COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF OWEN	)	
ELECTRIC COOPERATIVE, INC.	)	Case No. 2011-00037
FOR AN ADJUSTMENT OF RATES	)	

ATTORNEY GENERAL'S PRE-FILED TESTIMONY

Comes now the intervenor, the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention, and files the following testimony in the above-styled matter.

Respectfully submitted,
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Certificate of Service and Filing

Counsel certifies that an original and ten photocopies of the foregoing were served and filed by hand delivery to Jeff Derouen, Executive Director, Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601; counsel further states that true and accurate copies of the foregoing were mailed via First Class U.S. Mail, postage pre-paid, to:

Mark Stallons
President
Owen Electric Cooperative, Inc.
P. O. Box 400
Owenton, KY 40359

Hon. James M. Crawford
Crawford & Baxter, P.S.C.
PO Box 353
Carrollton, KY 41008

this 9th day of August, 2011

Assistant Attorney General

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF OWEN ELECTRIC COOPERATIVE	)	
CORPORATION FOR AN ORDER AUTHORIZING A	)	
CHANGE IN RATE DESIGN FOR ITS RESIDENTIAL	)	CASE NO.
AND SMALL COMMERCIAL RATE CLASSES, AND	)	2011-00037
THE PROFFERING OF SEVERAL OPTIONAL RATE	)	
DESIGNS FOR THE RESIDENTIAL RATE CLASSES	)	

DIRECT TESTIMONY AND SCHEDULES
OF
GLENN A. WATKINS

ON BEHALF OF THE
OFFICE OF THE ATTORNEY GENERAL

AUGUST 30, 2011

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION
OWEN ELECTRIC COOPERATIVE, CORPORATION
CASE NO. 2011-00037
DIRECT TESTIMONY & SCHEDULES
OF
GLENN A. WATKINS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Glenn A. Watkins. My business address is 9030 Stony Point Parkway, Suite 580, Richmond, Virginia 23235.

Q. WHAT IS YOUR PROFESSIONAL AND EDUCATIONAL BACKGROUND?

A. I am Executive Vice President and Senior Economist of Technical Associates, Inc., which is a business research and consulting firm with offices in Richmond, Virginia. Except during 1987 when employed by Old Dominion Electric Cooperative as its forecasting and rate economist, I have worked in varying capacities with Technical Associates, Inc. continuously since 1980.

During my career at Technical Associates, Inc., I have conducted cost of capital, revenue requirement, load forecasting, embedded and marginal cost of service, and rate design studies involving numerous electric, gas, water/wastewater, and telephone utilities, as well as presented expert testimony in Alabama, Arizona, Georgia, Kansas, Kentucky, Maine, Massachusetts, Maryland, Michigan, New Jersey, North Carolina, Illinois, Ohio, Pennsylvania, Vermont, Virginia, South Carolina, Washington State and West Virginia in connection with these studies.

I hold an M.B.A. and B.S. in economics from Virginia Commonwealth University and have been qualified as a Certified Rate of Return Analyst. A more complete statement of my professional and educational background is provided in my Schedule GAW-1.

Q. HAVE YOU PREVIOUSLY APPEARED BEFORE THIS COMMISSION?

A. Yes. I have presented testimony on behalf of the Kentucky Office of Attorney General ("OAG") in numerous rate cases involving Louisville Gas & Electric, Kentucky

Utilities, Duke Energy Kentucky, Blue Grass Electric Cooperative, and Columbia Gas of Kentucky.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I have been engaged by the OAG to review and examine Owen Electric Cooperatives ("Owen") proposed changes to its Residential and Small Commercial rate structures. The purpose of my testimony, therefore, is to comment on Owen's proposals and offer recommendations as to the proper structure of these rates.

Q. WHAT IS OWEN'S PROPOSED RATE DESIGN FOR THIS CASE?

A. In this case, Owen is proposing a significant change in its Residential and Small Commercial pricing structures. Under the Cooperative's rate design proposals, the Farm and Home (Residential) fixed monthly customer charge would systematically increase each year during a four year period such that this charge would increase from the current level of $11.30 to $25.00 by 2015. Similarly, the Small Commercial customer charge would increase from $13.34 per month to $35.00 per month.

Under Owen's proposals, the Cooperative's Residential Distribution (non-purchased power) revenue collections would shift from the current mix of about 35% associated with fixed monthly fees and 65% from volumetric charges to about 75% contributed from fixed fee revenue and 25% from volumetric revenue.[1] Small Commercial Distribution revenue collections would shift from about 28% fixed fee/72% volumetric based to about 73% fixed fee/27% volumetric based. In addition, Owen proposes to offer optional Residential time-of-use rates as well as an optional inverted usage block rate.

Q. ARE OWEN'S RESIDENTIAL RATE DESIGN PROPOSALS REASONABLE AND PROPER?

[1] Distribution revenue is total rate revenue less purchased power costs. Total Residential Distribution revenue is $21.473 million (per Exhibit 11, page 37). Current customer charge revenue is $7.333 million (per Exhibit 5, page 2) or 34.15%. Proposed (2015) customer charge revenue is $16.223 million, or 75.55%.

A. No. Owen's proposed Residential Schedule 1 rate design which is applicable to the vast majority of its customers directly conflicts with sound economic principles, is contrary to long established ratemaking policy, and is not in the public interest.

Q. OWEN CLAIMS THAT ITS RATE CASE APPLICATION IS REVENUE NEUTRAL. IF THE COOPERATIVE'S PROPOSED RATE DESIGN CHANGES WERE APPROVED, WOULD THIS CASE BE REVENUE NEUTRAL FOR ALL RESIDENTIAL CUSTOMERS?

A. No. Because Owen proposes a significant shift in revenue responsibility from volumetric charges to fixed monthly fees, Small Volume Residential customers would see increases in their electric bills while Large Residential electricity users would see reductions in their electric bills.

Specifically, the breakeven point (indifference level) is achieved at 1,095 KWH per month. As such, those customers using less than about 1,100 KWH per month would see an increase in their electric bills, customers using about 1,100 KWH would see no change in their overall bill, and customers using more than 1,100 KWH per month would enjoy a reduction.

Q. CAN YOU PROVIDE AN ESTIMATE OF THE PERCENTAGE OF OWEN'S RESIDENTIAL CUSTOMER BILLS THAT WOULD RECEIVE RATE DECREASES AND INCREASES?

A. Yes. Exhibit 6, page 5 of Owen's filing provides an annual bill frequency analysis. Based on this distribution of bills and consumption, and using the breakpoints discussed above, 52.1% of Residential bills (337,861) would increase as a result of the Cooperative's proposed rate design, 42.4% of Residential bills would decrease (274,849), and about 5.6% would remain unchanged (36,197).

Q. WHAT JUSTIFICATIONS DOES OWEN PROVIDE IN SUPPORT OF ITS SIGNIFICANT CHANGE IN RATE STRUCTURE?

A. Cooperative witness Mark Stallons claims there are three primary justifications for the Cooperative's proposed change in rate design. These justifications are: (1) a rate

design that collects the preponderance of margin (Distribution) revenue from fixed monthly fees is required in order to maintain the financial integrity of the Cooperative; (2) the Cooperative's fixed costs should be recovered through fixed charges; and, (3) a largely fixed fee rate structure is necessary before the Cooperative can promote energy efficiency investments.

Q. PLEASE DISCUSS MR. STALLONS' JUSTIFICATION RELATING TO HIS CLAIM THAT HIS PROPOSED RATE STRUCTURE IS REQUIRED IN ORDER TO MAINTAIN THE COOPERATIVE'S FINANCIAL INTEGRITY.

A. This claimed justification is simply incorrect. Within the United States there are dozens of investor-owned electric utilities and several hundred cooperatives.[2] Virtually every electric utility in the nation relies upon a rate structure that is overwhelmingly volumetrically based. Indeed, for decades the pricing structures of electric utilities have been largely volumetric based. This industry has remained not only financially viable, but has grown and prospered throughout the Country under volumetric rates for decades and continues to do so.

Any claim that Owen is somehow unique in the industry and requires a Residential and Small Commercial Distribution (non-purchased power) rate design that is predominately dependent on fixed monthly fees in order to remain financially viable verges on the absurd. As is well known, Owen is like other electric utilities in that it is a regulated monopoly. As such, Owen's prices are established in a manner that provides the Cooperative an opportunity to recover its costs of providing services including a reasonable profit (margin). This is in stark contrast to competitive firms in which market forces dictate the level of prices that can be charged. Indeed, if Owen's prudently incurred costs increases and/or usage revenues decreases, it has the ability to increase prices (and revenue) with a rate case.

In this case, Owen implies that under its current largely volumetric based rate structures, the Cooperative will face future revenue erosion due to the loss in KWH energy sales resulting from increased appliance efficiencies and conservation efforts of

[2] The National Rural Electric Cooperative Association states that it is the national service organization for more than 900 electric cooperatives and public power districts in the U.S.

customers. In this regard, while it is hopeful that Residential consumption of electricity will continue to become more and more efficient, this usage characteristic is nothing new. Indeed, the trend in increased appliance efficiencies began in the mid to late 1970's with the obsolescence of electric strip heating and introduction of heat pumps. Over this thirty to thirty-five year period virtually all electrical household appliance and equipment have become increasingly more energy efficient. During this same time period, American consumers have used more and more electricity overall as our lifestyles have changed and become more dependent on electrical devices. Notwithstanding that the laws of physics dictate that electric appliances have largely reached a point of diminishing efficiency gains, consumers are using more and more electrical devices with increased frequency as our lifestyles continue to change.

While it is highly unlikely that Owen's Residential customers will significantly reduce their total electricity consumption to any material degree in the next several years, there are two sides to the financial equation of every electric utility, including Owen. These two sides are revenues and costs. Even if Owen were to experience an erosion in sales due to the technological change, it will presumably also gain cost efficiencies due to technological change as well. These increased cost efficiencies include, but are not limited to, significant cost savings relating to the increased usage of automatic meter reading and smart metering technology, improved transformer efficiencies, improved maintenance scheduling and operations due to computerized software, improved outage response times due to smart circuits, lower average costs of billing and record keeping with computerized equipment, and a host of other increased cost efficiencies.

Finally, and most important, is the fact that even if Owen were unique to the industry and its sales revenue declines while costs either increase or remain constant, the Cooperative's financial integrity is protected with its ability to increase rates to recover its costs of providing service in a traditional general rate case as done by the rest of the industry.

Q. DOES OWEN'S PROPOSAL TO COLLECT A SUBSTANTIAL PORTION OF ITS DISTRIBUTION REVENUE FROM FIXED MONTHLY CHARGES COMPORT WITH THE ECONOMIC THEORY OF COMPETITIVE MARKETS OR THE ACTUAL PRACTICES OF SUCH COMPETITIVE MARKETS?

A. No. The most basic tenet of competition is that prices determined through a competitive market ensure the most efficient allocation of society's resources. Because public utilities are generally afforded monopoly status under the belief that resources are better utilized without the duplication of the fixed facilities required to serve consumers, a fundamental goal of regulatory policy is that regulation should serve as a surrogate for competition to the greatest extent practical.[3] As such, the pricing policy for a regulated public utility should mirror those of competitive firms to the greatest extent practical.

Q. PLEASE BRIEFLY DISCUSS HOW PRICES ARE GENERALLY STRUCTURED IN COMPETITIVE MARKETS.

A. Economic theory tells us that efficient price signals result when prices are equal to marginal costs.[4] It is well known that in the long-run all costs are variable and, hence, efficient pricing results from the incremental variability of costs even though a firm's short-run cost structure may include a high level of sunk or "fixed" costs or be reflective of excess capacity. Indeed, competitive market-based prices are generally structured based on usage, i.e. volume based pricing.

Q. PLEASE BRIEFLY EXPLAIN THE ECONOMIC PRINCIPLES OF EFFICIENT PRICE THEORY AND HOW SHORT-RUN FIXED COSTS ARE RECOVERED UNDER SUCH EFFICIENT PRICING.

A. Perhaps the best known micro-economic principle is that in competitive markets (i.e., no monopoly power or excessive profits exist) prices are equal to marginal cost. Marginal cost is equal to the incremental change in cost resulting from an incremental change in output. Although I will not explain the calculus involved in determining

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[3] James C. Bonbright, et al Principles of Public Utility Rates at 141 (Second Edition, 1988).

[4] Strictly speaking, efficiency is achieved only when there is no excess capacity such that short-run marginal costs equal long-run marginal costs. In practice, there is usually at least some excess capacity present such that pricing based on long-run marginal costs represents the most efficient utilization of resources.

marginal costs, it is readily apparent that because marginal costs measure the changes in costs with output, short-run "fixed" costs are irrelevant in efficient pricing. This is not to say that efficient pricing does not allow for the recovery of short-run fixed costs, but rather are reflected within a firm's production function such that no excess capacity exists and that an increase in output will require an increase in costs -- including those considered "fixed" from an accounting perspective. As such, under efficient pricing principles, marginal costs capture the variability of costs and since prices equal these costs, they too are variable in nature.

Q. PLEASE EXPLAIN HOW EFFICIENT PRICING PRINCIPLES ARE APPLIED TO THE ELECTRIC UTILITY INDUSTRY.

A. Universally, electric utility marginal cost studies include three separate categories of marginal costs: demand, energy, and customer. Consistent with the general concept of marginal costs, each of these costs vary with incremental changes such that marginal demand costs measure the incremental change in costs resulting from an incremental change in peak load (demand), marginal energy costs measure the incremental change in costs resulting from an incremental change in KWH (energy) consumption, and marginal customer costs measure the incremental change in costs resulting from an incremental change in number of customers.

Of particular relevance in this discussion is an understanding of what costs are included within, and the procedures used to determine, marginal customer costs. Since marginal customer costs reflect the measurement of how costs vary with number of customers, they only include those costs that directly vary as a result of adding a new customer. Therefore, these customer costs only reflect costs such as service lines, meters, and incremental billing and accounting costs. In every electric utility marginal cost study I have reviewed or conducted in the academic and regulatory arena, Residential marginal customer costs have been relatively low. Indeed, in all jurisdictions in which I have participated that have directly relied upon marginal cost pricing, Residential customer

charges have been established at relatively low levels; e.g., under $6.00 to $8.00 per month.[5]

Q. PLEASE EXPLAIN HOW THIS THEORY OF COMPETITIVE PRICING SHOULD BE APPLIED TO REGULATED PUBLIC UTILITIES, SUCH AS OWEN.

A. Due to Owen's investment in system infrastructure, there is no debate that many of its short-run costs are fixed in nature. However, as discussed above, efficient competitive prices are established based on long-run costs, which are entirely variable in nature.

Marginal cost pricing only relates to efficiency. This pricing does not attempt to always address fairness or equity. From a perspective of fair and equitable pricing of a regulated monopoly's products and services, it is generally agreed that payments for a good or service should be in accordance with the benefits received. In this regard, those that receive more benefits should pay more in total than those who receive fewer benefits. With respect to electricity usage, the level of KWH consumption is the most direct, and the best indicator of benefits received, such that volumetric pricing promotes the fairest pricing mechanism to customers and to the utility.

The above philosophy is, and has been, the belief of economists, regulators, and the marketplace for many years. As an illustration, consider utility industry pricing in its infancy (1800s). In the beginning, customers paid a fixed monthly fee and consumed as much of the utility commodity/service as they desired (usually water). It soon became apparent that this fixed monthly fee rate schedule was inefficient and unfair. Utilities soon began metering their commodity/service and charging only for the amount actually consumed. In this way, consumers receiving more benefits from the utility than others paid more in total for the utility service because they used more of the commodity.

[5] I have conducted or evaluated marginal cost studies involving electric utilities in Connecticut, Illinois, Maine, Virginia, and Washington, DC.

Q. IS THE ELECTRIC DISTRIBUTION INDUSTRY UNIQUE IN ITS COST STRUCTURE WHICH IS COMPRISED LARGELY OF FIXED COSTS IN THE SHORT-RUN?

A. No. Most manufacturing and transportation industries are comprised of cost structures predominated with "fixed" costs. Indeed, virtually every capital intensive industry is faced with a high percentage of fixed costs in the short-run. Prices for competitive products and services in these capital intensive industries are invariably established on a volumetric basis, including those that were once regulated; e.g., motor transportation, airline travel, and rail service.

Accordingly, Owen's position that its fixed costs should be recovered through fixed monthly charges is in my view incorrect. Pricing should reflect long-run cost incidence wherein all costs are variable or volumetric in nature, and users requiring more of the Company's products and services should pay more than customers who use less of these products and services. Stated in more simple terms, those customers who conserve, or who are otherwise more energy efficient, pay less than those who use more electricity.

Q. DO HIGH FIXED CUSTOMER CHARGE RATE STRUCTURES PROMOTE ADDITIONAL CONSUMPTION?

A. Yes. High fixed charge rate structures promote additional consumption because a consumer's price of incremental consumption is less than what an efficient price structure would otherwise be. A clear example of this principle is exhibited in the natural gas transmission pipeline industry. As discussed in its well known Order 636, the FERC's adoption of a "Straight Fixed Variable" ("SFV") pricing method was a result of national policy (primarily that of Congress) to promote the additional use of domestic natural gas by promoting additional interruptible (and incremental firm) gas usage. As such, the FERC's SFV pricing mechanism greatly reduced the price of incremental (additional) natural gas consumption thereby significantly increasing the demand for, and use of, natural gas in the United States subsequent to 1992 (when Order 636 was issued).

FERC Order 636 had two primary goals. The first was to enhance gas competition at the wellhead by completely unbundling the merchant and transportation

functions of pipelines.[6] The second goal was to encourage the increased consumption of natural gas in the United States. In the introductory statement of the Order, FERC stated:

> The Commission's intent is to further facilitate the unimpeded operation of market forces to stimulate the production of natural gas . . . . [and thereby] contribute to reducing our Nation's dependence upon imported oil . . . . [Order at 8].

With specific regard to the SFV rate design adopted in Order 636, FERC stated:

> Moreover, the Commission's adoption of SFV should maximize pipeline throughput over time by allowing gas to compete with alternate fuels on a timely basis as the prices of alternate fuels change. The Commission believes it is beyond doubt that it is in the national interest to promote the use of clean and abundant gas over alternate fuels such as foreign oil. SFV is the best method for doing that [Order at 128-129].

The FERC's objective for SFV is diametrically in opposition to a major claimed need for guaranteed revenue recovery through high fixed monthly customer charges. That is, there has been a recent trend for some natural gas LDC companies to advocate SFV Residential pricing and claiming a need for more reliance of fixed charge revenues by arguing that because retail rates have been historically volumetric based, there has been a disincentive for LDCs to promote conservation or encourage reduced consumption of natural gas. As is clearly discussed in FERC Order 636, the price signal that results from SFV pricing is meant to promote additional natural gas consumption, not reduce consumption. A rate structure, therefore, that is heavily based on a fixed monthly customer charge sends an even stronger price signal to consumers to use more energy.

Q. HAVE THERE BEEN ANY RECENT CHANGES IN ELECTRIC DISTRIBUTION COMPANIES STRUCTURES OR THE BUSINESS RISKS CONFRONTED BY OWEN THAT PROVIDE A COMPELLING REASON TO CHANGE THE ACCEPTED WISDOM AND POLICIES OF PRICING ELECTRIC DISTRIBUTION SERVICES BASED LARGELY ON VOLUMETRIC CHARGES?

[6] Federal Energy Regulatory Commission, Docket Nos. RM91-11-001 and RM87-34-065, Order No. 636 (Apr. 9, 1992), page 7.

A. No. As I have discussed, conservation through efficiency gains has been on-going for many years. As a result, even though average Residential usage per appliance has been declining, electric utilities have clearly been able to earn fair rates of return on their investments. Also, FERC's movement to straight fixed variable pricing for pipelines was unquestionably initiated to promote additional demand for natural gas, not less. In short, nothing has changed in the industry to abandon the collective wisdom of regulators and pricing economists for generations.

Q. AS A PUBLIC POLICY MATTER, WHAT IS THE MOST EFFECTIVE TOOL THAT REGULATORS HAVE TO PROMOTE COST EFFECTIVE CONSERVATION AND THE EFFICIENT UTILIZATION OF RESOURCES?

A. Unquestionably, the most important and effective tool that this, or any, regulatory Commission has to promote conservation is the development of rates that send proper pricing signals to conserve and utilize resources efficiently. In this regard, a pricing structure that is largely fixed in nature such that customers' effective prices do not properly vary with consumption, promotes the inefficient utilization of resources. Similarly, pricing structures that are weighted heavily on fixed charges are much inferior from a conservation and efficiency standpoint than pricing structures that require consumers to incur more cost with additional consumption.

Q. MR. WATKINS, A CUSTOMER'S TOTAL ELECTRIC BILL IS COMPRISED OF A DISTRIBUTION RATE COMPONENT AND A PURCHASED POWER COST COMPONENT. PURCHASED POWER COSTS ARE VOLUMETRICALLY PRICED AND REPRESENT THE MAJORITY OF A CUSTOMER'S ELECTRIC BILL. DOES THE VOLUMETRIC PRICING OF THE PURCHASED POWER COST COMPONENT OVERSHADOW THE NEED FOR A PROPER PRICING SIGNAL FROM DISTRIBUTION RATES?

A. No. The rationale of fixed charge pricing approaches escapes me as an economist. This notion implies that even though marginal rates may be inefficiently structured, this error is acceptable due to other aspects within a customer's electric bill. To me, this argument is no more plausible than establishing rates that provide for clearly

excessive monopolistic profits under the notion that the additional cost to consumers only represents a small portion of their energy bills and/or cost of living.

Q. EARLIER IN YOUR TESTIMONY YOU EXPLAINED THAT VOLUMETRIC PRICING PREDOMINATES IN COMPETITIVE MARKETS. IS THERE ANY DATA OR EXPERIENCE REGARDING THE PRICING OF ELECTRIC UTILITY SERVICES THAT HAVE RECENTLY BEEN DEREGULATED?

A. Yes. Retail electric competition for generation services exists in several states. Invariably, customer choice for generation supply is volumetrically priced. However, competition for electric generation alone does not necessarily provide a good apples-to-apples comparison with the bundled electric service provided by Owen.

Nonetheless, Texas has implemented total retail electric competition for consumers for most of the State's ratepayers, including distribution service. Under the Texas model, consumers select their electricity provider for all bundled electric services including generation, transmission, distribution and metering. The customers' selected service provider supplies all services from the generator to the meter box. Electric providers compete for customers and are free to set their own prices and pricing structure.

Q. HOW ARE COMPETITIVE RESIDENTIAL ELECTRIC RATES STRUCTURED IN TEXAS?

A. Every competitive electric service provider in Texas has a volumetric component within their rate structure. With regard to Residential fixed monthly customer charges, there are three different pricing structures: those with no fixed monthly charge; those that have a minimum bill amount; and, those with traditional fixed monthly customer charges (regardless of consumption). The following is a summary of the current rate structures regarding customer charges for the 35 providers that offer competitive residential electric service in Texas:

	Number Of Providers	Percentage Of Providers
No fixed charge	5	14%
Fixed charge waived with usage threshold	21	60%
Traditional fixed monthly customer charge	9	26%
Total	35	100%

Of the 9 providers that utilize a traditional fixed monthly customer charge, the minimum charge is $4.79 per month, the maximum customer charge is $9.89 per month, with an average customer charge of $6.04 per month. The details supporting these amounts are provided in my Schedule GAW-2.

From this data, 26% of the providers have maintained the traditional fixed monthly customer charge, 14% of the companies have abandoned fixed charge pricing altogether, and 60% of the providers waive any fixed fees once a minimum level of consumption (KWH) is achieved.[7] The conclusions that can be drawn from this data are:

(1) 74% of the competitive service providers have either abandoned traditional fixed customer charge pricing in favor of no customer charges at all or waive all fixed fees with reasonably low levels of consumption;

(2) of the 9 providers that continue to utilize a traditional fixed monthly customer charge, variable energy charges recover more than just generation and transmission (i.e., they include a substantial portion of distribution) costs as the maximum customer charge is only $9.89 with an average customer charge of $6.04; and,

(3) no competitor relies on fixed customer charge pricing for the majority of its revenue.

From this data and analysis, it is clear that when prices for a service similar to Owen's operations are established based on competition and determined by the market (customers and sellers), the resulting rate structure is similar to that found for most other competitive

[7] As indicated in the notes to Schedule GAW-2 customer charges are waived with a minimum monthly usage of 500 KWH or 1,000 KWH.

goods and services, i.e., predominantly based on volumetric pricing, and not fixed charge pricing.

Q. NOTWITHSTANDING THE EFFICIENCY REASONS AS TO WHY REGULATION SHOULD SERVE AS A SURROGATE FOR COMPETITION, ARE THERE OTHER RELEVANT ASPECTS TO THE PRICING STRUCTURES IN COMPETITIVE MARKETS *VIS A VIS* THOSE OF REGULATED UTILITIES?

A. Yes. In competitive markets, consumers, by definition, have the ability to choose various suppliers of goods and services. Such is obviously not the case with regulated monopoly utilities. Consumers and the market have a clear preference for volumetric pricing. Utility customers are not so fortunate in that the local utility is a monopoly. The only reason utilities are able to achieve pricing structures with high fixed monthly charges is due to their monopoly status. In my opinion, this is a critical consideration in establishing utility pricing structures. That is, competitive markets and consumers in the U.S. have demanded volumetric based prices for generations. Hence, a regulated utility's pricing structure should not be allowed to counter the collective wisdom of markets and consumers simply because of its market power.

Q. MR. STALLONS' THIRD JUSTIFICATION FOR PROPOSING THE ESTABLISHMENT OF EXCEPTIONALLY HIGH FIXED MONTHLY CUSTOMER CHARGES RELATES TO THE COOPERATIVE'S "INCENTIVES" TO PROMOTE AND LAUNCH ENERGY INNOVATIVE (CONSERVATION) PROGRAMS. PLEASE DISCUSS THE NEED FOR PRICING POLICIES SUCH AS THOSE ADVOCATED BY OWEN IN ORDER TO PROMOTE EFFECTIVE CONSERVATION MEASURES.

A. First and foremost, it is my firm belief that as public service companies, utilities such as Owen have a public obligation and duty to aggressively initiate and promote cost effective conservation programs. That is, just as is the case with Integrated Resource Planning responsibilities, Owen has a duty to promote cost effective conservation that is in the public interest. Whether Owen has a financial "incentive" to promote such policies

that are in the public interest begs the question. Specifically, these activities already fall within the organization's obligations and responsibilities. In this regard, ratepayers should reimburse Owen for the costs of implementing and managing effective conservation programs including any revenue erosion resulting from such activities.

Second, a pricing (rate) structure that is focused more on providing incentives to Owen than in promoting efficient electricity consumption is a clear case of throwing the baby out with the bath water. Beyond a doubt, the greatest tool this Commission has to promote the efficient utilization of society's resources is a pricing policy that establishes rate structures which encourage conservation, and not send a pricing signal that discourages the efficient utilization of electricity.

Third, Mr. Stallons' "incentive" justification is more in line with what one would expect from an investor-owned utility whose interests are geared to maximize investor (shareholder) interests. In this regard, Owen is a member-owned cooperative that exists and operates for the collective interests of its owner ratepayers. To the extent Owen develops and implements conservation programs that effectively reduce its members overall electric bills and that the consumer savings realized from these conservation programs exceed the costs (including any revenue erosion for reduced sales volumes) of the program, Owen is not only fulfilling its obligations as a Public Service Company, but is maximizing its owner/ratepayer interests and acting in their best interests. As such, Owen has a direct incentive to promote all effective energy conservation measures.

Q. HAVE YOU CONDUCTED ANY STUDIES OR ANALYSES TO INDICATE THE LEVELS AT WHICH OWEN'S RESIDENTIAL AND SMALL COMMERCIAL CUSTOMER CHARGES SHOULD BE ESTABLISHED?

A. Yes. In designing public utility rates, there is a technique that is widely used which produces fair and reasonable fixed monthly customer charges and is consistent with efficient pricing theory and practice. This technique considers only those costs that vary as a result of connecting a new customer and which are required in order to maintain a customer's account. This technique is known as a direct customer cost analysis and utilizes a traditional revenue requirement approach. Under this method, capital cost provisions include a return (margin), interest, and depreciation associated with the

investment in service lines and meters. In addition, operating and maintenance provisions are included for customer accounting, metering, and billing.

Under this direct customer cost approach, there is no provision for corporate overhead expenses or any other indirect costs as these costs are more appropriately recovered through energy (KWH) charges. I have conducted a direct customer cost analysis applicable to Owen's Residential and Small Commercial classes and have determined that this cost is in the range of $6.39 to $10.46 per month for Residential service and between $10.75 and $15.26 per month for Small Commercial service. The details of this analysis are provided in my Schedule GAW-3. It should be noted that my analysis includes meters O&M, meter reading and customer accounting expenses. The upper end of my cost analysis includes records and collections expenses while the lower end of my range excludes these costs.

Q. BEFORE YOU CONTINUE, WHY IS IT APPROPRIATE TO EXCLUDE CORPORATE OVERHEAD AND OTHER INDIRECT COSTS IN DEVELOPING RESIDENTIAL CUSTOMER CHARGES?

A. Like all electric utilities, Owen is in the business of providing electricity to meet the energy needs of its customers. Because of this and the fact that customers do not subscribe to Owen's services simply to be "connected," overhead and indirect costs are most appropriately recovered through energy charges.

Q. BASED ON YOUR OVERALL EXPERIENCE AS WELL AS THE STUDIES AND ANALYSES YOU CONDUCTED FOR THIS CASE, WHAT IS YOUR RECOMMENDATION CONCERNING THE APPROPRIATE CUSTOMER CHARGES FOR OWEN'S RESIDENTIAL AND SMALL COMMERCIAL RATE SCHEDULES?

A. Although my cost analysis indicates that a reduction to the Residential fixed monthly customer charge is warranted, the concepts of rate stability and rate continuity are also important. In this regard, I recommend that the current Residential customer charge of $11.30 be maintained in this case. Similarly, while the upper end of my cost analysis range indicates that a modest increase to the Small Commercial fixed monthly

customer charge can be supported, I recommend that this charge also be maintained at the current level.

Q. DO YOU HAVE ANY COMMENTS OR CONCERNS REGARDING OWEN'S PROPOSED OPTIONAL RESIDENTIAL RATE SCHEDULES?

A. Yes. Owen is proposing three separate seasonal time-of-use ("TOU") rate schedules as well as an inverted usage block rate schedule as options for Residential customers.

With regard to Owen's proposed TOU rate schedules, I have no major concerns or criticisms regarding these rate schedules. However, I do recommend that Owen's proposed TOU customer charge of $25.00 be reduced to a level between $11.30 and about $17.00 per month. In other words, while Owen's proposed TOU customer charge of $25.00 is excessive, more complex and expensive metering equipment along with additional customer accounting is required for TOU rate customers. In this regard, a somewhat higher customer charge is warranted for TOU rates. It should be noted that while TOU rates are proper from an economic and conservation perspective, and therefore, should be encouraged, electric utilities throughout the United States have had very little success with Residential customers opting for such rates. While Owen's proposal to offer Residential TOU rates is commendable, the reality is, it is likely that very few customers will either elect these optional rates and/or will benefit from TOU pricing.

With regard to Owen's proposed optional Residential inverted block rate schedule, I recommend that this proposed rate schedule either be rejected or significantly modified.

Generally, inverted block rate structures are desirable in situations in which a utility faces, and particular customers impose, increasing costs per unit. In other words, the average and marginal cost of providing service increases as KWH usage increases. In the electric utility industry, these increasing costs per unit are usually associated with, and a result of, customers with low load factors; i.e., as KWH consumption increases, peak KW demand increases at a faster rate.

In the instant case, Owen's proposed optional inverted block rate schedule is being offered in an attempt to accommodate low usage Residential customers whose KWH usage is consistently less than 500 KWH per month. Because this group of customers rarely use electricity for space heating or air conditioning, they tend to have very high load factors such that an inverted block price signal is not desirable. Indeed, while inverted block rates may be a preferred rate structure for the entire Residential class, such pricing is not consistent or appropriate if it is targeted only to those customers with low usage and high load factors.

The second criticism I have regarding the proposed rate as designed by Owen is that it was not developed based on cost of service, nor was any attempt made to design this rate on a "revenue neutral" basis.

The third, and most important, criticism I have regarding this proposed rate schedule is the level of the rate elements. Owen proposes a fixed monthly customer charge of $15.78 for this rate schedule. As discussed earlier in my testimony, such a fixed fee rate is excessive and should not exceed $11.30 if this new rate schedule is approved. In addition, and perhaps most importantly is the fact that Owen's proposed inverted energy charges are such that the $0.06977/KWH rate for the first energy block (0-300 KWH) is less than the variable cost of providing energy. Based on Owen's cost of service study, the average Residential cost of purchased power is $0.0749/KWH.[8] The most fundamental concept of business or economics is that prices must be at least equal to, or greater than, variable costs. As can be seen, the proposed first usage block rate of $0.06977/KWH does not even recover the variable cost of purchased power of about $0.0749/KWH. In summary, if the Commission is of the opinion that an optional inverted block rate schedule is in the public interest from a conceptual standpoint, significant modifications to Owen's proposed rates are required to reduce the customer charge, increase the first usage block energy charge, and ensure that the overall rate schedules are reasonably cost based or reasonably revenue neutral.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

[8] Calculated per Exhibit 11, page 22. Total Residential purchased power cost of $53,195,909 ($14,759,618 + $38,436,291) divided by Residential KWH of $710,449,061.

A. Yes.

BACKGROUND & EXPERIENCE PROFILE

GLENN A. WATKINS

VICE PRESIDENT/SENIOR ECONOMIST
TECHNICAL ASSOCIATES, INC.

EDUCATION

1982 - 1988	M.B.A., Virginia Commonwealth University, Richmond, Virginia
1980 - 1982	B.S., Economics; Virginia Commonwealth University
1976 - 1980	A.A., Economics; Richard Bland College of The College of William and Mary, Petersburg, Virginia

POSITIONS

Jul. 1995-Present	Vice President/Senior Economist, Technical Associates, Inc.
Mar. 1993-1995	Vice President/Senior Economist, C. W. Amos of Virginia
Apr. 1990-Mar. 1993	Principal/Senior Economist, Technical Associates, Inc.
Aug. 1987-Apr. 1990	Staff Economist, Technical Associates, Inc., Richmond, Virginia
Feb. 1987-Aug. 1987	Economist, Old Dominion Electric Cooperative, Richmond, Virginia
May 1984-Jan. 1987	Staff Economist, Technical Associates, Inc.
May 1982-May 1984	Economic Analyst, Technical Associates, Inc.
Sep. 1980-May 1982	Research Assistant, Technical Associates, Inc.

EXPERIENCE

I. Public Utility Regulation

A. Costing Studies -- Conducted, and presented as expert testimony, numerous embedded and marginal cost of service studies. Cost studies have been conducted for electric, gas, telecommunications, water, and wastewater utilities. Analyses and issues have included the evaluation and development of alternative cost allocation methods with particular emphasis on ratemaking implications of distribution plant classification and capacity cost allocation methodologies. Distribution plant classifications have been conducted using the minimum system and zero-intercept methods. Capacity cost allocations have been evaluated using virtually every recognized method of allocating demand related costs (e.g., single and multiple coincident peaks, non-coincident peaks, probability of loss of load, average and excess, and peak and average).

Embedded and marginal cost studies have been analyzed with respect to the seasonal and diurnal distribution of system energy and demand costs, as well as cost effective approaches to incorporating energy and demand losses for rate design purposes. Economic dispatch models have been evaluated to determine long range capacity requirements as well as system marginal energy costs for ratemaking purposes.

B. Rate Design Studies -- Analyzed, designed and provided expert testimony relating to rate structures for all retail rate classes, employing embedded and marginal cost studies. These rate structures have included flat rates, declining block rates, inverted block rates, hours use of demand blocking, lighting rates, and interruptible rates. Economic development and special industrial rates have been developed in recognition of the competitive environment for specific customers. Assessed alternative time differentiated rates with diurnal and seasonal pricing structures. Applied Ramsey (Inverse Elasticity) Pricing to marginal costs in order to adjust for embedded revenue requirement constraints.

GLENN A. WATKINS

C. Forecasting and System Profile Studies -- Development of long range energy (Kwh or Mcf) and demand forecasts for rural electric cooperatives and investor owned utilities. Analysis of electric plant operating characteristics for the determination of the most efficient dispatch of generating units on a system-wide basis. Factors analyzed include system load requirements, unit generating capacities, planned and unplanned outages, marginal energy costs, long term purchased capacity and energy costs, and short term power interchange agreements.

D. Cost of Capital Studies -- Analyzed and provided expert testimony on the costs of capital and proper capital structures for ratemaking purposes, for electric, gas, telephone, water, and wastewater utilities. Costs of capital have been applied to both actual and hypothetical capital structures. Cost of equity studies have employed comparable earnings, DCF, and CAPM analyses. Econometric analyses of adjustments required to electric utilities cost of equity due to the reduced risks of completing and placing new nuclear generating units into service.

E. Accounting Studies -- Performed and provided expert testimony for numerous accounting studies relating to revenue requirements and cost of service. Assignments have included original cost studies, cost of reproduction new studies, depreciation studies, lead-lag studies, Weather normalization studies, merger and acquisition issues and other rate base and operating income adjustments.

II. Transportation Regulation

A. Oil and Products Pipelines -- Conducted cost of service studies utilizing embedded costs, I.C.C. Valuation, and trended original cost. Development of computer models for cost of service studies utilizing the "Williams" (FERC 154-B) methodology. Performed alternative tariff designs, and dismantlement and restoration studies.

B. Railroads -- Analyses of costing studies using both embedded and marginal cost methodologies. Analyses of market dominance and cross-subsidization, including the implementation of differential pricing and inverse elasticity for various railroad commodities. Analyses of capital and operation costs required to operate "stand alone" railroads. Conducted cost of capital and revenue adequacy studies of railroads.

III. Insurance Studies

Conducted and presented expert testimony relating to market structure, performance, and profitability by line and sub-line of business within specific geographic areas, e.g. by state. These studies have included the determination of rates of return on Statutory Surplus and GAAP Equity by line - by state using the NAIC methodology, and comparison of individual insurance company performance vis a vis industry Country-Wide performance.

Conducted and presented expert testimony relating to rate regulation of workers compensation, automobile, and professional malpractice insurance. These studies have included the determination of a proper profit and contingency factor utilizing an internal rate of return methodology, the development of a fair investment income rate, capital structure, cost of capital.

Other insurance studies have included testimony before the Virginia Legislature regarding proper regulatory structure of Credit Life and P&C insurance; the effects on competition and prices resulting from proposed insurance company mergers, maximum and minimum expense multiplier limits, determination of specific class code rate increase limits (swing limits); and investigation of the reasonableness of NCCI's administrative assigned risk plan and pool expenses.

GLENN A. WATKINS

IV. Anti-Trust and Commercial Business Damage Litigation

Analyses of alleged claims of attempts to monopolize, predatory pricing, unfair trade practices and economic losses. Assignments have involved definitions of relevant market areas(geographic and product) and performance of that market, the pricing and cost allocation practices of manufacturers, and the economic performance of manufacturers' distributors.

Performed and provided expert testimony relating to market impacts involving automobile and truck dealerships, incremental profitability, the present value of damages, diminution in value of business, market and dealer performance, future sales potential, optimal inventory levels, fair allocation of products, financial performance; and business valuations.

MEMBERSHIPS AND CERTIFICATIONS

Member, Association of Energy Engineers (1998)
Certified Rate of Return Analyst, Society of Utility and Regulatory Financial Analysts (1992)
Member, American Water Works Association
National Association of Business Economists
Richmond Association of Business Economists
National Economics Honor Society

Owen Electric
Competitive Fixed Period Electric Residential Rates in Texas 1/

	Company	Customer Charge	
1	Amigo Energy	$6.95	2a/
2	Texas Power	$10.00	2b/
3	Champion Energy Services	$4.95	2a/
4	Gexa Energy	$4.79	
5	Cirro Energy	$9.89	
6	Kinetic Energy	$15.00	2b/
7	Ambit Energy	$9.99	2b/
8	StarTex Power	$4.99	2a/
9	YEP	$7.95	2b/
10	Brilliant Energy	$6.95	2a/
11	Southwest Power & Light	$7.95	2b/
12	Dynowatt	$6.95	2b/
13	APNA Energy	$8.95	2b/
14	MX Energy	$4.95	
15	Mega Energy	$12.95	2b/
16	Stream Energy	$0.00	
17	Texpo Energy	$7.95	2b/
18	Spark Energy	$8.99	2b/
19	TXU Energy	$4.95	
20	Reliant Energy	$9.89	
21	CPL Retail Energy	$4.95	
22	Potentia	$9.99	2b/
23	Tara	$6.95	2a/
24	Bounce	$4.95	2b/
25	Frontier	$5.00	2b/
26	Epcot Electric	$0.00	
27	TriEagle Energy	$4.95	
28	True Electric	$6.95	2b/
29	Mission Power	$6.95	2b/
30	Our Energy	$0.00	
31	Andeler Power	$0.00	
32	Veteran Energy	$5.00	
33	WTU Retail Energy	$4.95	
34	Entrust Energy	$0.00	
35	Pennywise Power	$9.95	2b/

Customer Charges:	
No Customer Charge	5
Waivable Customer Charge	21
Traditional Customer Charge	9
Total	35

Avg. Non-Waivable Customer Charge: $6.04

1/ "Fixed Period" means customer enters a contract to not switch provider for at least a predetermined time period, in this case 12 months.
2a/ Customer charge is waived with a minimum usage of 500kWh.
2b/ Customer charge is waived with a minimum usage of 1000 kWh.

Owen Electric Cooperative
Direct Customer Costs
(Residential and Small Commercial)

	Total Cooperative	Residential Allocation Factor	Residential Amount	Small Commercial Allocation Factor	Small Commercial Amount
Rate Base					
Gross Plant:					
369 Services 1/	$18,072,677	85.73% 2/	$15,493,706	9.85% 2/	$1,780,159
370 Meters 1/	$16,001,709	94.19% 2/	$15,071,370	4.09% 2/	$654,630
Total Gross Plt.	$34,074,386		$30,565,076		$2,434,789
Accum. Depreciation 1/					
369 Services 1/	($6,764,295)	85.73% 2/	($5,799,030)	9.85% 2/	($666,283)
370 Meters 1/	($5,958,167)	94.19% 2/	($5,611,759)	4.09% 2/	($243,749)
Total Accum Depr.	($12,722,462)		($11,410,789)		($910,032)
Net Plant (Rate Base)	$21,351,924		$19,154,286		$1,524,757
Depreciation					
Services 3/	$851,169	85.73% 2/	$729,707	9.85% 2/	$83,840
Meters 3/	$753,633	94.19% 2/	$709,817	4.09% 2/	$30,831
Total Depreciation Exp.	$1,604,802		$1,439,524		$114,671
Oper. & Maint. Expenses					
586 Meters Oper. 4/	$1,225,070	94.19% 2/	$1,153,844	4.09% 2/	$50,118
597 Maint. of Meters 4/	$8,039	94.19% 2/	$7,572	4.09% 2/	$329
902 Meter Reading 4/	$226,481	93.09% 5/	$210,831	4.04% 5/	$9,150
903 Records & Collections 4/	$2,836,562	93.09% 5/	$2,640,556	4.04% 5/	$114,597
908 Cust. Accounting 4/	$198,107	93.09% 5/	$184,418	4.04% 5/	$8,004
Total O&M Expenses	$4,494,259		$4,197,221		$182,197
Return:					
Interest @ 4.85 % 6/	$639,871		$574,012		$45,694
Margin @ TIER=2.0	$639,871		$574,012		$45,694
Total Return	$1,279,742		$1,148,025		$91,387
Revenue Requirement: Excluding Records & Collections:					
O&M Expenses			$1,556,665		$67,600
Depreciation			$1,439,524		$114,671
Return			$1,148,025		$91,387
Total Revenue Requirement			$4,144,214		$273,658
Number of Bills			648,908		25,451
Monthly Customer Cost Excluding Records & Collections			**$6.39**		**$10.75**
Revenue Requirement: Including Records & Collections:					
O&M Expenses			$4,197,221		$182,197
Depreciation			$1,439,524		$114,671
Return			$1,148,025		$91,387
Total Revenue Requirement			$6,784,769		$388,256
Number of Bills			648,908		25,451
Monthly Customer Cost Including Records & Collections			**$10.46**		**$15.26**

Owen Electric Cooperative
Direct Customer Costs
(Residential and Small Commercial)

Notes:

1/ Per Owen Exhibit 11, Schedule 2.2, Page 9.
2/ Per Owen Exhibit 11, Schedule 4.2, Page 33.
3/ Per Owen Exhibit 11, Schedule 2, Page 4.
4/ Per Owen Exhibit 11, Schedule 2, Page 3.
5/ Per Owen Exhibit 11, Schedule 4.2, Page 34.
6/ Calculated based on Owen's actual capital structure and cost of debt per Exhibit 12.
Owens' capital structure is as follows:

	Capital Structure	
	Amount	Pct
L-T Debt	$94,201,556	61.79%
Equity	$58,254,456	38.21%
Total	$152,456,012	100.00%

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF OWEN	)	
ELECTRIC COOPERATIVE, INC.	)	Case No. 2011-00037
FOR AN ADJUSTMENT OF RATES	)	

AFFIDAVIT OF GLENN A. WATKINS

Commonwealth of Virginia)
)
)

Glenn A. Watkins, being first duly sworn, states the following: The prepared Pre-Filed Direct Testimony, and the Schedules and Appendix attached thereto constitute the direct testimony of Affiant in the above-styled case. Affiant states that he would give the answers set forth in the Pre-Filed Direct Testimony if asked the questions propounded therein. Affiant further states that, to the best of his knowledge, his statements made are true and correct. Further affiant saith not.

Glenn A. Watkins

SUBSCRIBED AND SWORN to before me this 25th day of August, 2011.

NOTARY PUBLIC

My Commission Expires: 10-31-14

JENNIFER R. DOLEN
COMMONWEALTH OF VIRGINIA
Expires
10-31-14
ID#
7315146
NOTARY PUBLIC