,600 (due to a partial offset to the Company's General Price Level Adjustment). *Id.*

On May 16, 2008, the OSBA filed an Answer (Answer) opposing the Petition. The OSBA questioned whether Aqua knew of an impending rate increase, and so could have introduced pertinent evidence prior to the close of the record. Answer at 2. The OSBA further denied that the rate increase was 'substantial' because of the possibility that the increase could be abated. *Id.* In New Matter, the OSBA maintained that the Parties to this case had no opportunity to conduct discovery or introduce relevant evidence (including evidence as to whether Aqua could purchase water from a different source at a lower cost). *Id.* at 3-4. The OSBA also argued that granting the Petition would irreparably harm those Parties who opposed Aqua's proposed Purchased Water Adjustment (*see* Section IX.J. *infra*).

2. ALJs' Recommendation

In the Recommended Decision, the ALJs granted the Petition to Reopen the Record. R.D. at 4-5. Our regulations at 52 Pa. Code § 5.571(d) allow the reopening of the record where conditions of fact or law have so changed as to require, or the public interest requires, the reopening of the record. The ALJs concluded that this standard was met in this case. The affidavit supporting the Petition averred that after the hearings in this matter were concluded, Aqua was notified by the BCWSA that the BCWSA's Board had approved an increase in the wholesale water rate charged to Aqua, effective July 1, 2008. This rate increase will be in effect during the period that the rates established in this proceeding will be in effect, and the possible abatement of the rate increase is speculative. R.D. at 5.

Based on the new evidence introduced into the record, the ALJs recommended increasing Aqua's annual purchased water costs by $1,459,500. *Id.* They also recommended reducing Aqua's claimed General Price Level Adjustment by $128,900. *Id.*

3. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the ALJs' recommendation to be reasonable, appropriate and otherwise in accord with the record evidence, it is adopted.

C. Uncontested Adjustments

1. Positions of the Parties

Aqua included a claim of $233,000 in its cost of service, related to defending itself in a lawsuit. The OCA proposed that these costs be normalized over a two-year period consistent with the normalization period that Aqua used for rate case expenses in this proceeding. OCA MB at 36. Aqua did not object to this proposal. Aqua RB at 21.

In addition, the OCA proposed an adjustment in Aqua's calculation of the costs that vary with the production of water to serve new customers. The OCA's witness disputed Aqua's methodology and derived an adjustment based on a different methodology. OCA MB at 37 Aqua did not object to this proposal. Aqua RB at 21.

2. ALJs' Recommendation

The ALJs recommended approving both of the OCA's proposed adjustments. R.D. at 21.

3. Disposition

No Party excepted to the ALJs' recommendation on these issues. Finding the ALJs' recommendations to be reasonable, appropriate and otherwise in accord with the record evidence, they are adopted.

VII. Depreciation Accrual and Taxes

A. Depreciation Accrual

1. Positions of the Parties

Aqua's annual depreciation accrual applicable to plant in service at June 30, 2008, is $53,598,054. Aqua MB at 32. This figure was derived from a detailed depreciation study prepared by Aqua's consultant, Gannett Fleming, as adjusted for Aqua's final claim for future test year plant additions. *Id.* No Party proposed adjustments to Aqua's annual depreciation accrual. R.D. at 21.

2. ALJs' Recommendation

The ALJs did not make an explicit recommendation regarding Aqua's depreciation claim. R.D. at 21.

3. Disposition

Based on our review of the record, we will adopt Aqua's annual depreciation accrual claim without modification. No Party has objected to that claim, and we find it to be reasonable, appropriate and otherwise in accord with the record evidence.

B. Taxes

1. Position of the Parties

Aqua's claims for State and Federal taxes were set forth in Exhibit 1-A(a) at 66 Rev.-67 Aqua stated that no Party changed the manner in which it calculated State

and Federal taxes but noted that State and Federal taxes would have to be recalculated if the Commission adopted any adjustments to its other claims. Aqua MB at 33.

2. ALJs' Recommendation

The ALJs recommended adopting the tax methodology used by the Company. but recalculated the State and Federal taxes to reflect the ALJs' recommended adjustments to Aqua's other claims. R.D. at 22.

3. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the ALJs' recommendation to be reasonable, appropriate and in accord with the record evidence, it is adopted.

VIII. Rate of Return

A. Introduction

It is well settled that a public utility is entitled to an opportunity to earn a fair rate of return on the value of its property dedicated to public service. *Pennsylvania Gas & Water Company v. Pa. PUC*, 19 Pa. Cmwlth. 214, 341 A.2d 239 (1975). This is consistent with longstanding decisions by the United States Supreme Court, including *Bluefield Water Works and Improvement Company v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923), and *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 591 (1944).

A utility's rate of return has been defined as:

> [T]he amount of money a utility earns, over and above operating expenses, depreciation expense and taxes, expressed as a percentage of the legally established net valuation of utility property, the rate base. Included in the 'return' is interest on long-term debt, dividends on preferred stock, and earnings on common stock equity. In other words, the return is that money earned from operations which is available for distribution among the capital. In the case of common stockholders, part of their share may be retained as surplus. The rate-of-return concept merely converts the dollars earned on the rate base into a percentage figure, thus making the item more easily comparable with that in other companies or industries.

P. Garfield and W Lovejoy, *Public Utility Economics* (1964) at 116.

In determining a fair rate of return, we have traditionally considered the utility's capital structure in conjunction with its cost of debt, preferred stock, and common equity. *Aqua 2004, supra.*

B. Capital Structure

1. Positions of the Parties

Aqua adopted future test year-end capital structure ratios of 49.20% long term debt and 50.80% common equity. Aqua asserts that this is the best approximation of the mix of capital the Company will employ to finance its rate base during the period new rates are in effect. Aqua explains that it excluded short-term debt from the ratios because its short term debt of $20,414,844 (estimated at June 30, 2008) roughly approximates Aqua's balance of construction work in progress (CWIP). Aqua St. No. 4 at 17-18. Aqua asserts that short-term debt is routinely used by Aqua for the financing of CWIP, the acquisition of water companies necessary to expand its operations, and other purposes. Aqua contends that short-term debt incurred for these purposes represents interim or bridge financing until these items are permanently financed and included in rate base, and should not be used to suggest that short-term debt supports Aqua's permanent capital structure. Aqua St. No. 2-R at 20.

Aqua argues that the Commission has rejected efforts to incorporate a short-term debt component in Aqua's ratemaking capital structure in prior cases. *See e.g. Philadelphia Suburban 2002, supra*; *Pa. PUC v. Philadelphia Suburban Water Company*, 96 PUR 4th 158, 200 (1988), *Pa. PUC v. Philadelphia Suburban Water Company*, 58 Pa. P.U.C. 668, 689-90 (1984), *Pa. PUC v. Pennsylvania-American Water Co.* 231 PUR 4th 277, 310 (2004) (*PAWC 2004*). Aqua contends that the Commission's reasoning in those cases was based on the fact that short term debt was not used to permanently finance long-lived utility assets and customers had already realized the benefits of short-term debt through a lower rate for Allowance For Funds Used During Construction (AFUDC) accruals. Aqua MB at 37.

The OTS recommended the adoption of Aqua's proposed capital structure because it accurately represents the capital employed by Aqua and is in line with the capital structure ratios employed by Aqua's barometer group of water companies. OTS St. No. 1 at 5-6. The OTS stated that the barometer group's five-year average capital structure ratio is 49.1% long-term debt and 50.9% common equity, which is comparable to Aqua's five-year average capital structure ratio of 50.6% long-term debt and 49.4% common equity. OTS St. No. 1 at 5-6; Aqua Exh. No. 4-A at 2, 4, Sch. Nos. 2, 3.

The OCA proposed adding $20,414,844 of short term debt to Aqua's capital structure. This was the amount of short term debt estimated to be on Aqua's books at June 30, 2008. Aqua St. No. 2-R at 20. The OCA opines that short-term debt should be included in the capital structure because Aqua has consistently utilized short-term debt in recent years to finance a portion of rate base. OCA St. No. 2 at 15; OCA St. No. 2, Exh. No. DCP-1, Sch. No. 3 at 2.

2. ALJs' Recommendation

The ALJs recommended adopting Aqua's proposed capital structure. The ALJs noted that Aqua routinely uses short-term debt as interim or bridge financing for CWIP, the acquisition of water companies, and for other purposes, until these items are permanently financed and included in rate base. The ALJs concluded that Aqua's proposed capital structure represents the best approximation of the mix of capital Aqua will employ to finance its rate base during the period new rates are in effect. Citing *Philadelphia Suburban 2002, supra*, the ALJs concluded that Aqua's position is consistent with Commission precedent, wherein the Commission found that such short-term debt should not be included in a utility's capital structure. The ALJs, therefore, recommended rejecting the OCA's position. R.D. at 25-26.

3. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the ALJs' recommendation to be reasonable, appropriate and otherwise in accord with the record evidence, it is adopted. Aqua's proposed capital structure is an accurate representation of the capital employed by Aqua. Moreover, as noted by the OTS, it is similar to the capital structure ratios employed by the water companies in Aqua's water barometer group (the barometer group's five-year average capital structure ratio is 49.1% long-term debt and 50.9% common equity, whereas Aqua's five-year average capital structure ratio is 50.6% long-term debt and 49.4% common equity).

C. Cost of Debt

1. Positions of the Parties

Aqua's claimed cost of long-term debt in this proceeding is 5.88%. Aqua St. No. 4 at 19. No party objected to this claim and the ALJs used this cost rate in their overall rate of return recommendation.

2. Disposition

We shall adopt Aqua's proposal of 5.88% as the cost of long-term debt, having found it to be reasonable, appropriate and in accord with the record evidence. R.D. at 44.

D. Cost of Common Equity

The following table summarizes the cost of common equity claims made, and methodologies used by the Parties in this proceeding:

Methodology	Aqua	OTS	OCA
	%	%	%
Discounted Cash Flow	11.43	10.18-10.29	9.00-10.75
Risk Premium	11.50		
Capital Asset Pricing Model	13.14	9.54-11.87	9.90-10.50
Comparable Earnings	12.30		9.00-10.00
Recommended Range	11.25-11.75	10.18-10.29	9.50-10.20
Recommendation	11.75	10.24	9.90

Aqua St. No. 4 at 5, 20; OCA St. No. 2 at 29: OTS St. No. 1-S at 3; OTS St. No. 1 at 19. The components that resulted in these cost of equity recommendations are discussed below.

1. Reliance on Discounted Cash Flow Method

The Discounted Cash Flow (DCF) model is based on the 'dividend discount model' of financial theory, which maintains that the value (price) of any security or commodity is the discounted present value of all future cash flows. OCA St. No. 2 at 18. The DCF methodology requires the use of an expected dividend yield to establish the investor required cost of equity. Aqua St. No. 4 at 22. All three rate of return witnesses in this proceeding employed the constant growth or 'Gordon model' of the DCF, in which

$$D1/P0 + g = k$$

where D1 is the dividend expected during the year, P0 is the current price of the stock, g is the expected growth rate of dividends, and k is the discount rate (cost of capital). For purposes of calculating a dividend yield applicable to the formula, D0/P0 (the current dividend yield divided by the current price) must be adjusted by ½ the expected growth rate in order to account for changes in the dividend rate in period 1. The adjustment of ½

the growth rate must be used because, when the timing of the dividend cannot be ascertained due to the lack of certainty, an assumption is made halfway through the prospective year. OTS MB at 25-26; OTS St. No. 1 at 15; Tr. at 372.

a. Positions of the Parties

Aqua used not only the DCF method, but also the Risk Premium (RP), Capital Asset Pricing Model (CAPM) and Comparable Earnings (CE) methodologies. Aqua St. No. 4 at 3-4, 19-20. Aqua criticized the OTS and the OCA for relying too heavily on the DCF method in determining Aqua's cost of equity. Aqua indicates that it is best to use a number of different methodologies when determining a utility's cost of common equity. Aqua St. No. 4-R at 5-6. Aqua contends that each of the methods used to measure the cost of equity contains certain incomplete and/or overly restrictive assumptions and constraints that are not optimal. Aqua St. No. 4 at 19-20.

Aqua's witness, Paul Moul, testified that there are a number of problems with the DCF method. Mr. Moul asserted that the DCF model may not reflect the true risk of a utility because: (1) it is 'circular' in nature when applied in rate cases; and (2) it does not take into consideration the impact of mergers and acquisitions. Mr. Moul explained that the DCF model is circular because it attempts to measure investors' expectations for the future, investors' expectations for the future depend upon regulatory decisions, and regulators depend upon investors' expectations. Aqua St. No. 4 at 19-20. Mr. Moul also testified that mergers and acquisitions have resulted in a significant rise in stock prices and a fall in dividend yields. He stated that, without some adjustment, the results of the DCF method become unduly depressed by reference to alternative investment opportunities such as public utility bonds. Aqua St. No 4 at 21-22.

The OTS relied upon the DCF method in determining the cost of common equity. The OTS witness, Amanda Gordon, used the CAPM model to confirm the

validity of her DCF results. OTS St. No. 1-SR at 13. The OTS asserted that 'the DCF method is the only analytical tool offered that is market based and measures the cost of capital directly. The OTS argues that the Commission has relied primarily on the DCF and informed judgment in determining the cost of common equity for utilities. OTS RB at 13.

The OCA used the DCF method as well as the CAPM and the CE methods in determining the cost of equity. OCA St. No. 2 at 29. The OCA witness, David Parcell, testified that the cost of common equity cannot be precisely quantified because it is an opportunity cost: the prospective return available to investors from alternative investments of similar risks. OCA St. No. 2 at 25. Mr. Parcell also testified that the DCF method is no more circular than other market-based models, such as CAPM, which also use stock prices as a component. OCA St. No. 2S at 3.

b. ALJs' Recommendation

The ALJs recommended determining Aqua's cost of common equity using the DCF method, with other standard financial models (including CE, RP and CAPM) being used as checks upon the reasonableness of the DCF results. The ALJs found that this recommendation was consistent with the Commission's Orders in other rate proceedings, including *Philadelphia Suburban 2002, supra*, and *Aqua 2004, supra*. In these cases, the Commission relied primarily on the DCF method but used the CAPM, RP and CE methods to check the reasonableness of the result provided by the DCF. R.D. at 29.

c. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the ALJs' recommendation to be reasonable, appropriate and otherwise in accord with the

record evidence, it is adopted. We have often relied on the DCF methodology and informed judgment in arriving at our determination of the proper cost of common equity. *See, Pa. PUC v. Roaring Creek Water Company*, 150 PUR4th 449, 483-488 (1994); *Pa. PUC v. York Water Company*, 75 Pa. P.U.C. 134, 153-167 (1991); *Pa. PUC v. Equitable Gas Company*, 73 Pa. P.U.C. 345-346 (1990). In cases where we had a concern that the DCF might be understating the cost of equity, we relied upon other standard financial models, including the CE, RP and CAPM methodologies, as checks upon the reasonableness of the DCF results. *See generally, Philadelphia Suburban 2002, supra.* Accordingly, we shall adopt the ALJs' recommendation.

2. Leverage Adjustment

a. Positions of the Parties

Aqua's witness, Mr. Moul, used a leverage adjustment of 65 basis points in his DCF calculation to reflect the difference in risk attributed to changes in leverage that occur when the book value capital structure, rather than the market value capital structure, is used to compute the weighted average cost of capital. Aqua St. No. 4 at 14, 33-34. According to Mr. Moul, this modification to the DCF model must be recognized in order to make the DCF results relevant to the book value capital structure. Mr. Moul derived his 65 basis point leverage adjustment by computing the average leverage adjustment granted in the following four rate cases:

Case	Leverage Adjustment Granted
Pennsylvania-American Water Company R-00016339 (January 10, 2002)	60 basis points
Philadelphia Suburban Water Co. R-00016750 (August 1, 2002)	80 basis points
Pennsylvania-American Water Co. R-00038304 (January 29, 2004)	60 basis points
Aqua Pennsylvania, Inc. R-00038805 (August 5, 2004)	60 basis points

Aqua St. No. 4 at 30-33.

The OTS opposed Aqua's use of a leverage adjustment. OTS witness Gordon testified that she believed an upward leverage adjustment is inappropriate because Aqua's market-to-book ratio is more than 1.0. The OTS asserted that Mr. Moul's application of the leverage adjustment in this case is inconsistent with the position he took in *Pa. PUC v. Blue Mountain Consolidated Water Co.* 55 Pa. P.U.C. 502 (1982). The OTS notes that Mr. Moul advocated a positive market-to-book adjustment when a market-to-book ratio was less than 1.0 – which is the opposite of the reasoning he applied here. Also, OTS witness Gordon asserts that the academic literature cited by Mr. Moul does not support his leverage adjustment. OTS St. No. 1 at 11-13.

The OCA also opposed Aqua's leverage adjustment. OCA witness Parcell testified as follows:

> Investors are well aware that water utilities have their rates established based upon the book value of their assets (rate base) and capitalization. As a result, investors are not expecting a regulatory award on any other basis, nor should they be compensated for any difference between the book value and market value of their common equity.

OCA St. No. 2 at 33.

b. ALJs' Recommendation

The ALJs recommended adopting Aqua's 65 basis point leverage adjustment because it is consistent with prior Commission Orders wherein the Commission adjusted the market-determined cost of equity for the higher financial risk related to the book value capitalization. The ALJs relied on the cases cited by Aqua in its testimony and brief in reaching their conclusion. Aqua St. No. 4 at 30-33; R.D. at 31-32.

c. Exceptions and Replies

The OCA excepted to the ALJs' recommendation granting Aqua a 65 basis point leverage adjustment. According to the OCA, an upward leverage adjustment is not binding precedent in this jurisdiction. The OCA notes that the Commission recently declined to adopt an upward adjustment in *Pa. PUC v. Metropolitan Edison Company*, Docket No. R-00061366 (January 11, 2007), and *Pa. PUC v. Pennsylvania Electric Company,* Docket No. R-00061367 (January 11, 2007) (*Met Ed/Penelec*). In those proceedings, the companies received a return on equity of 10.1%. The OCA contends that a leverage adjustment is not binding precedent because the Commission has not adopted an upward adjustment in all cases. OCA Exc. at 16-17.

The OCA also notes that in each of the cases cited by Aqua, in which an upward leverage adjustment to the cost of equity was granted, the cost of equity adopted by the Commission was no higher than 10.6% including the leverage adjustment. That figure is lower than the 10.78% DCF that Aqua sought in this proceeding without the 65 basis point leverage adjustment. OCA Exc. at 16-17.

The OTS also excepted to the ALJs' recommendation on this issue. The OTS argues that, contrary to the ALJs' representation, application of an adjustment to calculated cost of equity findings has not been universally condoned. OTS Exc. at 9.

The OTS argues that leverage adjustments are purely discretionary and that such adjustments to calculated equity results were specifically rejected in the *Met Ed/Penelec* case. OTS Exc. at 14.

In its Exceptions, the OSBA observes that prior decisions awarding leverage adjustments played an important role in influencing the ALJs' decision. However, none of the cases relied upon by the ALJs involved a return on common equity higher than 10.6%. The OSBA argues that there is no persuasive evidence of record that the cost of capital for Aqua today is higher than the cost of capital at the time the Commission awarded Pennsylvania-American Water Company a 10.6% return on equity four years ago. OSBA Exc. at 2-3.

d. Disposition

Upon review and consideration of the record, we agree with the OTS regarding this issue. The fact that we have granted leverage adjustments in the past does not mean that such adjustments are indicated in all cases.

Based upon our analysis and review of the record, the Recommended Decision, and the Exceptions and Replies thereto, we reject the ALJs' recommendation to add a 65 basis point risk adjustment. The award of such an adjustment is not precedential but discretionary with the Commission. In fact, in *Met Ed/Penelec*, we specifically approved the removal of any risk adders from the cost of equity calculations. *Met Ed/Penelec* at 136.

In the cases cited by Aqua in support of its leverage adjustment, it is obvious that the DCF results in those cases were not as high as the unadjusted DCF result we have in this proceeding, since the final cost of equity in those cases was no higher than 10.6% with the leverage adjustment. The unadjusted DCF results presented by the

Parties in this case are generally higher that the DCF recommendations from the earlier cases cited by Aqua. When viewed in the context of the other methodologies, we conclude that there is no need to have an upwards adjustment to compensate for any perceived risk related to Aqua's market-to-book ratio. Accordingly, we reject the ALJs' recommendation to allow a 65 basis point leverage adjustment.

3. Dividend Yield

a. Positions of the Parties

In developing his recommendation, Aqua's witness, Mr. Moul calculated average dividend yields for the twelve, six and three months ended September 2007 using ex-dividend adjusted prices. From that data, he selected the six-month average yield for the Water Group of 2.67%. He adjusted his finding to capture one-half of the anticipated growth in dividends. As adjusted, Mr. Moul's recommended dividend yield for the Water Group is 2.78%. Aqua MB at 43-44.

To arrive at a representative dividend yield, the OTS witness Ms. Gordon placed equal emphasis on the most recent spot and 52-week average dividend yields. The spot yield was 2.83% and the 52-week average yield was 2.72%. The OTS' dividend yield recommendation of 2.78% is the average of these two dividend yields. OTS MB at 27.

The OCA derived a dividend yield for its DCF analysis by averaging the dividend yields from three proxy groups: (1) Value Line Water Group – 2.5%; (2) AUS Utility Reports Group – 2.9% and (3) Moul Group – 2.8%. The mathematical average of these three components is 2.73%. OCA MB at 55.

A summary of the Parties' recommended dividend yields is shown below:

	Aqua	OTS	OCA
	%	%	%
Range		2.72-2.83	2.5-2.9
Recommendation	2.78	2.78	2.73

b. ALJs' Recommendation

The ALJs did not specifically recommend a dividend yield for the purpose of their DCF analysis.

c. Disposition

No Party filed Exceptions regarding the appropriate dividend yield to use in determining a DCF calculation. Based on our review and consideration of the record, we will adopt the dividend yield of 2.78% recommended by both Aqua and the OTS to be used in our DCF analysis. We note that this dividend yield is also very close to the dividend yield recommended by the OCA.

4. DCF Growth Rates

a. Positions of the Parties

As explained above, the expected growth rate is a component of the DCF equation. The Parties proposed the following growth rates for use in the DCF model:

	Aqua	OTS	OCA
	%	%	%
Range	9.25-11.10	9.69-9.79	5.5, 5.6, 6.1
Recommendation	8.00	7.46	7.0-7.3[2]

Aqua St. No. 4 at 29-30, Sch. No. 9; OTS St. No. 1 at 23; OCA Exh No. DCP-1, Sch. No. 5 at 4; Aqua MB at 59.

Mr. Moul asserted that the best measure of growth in the DCF model is forecasted earnings per share (EPS) growth, such as those published by IBES/First Call, Zacks, Reuters/Market Guide and *Value Line*. Mr. Moul stated that he used these forecasts because they are available to investors. The EPS growth rates from these forecasts range from 9.25% to 11.10%. Aqua Exh. No. 4 at 29. Mr. Moul considered long-term growth in corporate profits as forecasted by these company-specific EPS growth rates. Additionally, Mr. Moul looked at various factors including the *Value Line* forecast of a decline in the dividend payout, which indicates that the EPS for his Water Group will grow prospectively at a more rapid rate than the dividends per share. Mr. Moul recommended a DCF growth rate of 8.0%, which will accommodate all these factors. Aqua St. No. 4 at 28-30.

The OTS recommended a growth rate of 7.46%. OTS St. No. 1 at 23. OTS witness Gordon examined projected earnings forecasts and log-linear regression analysis data to determine a representative dividend expected growth rate. From a barometer group of eight companies, Ms. Gordon derived an average growth rate forecast of 9.68%. *Id.* She looked at five-year projected growth estimates from *Value Line,* S&P, Yahoo Finance, Clear Station, MSN Money, Morningstar and Smart Money. However, Ms.

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[2] The ALJs stated that it is not clear from the record what growth rate OCA witness Parcell used to derive OCA's proposed 9.90% cost of equity. However, Aqua states that, '[g]iven average dividend yields for his barometer groups of 2.6%-2.9% [OCA Exh. No. DCP-1, Sch. No. 5 at 4], the implicit growth rate included in Mr. Parcell's 9.9% equity cost proposal is only 7.0%-7.3%. Aqua MB at 59-60.

Gordon believed that those growth rates were not indicative of long-term expectations because several of the water companies in her barometer group experienced several poor market years. As a result, Ms. Gordon concluded that the growth rates are biased higher since they are calculated from an abnormally low earnings base. OTS St. No. 1 at 22. Consequently, Ms. Gordon relied upon a log-linear regression analysis that included both historical and forecasted earnings per share, from 2001 to 2012. Ms. Gordon's log-linear regression analysis resulted in an average growth rate of 7.46%, which she recommends for use in the DCF calculation. OTS St. No. 1 at 21-22.

OCA witness Parcell derived the following average growth rates from the three barometer groups he analyzed: (1) 5.6% (Value Line); (2) 5.5% (AUS); and (3) 6.1% (Aqua witness Moul). OCA Exh. No. CP-1, Sch. No. at 4. Mr. Parcell testified that he rejected Aqua's recommended DCF growth rate because: (1) most of the historic and projected growth rates that Mr. Moul examined are below 8.0%; and (2) only four of the sixteen growth rate indicators considered by Mr. Moul are EPS projections above 8.0%. OCA St. No. 2 at 32: Aqua St. No. 4, Exh. 4-A at 15-16. Mr. Parcell opined that it is likely that investors rely on a number of different projections such as EPS, Dividends Per Share, Book Values Per Share and Percent Retained to Common Equity when making investment decisions. OCA St. No. 2 at 32-33; OCA St. No. 2S at 4.

b. ALJs' Recommendation

The ALJs recommended adopting Aqua's growth rate projection of 8.00%. The ALJs relied on the testimony of Aqua's witness that his 'company-specific growth analysis, which focuses principally upon five-year forecasts of earnings per share growth, conforms with the type of analysis that influences the total return expectation of investors. Aqua St. No. 4 at 28. The ALJs concluded that Aqua's growth rate analysis is based on sound economic principles. R.D. at 34. The ALJs were also influenced by evidence that: (1) no analyst that follows the water industry employs OTS witness

Gordon's log-linear regression analysis to project future growth; and (2) OTS witness Gordon's log-linear regression analysis weighs each time period equally and as such, assumes that today's investors accord the same significance to 2001 financial results as they do to 2007 financial results. Aqua MB at 58-59: Tr. 403. The ALJs also found that it was not clear how OCA witness Parcell derived his recommended cost of equity range from the DCF cost rates of his barometer group companies.[3] R.D. at 34.

c. Exceptions and Replies

The OCA excepted to the ALJ's recommendation on this issue. According to the OCA, Aqua's witness examined a number of potential growth rates to estimate a single dividend growth rate, which was then combined with the average dividend yield to develop a single DCF cost. Aqua St. No. 4 at 29-30. The OCA argues that Aqua's witness can justify his 8.0% dividend growth rate recommendation only by disregarding twelve of the sixteen potential growth indicators he examined, and each of these was a measure of a single growth rate estimate – EPS. The OCA contends that it is not proper to rely exclusively on a single growth estimate because that assumes all investors rely exclusively on this single statistic in making investment decisions. OCA Exc. at 15.

The OCA asserts that the recommendations of its witness were much more comprehensive and unbiased than Aqua's. The OCA observes that the validity of its recommended 7.0% to 7.3% dividend growth rate range is reinforced by the OTS witness' recommended dividend growth rate of 7.46%. The OCA concludes that Mr. Moul's dividend growth rate recommendation must be rejected. OCA Exc. at 16.

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[3] OCA witness Parcell recommended a cost of equity range of 9.0% 10.75% derived from DCF cost rates from the companies in his three barometer groups: Value Line (8.2%); AUS (8.4%); and Moul (8.9%). The OCA's three DCF cost rates were derived from average growth rates of 5.6% (Value Line), 5.5% (AUS) and 6.1% (Moul). OCA MB at 55-56.

d. Disposition

Based on our review and consideration of the record, we will adopt the ALJ's recommendation of an 8.0% dividend growth rate. This growth rate was selected after consideration of a number of market factors that affect investors' expectations. We believe that Mr. Moul's five-year long-term forecasts of earnings per share growth formed a valid basis for computing a dividend growth rate appropriate for use in our consideration of the DCF model herein.

5. Performance Factor Consideration

Both the Code and a Commission policy statement provide that the Commission may reward utilities through rates for their performance. In pertinent part, Section 523 of the Code, 66 Pa.C.S. § 523 provides:

> **§ 523. Performance factor consideration**
>
> (a) **Considerations.** – The Commission shall consider, in addition to all other relevant evidence of record, the efficiency. effectiveness and adequacy of service of each utility when determining just and reasonable rates under this title. On the basis of the commission's consideration of such evidence, it shall give effect to this section by making such adjustments to specific components of the utility's claimed cost of service as it may determine to be proper and appropriate. Any adjustment made under this section shall be made on the basis of specific findings upon evidence of record, which findings shall be set forth explicitly, together with their underlying rationale, in the final order of the commission.
>
> (b) **Fixed utilities.** – As part of its duties pursuant to subsection (a), the commission shall set forth criteria by which it will evaluate future fixed utility performance and in assessing the performance of a fixed utility pursuant to

subsection (a), the commission shall consider specifically the following:

> (1) Management effectiveness and operating efficiency as measured by an audit pursuant to Section 516 (relating to audits of certain utilities) to the extent that the audit or portions of the audit have been properly introduced by a party into the record of the proceeding in accordance with applicable rules of evidence and procedure.
>
> * * *
>
> (5) Action or failure to act to encourage cost-effective conservation by customers of water utilities.
>
> * * *
>
> (7) Any other relevant and material evidence of efficiency, effectiveness and adequacy of service.

In the Policy Statement regarding Small Nonviable Water and Wastewater Systems, 52 Pa. Code § 69.711, the Commission has provided for the possibility of acquisition incentives to encourage viable utilities to acquire small nonviable water and wastewater systems, when such acquisitions are in the public interest. Among the acquisition incentives that the Commission will consider are those involving rate of return premiums:

> (b) *Acquisition incentives.* In its efforts to foster acquisition of suitable water and wastewater systems by viable utilities when the acquisitions are in the public interest, the Commission seeks to assist these acquisitions by permitting the use of a number of regulatory incentives. Accordingly, the Commission will consider the following acquisition incentives:
>
> (1) *Rate of return premiums.* Under 66 Pa. C.S. §523 (relating to performance factor

> considerations), additional rate of return basis points may be awarded for certain acquisitions and for certain associated improvement costs, based on sufficient supporting data submitted by the acquiring utility within its rate case filing. The rate of return premium as an acquisition incentive may be the most straightforward and its use is encouraged.

52 Pa. Code § 69.711.

a. Positions of the Parties

Aqua's proposed rate of return of 11.75% on common equity includes a performance factor of 25 basis points. Aqua St. No. 4 at 2. According to Aqua's witness, Mr. Moul, the 25 basis points are in recognition of the exemplary performance of Aqua's management: (1) as a provider of high quality customer service; (2) as a low cost provider of water service; and (3) as a leader in the consolidation of small troubled water companies in Pennsylvania. Aqua St. No. 4 at 2. Specific reasons cited by Aqua as justification for awarding a rate of return premium include:

> (1) Aqua is in full compliance with all existing Federal and State primary drinking water standards and complaints regarding the taste, odor or appearance of Aqua's product have been minimal. Aqua St. No. 2 at 7· Aqua MB at 60-61.
>
> (2) Aqua has taken full advantage of refinancing opportunities to lower its embedded cost of long-term debt and to keep its cost of raising equity to a minimum through its Customer Stock Purchase Program which has kept the costs of raising equity capital to a minimum. Aqua St. No. 2 at 8.
>
> (3) Aqua has kept its rates below the levels charged by many other Pennsylvania water utilities, notwithstanding a

tremendous investment in new and replacement plant in the past several years. Aqua St. No. 2 at 8; Aqua MB at 61.

(4) Aqua has provided excellent customer service as exemplified by the public input testimony of a representative of the Delaware County Chamber of Commerce regarding the steps taken by Aqua to ensure that Aqua's ongoing construction activities were carried out with minimal disruption to homes and businesses. Tr. 290-92; Aqua MB at 61-62.

(5) Aqua's leadership role in responding to existing and prospective regional water supply problems has resulted in improved service to thousands of Pennsylvanians and the takeover of several profoundly troubled systems. Aqua St. No. 2 at 9-10 and Appendices A-B.

(6) As a national leader in infrastructure rehabilitation Aqua is well-positioned to continue providing its customers with the high quality and reliable service they have come to expect. Aqua St. No. 2-R at 25; Aqua MB at 62.

(7) Aqua's Helping Hand Program offers water audits, appropriate plumbing repairs where necessary to low income customers and, upon identification of qualified applicants, the partial forgiveness of arrearages. Aqua St. No. 2 at 10; Aqua MB at 62.

(8) Aqua has a long and unparalleled history of community involvement. Tr. 239, 334-35; Aqua MB at 62-63.

The OTS opposed Aqua's proposed 25 basis point addition to the cost of common equity because: (1) an appropriate rate of return on common equity assumes efficient and economical management of a utility: including cost containment and infrastructure maintenance; and (2) Aqua has already claimed an acquisition premium adjustment to its rate base pursuant to 52 Pa. Code §69.711(b). The OTS argued that Aqua should not be rewarded twice once in rate base and once in rate of return for the same action of acquiring troubled water systems. OTS St. No. 1-SR at 14.

The OCA also opposed Aqua's proposed 25 basis point addition to the cost of common equity. The OCA asserted that: (1) the uncontested positive acquisition adjustment applied for by Aqua is the appropriate premium to award in this case; and (2) the particular character of the acquisitions have not been set forth in detail sufficient to support additional rate of return basis points. OCA MB at 66-67.

The OCA asserts that at the public input hearing in Shavertown, Midway Manor customers complained of less than exemplary customer service by Aqua despite the fact that Aqua promised water main improvements and fire protection four years ago. These customers have incurred three rate increases over four years even though Aqua has not delivered these services. OCA MB at 67.

With regard to water purity, OCA witness Terry Fought found that: (1) one of Aqua's water sources has exceeded one of the Safe Drinking Water Primary Maximum Contaminant Levels (MCLs); and (2) seventeen of Aqua's water sources have exceeded some of the Safe Drinking Water Secondary MCLs; and (3) some of Aqua's systems supply extremely hard water that causes customers expense and inconvenience. OCA MB at 67-68. The OCA also submitted evidence that more than one-half of Aqua's systems (30 of 56 systems) have levels of unaccounted-for water that exceed 20%, an excessive level under the Commission's Policy Statement on Water Conservation at 52 Pa. Code §65.20(4). OCA MB at 68.[4]

The OCA argued that Aqua's Helping Hand Program is ineffective because: (1) customer defaults have significantly outnumbered the active participants for the past three years; and (2) customer outreach levels have been extremely limited. OCA MB at 70; OCA Cross-Exam. Exh. No. 7· Tr. 479-98. The OCA suggested that the Commission direct Aqua to: (1) investigate ways to decrease the program's delinquency

[4] These allegations are discussed in more detail in Section X. *infra.*

rate without changing existing eligibility requirements; and (2) increase low-income customer outreach initiatives (which, in the year 2007 only included internal referrals from Aqua's inbound call center). OCA MB at 70-71.

b. ALJs' Recommendation

The ALJs recommended denying Aqua's 25 basis point performance adjustment to the return on common equity. R.D. at 41. The ALJs concluded that Aqua did not develop a sufficient record in this proceeding to support rewarding the Company with both a rate of return premium as well as a credit acquisition adjustment. Aqua did not provide evidence that all of the required parameters were met under our Policy Statement, 52 Pa. Code § 69.711(a), for the Commission to award Aqua's proposed rate of return premium, in addition to the credit acquisition adjustment that no Party to this proceeding contested. *Id.*

The ALJs noted, however, that Aqua followed-up with the customers who raised concerns during the public input hearings about alleged high or low water pressure, leaking water, malodorous or foul-tasting water or water that leaves a deposit on household fixtures. Aqua witness Tagert testified that Aqua tested the water of customers who agreed to provide water samples, and it found that the water in those homes complied with all applicable drinking water standards. R.D. at 41-42.

c. Exceptions and Replies

Aqua excepted to the ALJs' recommendation on this issue. Aqua also clarified that its request for a performance factor was not advanced pursuant to the Commission's Policy Statement at 52 Pa. Code § 69.711, as assumed by the ALJs, but rather under Section 523 of the Code. Aqua argues that, pursuant to Section 523, the Commission may consider, *inter alia*, the efficiency, effectiveness and adequacy of

service of a utility when determining just and reasonable rates. Aqua observes that when the Policy Statement speaks to the availability of rate of return premiums, it does so in the narrow context of encouraging larger water companies to acquire troubled systems. Aqua contends that the remedies available under the Commission's Policy Statement at 52 Pa. Code § 69.711 and Section 523 of the Code are not mutually exclusive. Aqua Exc. at 4-5.

d. Disposition

In Aqua's 2004 rate case, Aqua made similar arguments in support of an adjustment to its cost of common equity for managerial performance. In that case, we found that the ALJ did not give sufficient consideration to Aqua's water quality, customer service, low income program and regionalization efforts. *Aqua 2004, supra,* at 53. As in the 2004 rate case, we find that Aqua's managerial performance related to its water quality, customer service and low income program continues to be laudable and should be a factor in its cost of common equity. Accordingly, we shall grant Aqua's Exception, in part, and add 22 basis points to Aqua's DCF result in recognition of its exemplary managerial performance.

Aqua has done much to improve the quality of service throughout its growing service territory. We recognize, however, that Aqua cannot repair and refurbish all of its acquisitions at once. We have paid attention to the evidence of problems in those areas presented by the OCA, especially the unaccounted-for water levels. We believe that greater attention must be paid by Aqua to the service problems inherited by the customers of its smaller systems. Accordingly, we will be looking for evidence of improvements in these smaller systems, which are often located in rural areas, in Aqua's next rate case.

6. Overall Cost of Capital

a. Positions of the Parties

Aqua proposed a DCF result of 11.43%, which was the sum of a dividend yield of 2.78%, a dividend growth rate of 8.0% and a leverage adjustment of 0.65%. Aqua's witness then performed CAPM, CE and RP analyses for the purpose of checking the results of his DCF calculation. As a result of this comparison, Aqua's witness recommended a COE of 11.5% that was the midpoint of the range from 11.25% to 11.75%. A performance adjustment of 25 basis points or 0.25% was then added to the 11.5% for a final COE recommendation of 11.75%. Aqua St. No. 4 at 34, 48. The overall rate of return using a COE of 11.75%, Aqua's cost of debt of 5.88%, and Aqua's capital structure, was 8.86%. Aqua MB at 36.

The OCA recommended a COE of 9.9% and a 7.89% overall rate of return. The OCA's rate of return analysis considered the DCF. CAPM and CE methods for comparison's sake. The OCA witness concluded that a COE range of 9.0% to 10.0% was appropriate. OCA St. No. 1 at 27-28. The OCA's capital structure recognized a short term debt component. The OCA's recommendation did not include a leverage adjustment or a performance factor. OCA MB at 72-73.

The OTS recommended a COE of 10.24% based on a range of 10.18% to 10.29% that relied principally on the DCF. The OTS' overall rate of return recommendation of 8.09% reflected a cost of long term debt of 5.88% and a cost of equity recommendation of 10.24%. OTS St. No. 1-S, Sch. 1.

b. ALJs' Recommendation

The ALJs recommended a COE of 11.50% based on Aqua's proposed cost of equity of 11.75% less the addition of the 25 basis point performance factor. R.D. at 44.

c. Exceptions and Replies

Many of the issues discussed by the Parties in these Exceptions have already been considered in earlier Exceptions regarding the specific components of the COE. As a result, the discussion of the Exceptions to the overall final COE and overall rate of return will be brief.

Aqua excepts to the ALJs' 11.5% COE recommendation because it did not include any provision for a performance factor. Aqua contends that its consistent track record of extraordinary service be taken into consideration in setting its equity allowance. Aqua Exc. at 4-9.

The OCA objects to the ALJs' 11.5% COE recommendation because it is far higher than what the Commission has granted to electric utilities in recent cases. The OCA also observes that the ALJs' 11.5% COE recommendation far exceeds the return on equity granted to other subsidiaries of Aqua's parent company. The OCA cites *Bluefield* in asserting that it would be unreasonable and unjustifiable to award a return on equity to Aqua that is so far out of line from those granted to similar businesses with corresponding risks that are in the same geographic area. The OCA also contends that sound public policy and a balancing of investor and ratepayer interests requires that the Commission reject the ALJs' recommendation. OCA Exc. at 1-2.

The OTS objects to the ALJs' COE recommendation because it is excessive and unjustly favors Aqua's shareholders. The OTS argues that an inflated rate of return unduly enriches shareholders while saddling ratepayers with unjustifiable rates. The OTS contends that the ALJs' recommendation is inconsistent with the *Hope* and *Bluefield* decisions and contrary to the public interest. OTS Exc. at 7-8.

Although the OSBA did not propose any cost of capital recommendations in this case, it did take exception to the ALJs' COE recommendation. The OSBA asserted that, in granting a COE of 11.5%, the ALJs gave no apparent consideration to prior cases. Had they considered those cases, they would have found that the Commission granted a COE of just 10.6% to Pennsylvania-American Water Company. *PAWC 2004*. The OSBA contends that Aqua should receive a COE no higher than 10.6%.

d. Disposition

In *Lower Paxton Township v. Pa. PUC*, 317 A.2d 917, 920-921 (Pa. Cmwlth. 1974) (*Lower Paxton*), the Court recognized that the Commission may consider its judgment as well as other factors which affect the cost of capital, including any peculiar features of the utility involved. Here, we are guided by the spirit and intent of *Lower Paxton*. In this case, we have relied on the DCF methodology and informed judgment in arriving at our determination of the proper cost of common equity. We have also consulted the CAPM, CE and RP analyses performed by the Parties.

Based upon our analysis and review of the record evidence, the Recommended Decision, and the Exceptions and Replies thereto, we reject the ALJs' 11.50% recommended cost of common equity and adopt an 11.00% cost of common equity to be applied to Aqua's common equity ratio. As previously noted, we primarily rely on the DCF methodology, while using the other cost of common equity

methodologies as a check on the DCF results. As also discussed previously, we accept a dividend yield of 2.78%, which was the dividend yield recommended by both Aqua and the OTS, and was also within a reasonable range of the dividend yield proposed by the OCA (2.5%-2.9%). We have determined that an 8.0% growth rate is the proper growth rate to be added to the 2.78% dividend yield which we deemed appropriate. This results in a 10.78% (2.78% dividend yield plus 8.0% growth rate) cost of common equity based on a DCF analysis. As discussed previously, we shall add 22 basis points to Aqua's DCF result in recognition of its exemplary managerial performance. The 22 basis point adjustment added to the 10.78% DCF calculation results in an 11.00% cost of common equity. Accordingly, the Exceptions of Aqua, the OTS, the OCA and the OSBA regarding the final cost of common equity are granted or denied consistent with the discussion herein.

e. Conclusion

The following table summarizes our determinations concerning Aqua's capital structure, cost of debt, cost of preferred stock, and cost of common equity, as well as the resulting weighted cost and overall rate of return:

Capital Type	**Percent of total cost (%)**	**Cost Rate (%)**	**Weighted Cost (%)**
Long-term Debt & Allocation Of Parent Debt	49.20	5.88	2.89
Preferred Stock	0	0	0
Common Equity	50.80	11.0	5.59
Total	100		8.48

IX. Rate Structure

A. Introduction

Rate structure is the process by which revenues allowed as a result of a rate proceeding are allocated to the various customer classes in a just, reasonable and nondiscriminatory manner based on the costs incurred by the utility to serve the class. Public utility rates should enable the utility to recover its cost of providing service and should allocate this cost among the utility's customers. *Pa. PUC v. West Penn Power Company,* 73 Pa. P.U.C. 454, 510, 119 PUR4th 110 (1990) (*West Penn 1990); Pa. PUC v. The Peoples Natural Gas Company,* R-00832315 (January 13, 1984) at 8. R.D. at 44-45.

Aqua's rate design proposals in this proceeding are designed to continue implementing the Commission-approved concept of rate equalization. Aqua proposed to establish two rate targets. For the overwhelming majority of rate divisions, which include customers with normal usage patterns, the target is the Company's Main Division rates. For five divisions which have seasonal service characteristics, Aqua proposed to establish Seasonal Rates. Aqua MB at 66.

B. Aqua's Rate Design Proposals

Aqua asserted that when moving to consolidate districts, it is necessary to keep in mind that many of the municipal systems and troubled water companies that it has acquired in recent years were served under rates that were substantially different from Aqua's rates. Accordingly, consolidation of rates cannot be undertaken immediately. Greater-than-average percentage increases are needed over a period of years to consolidate these rates. Judgment is needed to establish the amount of the increase for

each division, taking into account not only the percentage increase but also the actual dollar effect of the increase. Aqua MB at 66.

Aqua proposed a $13.50 per month customer charge for a 5/8-inch meter. The current 5/8-inch meter charge is $11.50 per month exclusive of the 5% distribution system improvement charge (DSIC), or $12.08 per month inclusive of the DSIC. Comparable increases in customer charges are also proposed for other meter sizes. Aqua has proposed an increase in metered Main Division revenues of about 13.2%. Aqua MB at 66.

Aqua proposed to move various rate divisions to – or closer to – their respective targets, as follows:

> Non-Seasonal Rate Divisions. The following divisions have been merged with Main Division rates since the Company's last base rate case or are proposed to be merged in this case: Shenango, Susquehanna, Rolling Green, Monroe Manor, Waymart, White Rock, Meribah, Woodlock Springs, NUI I, NUI II, Jefferson, Ariana and Wilbar. In addition, Aqua has proposed rates for its Paupack, NUI III, Midway Manor (Meadowcrest Collective), Pennsview and Roaring Creek division that are somewhat different from the Main Division's proposed rates, but are generally consistent with Main Division rates in overall design. Consequently, even a modest scaleback of the Main Division proposed rates will make it possible to merge these divisions with the Main Division in this case, and that is what Aqua has proposed. For the rest of its non-seasonal divisions,[5] the Company has proposed rates that will move them closer to the Main Division but will require additional rate cases to get there.

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[5] These rate divisions are: Bensalem, Bristol, Chalfont, White Haven, Wapwallopin, Applewood, Marienville, Hedgerow, Rivercrest, Garbush and Country Club Gardens.

> Seasonal Rate Divisions. Aqua proposes to merge the Eagle Rock, Tanglewood and Thornhurst divisions with its Fawn Lake division, which is the target for the Seasonal Rate divisions. In this case, the Company proposes to move the Masthope (CS Water), Pinecrest and Oakland Beach divisions closer to the Fawn Lake division in order to achieve rate equalization in a subsequent case or cases.

Aqua MB at 67-68.

The Main Division public fire protection rate is being held at $303 per year because it is more than 25% of the cost of service. Section 1328 of the Code, 66 Pa.C.S. §1328, precludes increases in public fire protection rates when they are more than 25% of the cost of that service. Public fire hydrant rates that are below 25% of the cost of service are being increased toward, or equal to, that target ($17.00 per month). The base rates for private fire protection customers were increased approximately 5%, which simply rolls in the existing DSIC. Aqua MB at 68.

C. Cost of Service Study – Allocation of Administrative and General Expenses

1. Positions of the Parties

Aqua contended that its method of allocation (the Base-Extra Capacity Method) has been used by the Company, and has been accepted by this Commission in the Company's rate cases, for over twenty years as the appropriate methodology for determining class costs of service. Aqua MB at 69. When determining its allocation factor for Administrative and General (A&G) expenses, Aqua excluded the entire cost for purchased water, power and chemicals. According to Aqua, these costs have little or no relationship to the size of a utility's A&G expenses. For that reason, the American Water Works Association (AWWA) Manual on Water Rates states that those costs should be excluded from the A&G allocator. *Id.* at 71. Aqua RB at 33.

The OCA recommended including at least 25% of the costs for purchased water, power and chemicals in the allocation factor for A&G expenses. The OCA stated 'to some extent purchased water, power and chemical expenses may be excluded from the allocation factor for A&G expenses because they represent such a significant cost component and, if included, may unduly weigh the allocation of A&G expenses. OCA MB at 74. Nevertheless, the OCA argued that exclusion of these costs in their entirety is unreasonable because 'a portion of Aqua's A&G costs are directly or indirectly related to purchase of water, power and chemicals. *Id.*

The OCA also disputed Aqua's interpretation of the AWWA's Manual on Water Rates. According to the OCA, Aqua relies on a statement in the Manual that is set forth in the facts of a hypothetical, and the Manual states that examples are merely examples – not endorsements or recommendations. OCA MB at 76.

The OSBA agreed with Aqua's position that it is standard utility practice to allocate A&G expenses in the way that Aqua did. The OSBA argued that the OCA's proposal would distort the resulting allocation of A&G expenses to rate classes. Finally, the OSBA noted that the OCA did not propose a change in the allocation of revenues among the classes to reflect its proposal. OSBA MB at 16.

2. ALJs' Recommendation

The ALJs recommended adopting Aqua's allocation method. The ALJs opined that the allocation method used by Aqua was fair and reasonable, and comports with standard practice in the industry. They also noted that the OCA's argument for including 25% of these costs in the A&G allocation factor is not supported by the evidence and is therefore rejected. R.D. at 51.

3. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the ALJs' recommendation to be reasonable, appropriate and otherwise in accord with the record evidence, it is adopted.

D. Scale Back

1. Customer Charges

a. Positions of the Parties

Aqua proposed an increase in the customer charge, from the current rate of $11.50 per month to $13.50 per month for customers with 5/8 inch meters (and the same percentage increase for those with larger meters). Aqua MB at 72. The OCA proposed that this increase be proportionately scaled back if the Commission authorizes less than the full amount of Aqua's requested revenue increase. OCA MB at 76. The OCA argued that the state of the economy. and the affordability of basic water service to low-income customers, should be considered in this case. *Id.* at 77. According to the OCA, increasing the customer charge by a higher percentage than the volumetric charges would disproportionately affect low volume users, who are often also low-income or payment-troubled customers. *Id.* at 78.

In response, Aqua maintained that its cost of service study supported customer charges higher than those Aqua proposed. As a result, any scale back would move rates further away from the indicated cost of service. Aqua MB at 72. Citing *Aqua .2004*, Aqua asserted that the Commission previously rejected a similar proposal of the

OCA to scale-back Aqua's proposed customer charges.[6] Finally, Aqua contended that the record contained no evidence demonstrating a correlation between low-use and low-income customers. Aqua RB at 34.

b. ALJs' Recommendation

If the Commission allows a lower level of revenue than that requested by Aqua, the ALJs recommended that customer charges not be scaled back. They noted that in *Philadelphia Suburban 2002,* the Commission approved the Company's proposal not to scale back proposed customer service charges, where those charges would still be lower than the scaled back Main Division rates. The ALJs concluded that the facts in this case do not demand any deviation from Commission precedent. The proposed customer charge will still be well below the cost of service. Allowing a scale back of the customer charge would only move the rate further from the actual cost of service. R.D. at 53.

c. Exceptions and Replies

The OCA excepted to the ALJs' recommendation on this issue. The OCA argues that its position is inconsistent with the decision in *Philadelphia Suburban 2002.* According to the OCA,

> [T]hat case stands for the proposition that in the context of single tariff pricing, customer charges for ratepayers in divisions other than Main Division should not be lowered beyond the target Main Division customer charge, because to do so would move the charges further from single tariff pricing under Main Division rates.

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[6] The Company cites its 2003 rate case, but the issue was actually discussed in the Company's 2001 rate case. *Philadelphia Suburban, supra.*

OCA Exc. at 18 (footnote omitted). The OCA notes that it proposes an across-the-board proportionate scale back for customer charges in all divisions. *Id.* at 19.

The OCA further notes that the result of the Recommended Decision would be to scale back volumetric charges but not customer charges. The OCA posits that this will disproportionately affect those who are most vulnerable to a rate increase. OCA Exc. at 20. The OCA argues that the Commission should proportionately scale back both customer charges and volumetric charges. *Id.* at 21.

Aqua contends that the ALJs correctly interpreted Commission precedent. Aqua R. Exc. at 19. According to Aqua, the OCA's position is based on the principle of gradualism. Aqua argues that the principle of gradualism does not require a scale back of its customer charge because a significant degree of gradualism has already been built into the customer charge, which is below the range of indicated costs. *Id.*

d. Disposition

Based on our review of the record, we agree with the OCA that a scale back of the customer charge, as well as the volumetric charge, is appropriate in this case. In addition, we agree with the OCA that this result is not inconsistent with our decision in *Philadelphia Suburban 2002, supra,* because the scale back would apply across all divisions. We shall, therefore, grant the OCA's Exception on this issue.

2. Industrial 5th and 6th Rate Blocks

a. Positions of the Parties

As part of its scale back rate design, Aqua proposed a proportional scale back which included the 5th and 6th rate blocks for the Industrial Class. According to

Aqua, its proposed rates would give the Industrial Class a significantly larger increase (16.5%) than the average increase (13.8%) for metered water sales. Aqua Ex. 50-B, Sch. A. Therefore, the Industrial Class would move much closer to its class cost of service, as indicated by a relative rate of return of 0.91 under proposed rates versus 0.88 under present rates. Aqua Ex. 50-B, Sch. B and C; Aqua MB at 73.

The OTS opposed scale back for the 5th and 6th rate blocks for Industrial customers on the basis that this class is already highly subsidized by the other classes of ratepayers. The OTS noted, in this regard, that under proposed rates the overall rate of return for this class was still well below system average. The OTS argued that since Commercial customers do not pay 5th and 6th usage block rates, the inclusion of the 5th and 6th rate blocks in any proportional scale back would actually cause Commercial rates to be higher. OTS R.B. at 25-27.

Aqua responded that since its rate proposal already moved the Industrial Class aggressively toward its class cost of service, that same degree of closure will remain if the Industrial Class rates were scaled back. As a result, Aqua maintained that there was no reason to accelerate the Industrial Class' movement toward cost of service as the OTS had proposed. Aqua St. No. 5-R at 5.

Aqua LUG also objected to any modification of Aqua's proposed scale back rate design. Aqua LUG contended that the large Commercial and Industrial (C & I) customers were already receiving above system average rate increases under proposed rates in comparison to residential class and commercial class customers. Failure to provide a scale back would result in a 'disproportionate recovery of revenues' from large C & I customers. Aqua LUG MB at 2 and 7.

b. ALJs' Recommendation

The ALJs recommended that the Commission adopt the OTS' proposal that the 5th and 6th Industrial rate blocks not be scaled back proportionately should the Commission approve less than the full amount of the proposed revenue increase requested. The ALJs agreed with OTS that Aqua and AquaLUG ignore the negative impact of any scale back on the relative rate of return, and the resultant increase in the subsidy Industrial customers already receive at the expense of other ratepayers.

c. Exceptions and Replies

Aqua excepted to the ALJs' recommendation on this issue. Aqua reiterates that its proposed rates would result in a significantly larger increase for this class of customers than the average increase for metered water sales. As a result, the industrial class would move substantially closer to its cost of service. Aqua states that if the Commission adopts its scale back proposal, the degree of closure between revenues and cost of service will remain as the Company proposed. Aqua Exc at 16-17.

AquaLUG also excepted to the ALJs' recommendation on this issue. AquaLUG avers that the ALJs' recommendation fails to fully account for Aqua's design for moving large C&I customers toward the cost to serve this class, and disregards the substantial negative impact that such a measure will have on these customers. AquaLUG maintains that the Company's original rate allocation design anticipated and incorporated a movement of the large C&I rate class closer to the Company's cost to serve. Finally, AquaLUG submits that the Recommended Decision failed to recognize the significant strain on large C&I customers. AquaLUG Exc at 5.

In its Reply Exceptions, the OTS states that Aqua LUG's claims regarding the effects on the commercial class are misplaced because commercial customers do not

pay the fifth or sixth industrial usage rates. OTS R. Exc. at 9. The OTS also states 'despite claims that [the] OTS proposal would incongruously serve to increase the burden on Aqua's 'second largest' customers, AquaLUG has provided no bill comparison to support this claim. *Id.* at 9-10. Accordingly, the OTS urges the Commission to adopt the ALJs' recommendation and deny the Exceptions of the Company and AquaLUG.

d. Disposition

We will grant the exceptions of Aqua and AquaLUG. We agree with Aqua that its rate proposal is already moving the Industrial Class toward its class cost of service, and with the same across the board scale back, there will be the same degree of closure for this rate class. We also recognize the strain that may be put on large C & I customers without the proportionate scale back.

E. Seasonal Rate Design

1. Oakland Beach Customer Charge

a. Positions of the Parties

Aqua proposed an increase in the monthly customer service charge from $7 73 to $15.00 per month for its Oakland Beach Division. Aqua contended that this increase will lessen the gap between Oakland Beach and the Seasonal Rate target and therefore make it easier to merge Oakland Beach with the target rates in the Company's next base rate case. Aqua St. No. 5-R at 4; Aqua MB at 75.

The OTS argued that this increase in rates is excessive. It consequently recommended that the customer service charge be reduced to $12.00 per month. The

OTS believes its proposed 55.2% increase is more reasonable than the Company's proposed 94% increase. OTS RB at 27-28.

b. ALJs' Recommendation

The ALJs recommended adopting OTS' proposal. R.D. at 56. The ALJs concluded that Aqua's proposed increase in the customer service charge for Oakland Beach is excessive and is not in conformity with the principle of gradualism enunciated by the Commission in *Pa. PUC v. Pennsylvania-American Water Co.* 71 Pa. PUC 210, 283 (1989) (*PAWC 1989*). In that case, according to the ALJs, the Commission stated that the allocated cost of service is only one of several factors appropriate for consideration in designing rates and that the results of a cost-of-service study should be viewed as a guide in allocating revenue increases among customer classes. *Id.* The ALJs found the OTS proposal represented a reasonable balance between gradualism and the movement of rates toward the cost of service.

c. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the ALJs' recommendation to be reasonable, appropriate and otherwise in accord with the record evidence, it is adopted.

2. Company Seasonal Rate Design

a. Positions of the Parties

The Commission previously approved a Seasonal Rate design for divisions of Aqua in which a majority of customers reside in the community for only part of the year and have their water service turned off for the rest of the year. The OTS proposed

refinements to the Company's seasonal rate design, including a $23.00 monthly customer charge and a two-block volumetric rate structure. Under this rate design, a customer using 4,000 gallons per month would pay the same monthly bill amount as a Main Division customer at the same usage level. No Party objected to this proposal and the Company agreed to adopt it as part of the Company's final rate design. Aqua MB at 74.

b. ALJs' Recommendation

The ALJs omitted any discussion of the OTS' Seasonal Rate Design proposal and did not have a recommendation on this issue in their Recommended Decision.

c. Exceptions and Replies

The OTS excepted to the ALJs' failure to acknowledge and recommend the adoption of its proposed refinements for the Company's Seasonal Rate Design. The OTS stated that since neither the Company nor any other Party objected to its proposal, the Commission should adopt it. OTS Exc at 17.

d. Disposition

Based upon our review of the evidentiary record herein, we find the OTS' proposed refinement to Aqua's Seasonal Rate Design to be reasonable, appropriate and in accord with the record evidence. As such, it is adopted.

F. Public and Private Fire Protection Rates

1. Public Fire Protection Rates

a. Positions of the Parties

Aqua proposed to maintain public fire protection rates at present levels in its Main Division, because those rates are more than 25% of the cost of service. Aqua proposed increases in the fire protection rates in certain other divisions toward, or equal to, the 25% of cost of service level of $17.00 per month. Fire protection rates in some areas were left unchanged. Aqua St. No. 5 at 14.

With respect to the Eagle Rock division, the OTS proposed that the public fire protection rate be increased to $17.00 rather than $4.00 as proposed by the Company. There are currently no hydrants in Eagle Rock. No Party objected to the OTS' proposal, and the Company adopted it. Aqua St. No. 5-R at 4.

The OCA proposed that public fire hydrant rates below 25% of the cost of service should not be scaled back if the Commission awards less than the Company's requested revenue increase. No Party objected to the OCA's proposal, and the Company adopted it. Aqua St. No. 5-R at 3.

b. ALJs' Recommendation

The ALJs recommended adoption of the Parties' proposals regarding public fire protection, finding these proposals to be duly supported by the substantial evidence of record. R.D. at 57-58. They found those proposals were supported by the record. They also found those proposals consistent with Section 1328 of the Code, 66 Pa. C.S. § 1328, which states in pertinent part:

(a) **General Rule.** A public utility that furnishes water to or for the public shall be allowed to recover in rates the full cost of service related to public fire hydrants.

(b) **Charge to Municipalities and Other Customers of the Public Utility.**

(1) In determining the rates to be charged for public fire hydrants by a public utility that furnishes water to or for the public, the commission shall as part of a utility's general rate proceeding provide for the recovery of the costs of public fire hydrants in such a manner that the municipalities in which those public fire hydrants are located are not charged for more than 25% of the cost of service for those public fire hydrants, as such cost of service is reasonably determined by the commission.

(2) The commission shall also as part of the utility's general rate proceeding provide for the recovery of the remaining cost of service for those public fire hydrants not recovered from the municipalities under paragrAquah (1) by assessing all customers of the public utility the remaining cost of service to the public fire hydrants. The remaining cost of service for those public fire hydrants shall be included in the public utility's fixed or service charge or minimum bill.

c. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the ALJs' recommendation to be reasonable, appropriate and in accord with the record evidence, it is adopted.

2. Private Fire Protection Rates

a. Positions of the Parties

Aqua proposed to increase private fire protection base rates by 5%, from $52.00 per month to $54.60 per month, which would not be subject to scale-back. This increase would 'roll-in' to base rates Aqua's current 5% DSIC. As a result, Aqua contended that there will be no increase in the bill that the customer actually pays. Aqua MB at 75-76. Aqua also argued that even with the DSIC roll-in, the private fire protection class moves significantly closer to its cost of service, i.e. from a relative rate of return of 1.69 under present rates to 1.37 under proposed rates. Aqua RB at 35; Aqua Exh. 50-B, Sch. B and C.

The OCA agreed with Aqua's proposal to increase private fire hydrant rates without any scale back. In the OCA's opinion, the proposed increase is minimal. OCA MB at 76-77.

The OTS, however, argued that private fire protection rates should not increase. The OTS was concerned about the 'compounding effect' of the DSIC in the next rate case. As the OTS stated:

> [I]f the current 5% DSIC is added to the existing private fire service rates in this case, it is true that [the] actual bill the customer pays will not increase. However, after this case, when the Company files new quarterly DSIC rates, the billed-amount these customer[s] pay for private fire service will begin to increase again. When the new DSIC reaches 5%, these customers will effectively have experienced a 10% increase in their present rate (5% base rate roll-in plus a new 5% DSIC).

OTS RB at 28-29. In addition, the OTS contended that Aqua's cost of service study did not support the proposed rate increase because the overall rate of return for this class under proposed rates would be 12.15%, well above the system average of 8.85% (as compared to the present rate of return of 11.9% and a system average of 7.0%). R.D. at 59.

b. ALJs' Recommendation

The ALJs' agreed with Aqua and the OCA, and recommended allowing a 5% increase in the private fire protection rate. The ALJs opined that this increase is minimal. In addition, although the overall rate of return for this class is higher than the system average, the ALJs found that the proposed rate effectively moves this class closer to the cost of service (moving from a relative rate of return under present rates of 1.69 to a relative rate of return of 1.37 under proposed rates). R.D. at 60.

c. Exceptions and Replies

In its Exceptions, the OTS argues that the ALJs erred by recommending an increase in the private fire rates and that these rates should not be subject to any rollback provisions presented in the proceeding. The OTS, based on the concern about the 'compounding effect' of the DSIC in the next rate case, and its contention that Aqua's cost of service study does not support the proposed rates, maintains that the private fire protection customers should receive no increase in base rates. OTS Exc. at 15-16.

In response, Aqua avers that to increase base rates for private fire protection service by approximately 5% will essentially maintain private fire customers' bills at their current level; such customers are currently paying the DSIC of approximately 5%, and the DSIC will be set at zero at the conclusion of this case. Aqua argues that the proposed rates would produce significant closure between the private fire service class'

revenues and cost of service, as evidenced by the reduction of its relative rate of return from 1.69 at present rates to 1.37 under proposed rates. Aqua R. Exc. at 19-20.

d. Disposition

On review of the evidentiary record, we shall adopt the ALJs' recommendation on this issue. We find that the proposed increase is minimal and will provide closure between the private fire service class' revenues and cost of service. Accordingly, the OTS' Exception on this issue is denied.

G. Competitive Rate Rider (CRR) Customers

1. Positions of the Parties

Aqua averred that its competitive service riders (Demand-Based Industrial Service, Demand-Based Resale Service and Electric Generation Service) enable Aqua to retain large industrial customers by providing them with a discount in the form of a 'rider rate' if they can demonstrate a risk of leaving the system because of competitive alternatives. Aqua St. No. 5 at 13. The OTS presented an analysis based on three of these CRR customers. The OTS argued 'these customers must be subject to a new alternative supply analysis in order to continue to receive the associated discount. OTS MB at 40. OTS noted that the original contracts with at least two of Aqua's four CRR customers had expired between three and seven years ago, and were extended without requiring updated competitive supply analyses. OTS MB at 40-41.

Aqua argued that the OTS' position was based on speculation about changes in the costs of available competitive alternatives. Nevertheless, Aqua was willing to require updated competitive supply analyses from the customers identified by the OTS. Aqua MB at 76.

2. ALJs' Recommendation

The ALJs recommended that the Commission 'adopt the OTS' proposal and require all [Aqua] CRR customers to provide updated competitive supply analyses before the next rate case, and at least once every 5 years. R.D. at 61. This would not only ensure that the customers continued to be eligible for such discounts, it would also ensure that such discounts were necessary and in the public interest. *Id.*

3. Exceptions and Replies

Aqua excepted to the ALJs' recommendation on this issue. Aqua contends that the OTS' proposal only requires three CRR customers to submit updated analyses of their competitive supply alternatives. Aqua avers that the ALJs erroneously restated the OTS' proposal, requiring updated analyses of competitive supply alternatives by all of Aqua's CRR customers. Aqua asks this Commission to correct this oversight so as to accurately reflect the OTS' proposal. Aqua Exc. at 17-18.

The OTS' Reply Exceptions did not address this issue.

4. Disposition

Based on our review of the record, we shall grant the Company's Exception on this issue. Accordingly, we shall adopt the OTS' proposal, which Aqua agreed to, with the clarification that such proposal only included three specifically-identified CRR customers (Montenay Resources, Boeing Helicopter and Foster Wheeler).

H. Uniform Increase – First Four Volumetric Rates

1. Positions of the Parties

Aqua's proposed Main Division rates would produce slightly different percentage rate increases (approximately 13.0% to 14.4%) for its commercial customers. OSBA St. No. 1, Sch. BK-1 at 1. The OSBA contended that Aqua's proposed Commercial consumption charges are inappropriate because they are not supported by cost of service evidence. OSBA MB at 5-6. The OSBA argued that under *Pa. PUC v. Citizens' Electric Company of Lewisburg, Pa.* R-20072348 (February 19, 2008), there must be a cost justification for changes in rate design. Absent cost of service evidence to support the proposed differential increases, the OSBA recommended uniform rate increases for each Main Division commercial consumption charge. *Id.* at 6.

Conceptually, Aqua agreed with the OSBA's proposal that the increases should be uniform at 13.63% across all four blocks. OSBA St. No. 1, Sch. BK-1 at 2. As a practical matter, however, Aqua argued that it would be difficult, and perhaps impossible, to implement that proposal. Aqua MB at 76.

According to Aqua, the OSBA's proposal also affects the first four volumetric blocks for the Industrial Class and the first three volumetric blocks for the Public Class, which are linked to each other and to the Commercial Class. Aqua St. No. 5-R at 3. Aqua averred that, as a consequence, trying to make the increases in those blocks uniform would conflict with the far more important goal of achieving the class revenue targets. Aqua St. No. 5-R at 3. Aqua stated that in calculating its rates, it would try to get as close to uniform increases in the first four volumetric rate blocks as possible, but argued that it should not be required to subordinate more important rate structure goals to that end. Aqua MB at 77

2. ALJs' Recommendation

The ALJs recommended against the OSBA's proposal. R.D. at 62. The OSBA's proposal was revenue neutral. As a result, Aqua would have to adjust those Industrial and Public rate blocks *not* linked to the Commercial rate blocks to avoid creating the risk of either over-collection or under-collection of revenue. This would result in differing percentages of rate increases in those rate blocks to ensure revenue neutrality on a class basis. *Id.*

3. Exceptions and Replies

The OSBA excepted to the ALJs' finding on this issue. The OSBA argues that there is no cost of service study evidence to support different percentage increases to each of the four Commercial Class rate blocks. The OSBA also puts forth an alternative remedy should the Commission be concerned about the impact of its proposal on the Industrial fifth and sixth and Public fourth rate blocks. Specifically, the OSBA suggests breaking the current link between the Commercial Class rate blocks and certain Industrial Class and Public Class rate blocks. OSBA Exc. at 3-7

In response, Aqua reiterates that it agrees with the OSBA's recommendation in principle, but the recommendation may be difficult to implement in practice. Aqua avers that it will make every reasonable effort to achieve uniform percentage increases in the first four blocks – or get as close to uniformity as it can – while still hitting the appropriate revenue targets for each class. Aqua R.Exc. at 20-21.

In its Reply Exceptions, the OTS does not object to the OSBA's recommendation of increasing each of the four usage rates by the same percentage. However, the OTS does object to the OSBA's alternative remedy because the OTS sees no reason to complicate Aqua's rate structure. OTS R.Exc. at 11-12.

In its Letter in Lieu of Reply Exceptions, AquaLUG notes its concerns with the OSBA's Exception. AquaLUG notes that the Recommended Decision proposed excluding the fifth and sixth industrial rate blocks from a proportional scale back of rates in the event that the Commission approves a lower rate increase than Aqua's original request. *See*, Section IX.D.2. *supra*. If this recommendation would be adopted, *and* the OSBA's Exception would be granted, the resulting rate allocation would be higher than those proposed by any Party to this proceeding. In this scenario, Aqua's largest customers would not only receive higher than proposed increases for the third and fourth rate blocks, they would also receive higher rate increases in the fifth and sixth blocks through their potential exclusion from any scale back of rates. Such a result, according to Aqua LUG, would be unjust and unreasonable. Letter in Lieu of R.Exc. at 1.

4. Disposition

On review of this issue, we agree with the recommendation of the ALJs. Aqua will calculate its compliance rates, taking every effort to get as close as possible to uniform increases for each of the first four Commercial Class rate blocks.

Section 1301 of the Code provides that every rate made, demanded, or received by any public utility shall be just and reasonable and in conformity with regulations or orders of the Commission. The rate made is determined by two factors: (a) what increase in revenues over those produced by existing rates is needed to give the utility a fair rate of return, and (b) how those increased revenues are going to be allocated in rates among the various rate classes. Rate classes are established by grouping customers with similar characteristics as to the type of service (for example, residential, commercial, and industrial), and the demand of service (for example, amount of usage and demand load). Rates are designed to recover the cost of serving that class. When a utility files for a rate increase, it must file a cost-of-service study assigning to each

customer class a rate based upon operating costs that it incurred in providing that service. 52 Pa. Code § 53.53.

There is no requirement that utility rates for different classes of service must be either uniform or equal or that they must be equally profitable. Rate structure, which is an essential, integral component of rate-making, is not merely a mathematical exercise applying theoretical principles. Rate structure must be based on the hard economic facts of life and a complete and thorough knowledge and understanding of all the facts and circumstances which affect rates and services, and the rates must be designed to furnish the most efficient and satisfactory service at the lowest reasonable price for the greatest number of customers, i.e. the public generally.

While cost to serve is important, other relevant factors may also be considered. *PAWC 1989, supra,* 71 Pa. P.U.C. at 283.

The OSBA proposes a revenue neutral, uniform rate increase for each Main Division commercial consumption charge. Aqua would have to adjust those Industrial and Public rate blocks not linked to the Commercial rate blocks in order to avoid creating the risk of either over-collection or under-collection of revenue, resulting in differing percentages of rate increases in those rate blocks to ensure revenue neutrality on a class basis. We find this would result in a higher rate allocation than presented. Accordingly, the OSBA's Exceptions on this issue are denied.

I. Bristol Division Non-Residential Rates

1. Positions of the Parties

Aqua proposed merging Bristol's non-residential rates with those of its Main Division. To promote gradualism, OSBA proposed a lesser increase, keeping these

blocks separate from the Main Division until the next base rate case. Aqua MB at 77 Aqua responded by agreeing to part of the OSBA's recommendation. Specifically, Aqua agreed not to equalize the Commercial and Public fourth volumetric rate blocks and the Industrial fourth and fifth volumetric blocks with comparable blocks in its Main Division. For these rate blocks, Aqua agreed to an increase that would make up 65% of the difference between existing rates and the comparable Main Division rates established in this case. *Id.* Aqua continued to propose merging all other non-residential rate blocks with the Main Division in this case. *Id.*

2. ALJs' Recommendation

The ALJs recommended accepting Aqua's proposal. They noted that the phased integration of Bristol's rates with those of the Main Division has been occurring over twelve years. The ALJs found that Aqua's proposal 'represents a reasonable compromise to OSBA's recommendation' because it provides for a reduction in the proposed rates while continuing progress toward integration with Main Division rates. R.D. at 63.

3. Disposition

No Party excepted to the ALJs' recommendation on this issue. Finding the ALJs' recommendation to be reasonable, appropriate and in accord with the record evidence, it is adopted.

J. Purchased Water Adjustment

1. Positions of the Parties

Aqua proposed a Purchased Water Adjustment (PWA) under Section 1307 of the Code, 66 Pa. C.S. § 1307 to reflect increases or decreases in its cost to purchase water caused by changes in the rates charged by non-affiliated suppliers. Aqua MB at 78. The PWA would adjust customers' bills by adding a charge or credit to reflect increases or decreases in the Company's annual purchased water cost. Aqua submitted a proposed tariff explaining in detail the mechanics of the PWA.

Aqua contended that its suppliers (many of whom are municipal authorities) can increase their rates quickly, and that even relatively small changes in those rates could have a material effect on Aqua's operating and maintenance expenses. *Id.* Aqua further contended that its proposal is consistent with Commission and appellate precedent. Aqua MB at 80. As legal authority for establishing the PWA, Aqua cited such cases as *Re Small Water and Sewer Ratemaking Methodologies*, 1996 Pa. PUC LEXIS 180 (November 1, 1996) and *Delegation of Authority to Bureaus with Enforcement Responsibilities*, 1994 Pa. PUC LEXIS 148 (Sept. 2, 1994). In addition, Aqua argued that the prohibition against single-issue ratemaking does not apply to cost recovery under Section 1307 Aqua RB at 38-39.

Aqua's proposed PWA was opposed by the Aqua LUG, the OCA, the OSBA, and the OTS. These Parties argued that the proposal is legally unsound and is not warranted by the facts. They argued, *inter alia*:

- The PWA constitutes impermissible single-issue ratemaking. Aqua LUG MB at 4-5; OCA MB at 79; OTS RB at 21-22.