BEFORE THE WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

PACIFIC POWER d/b/a PACIFICORP,

Respondent.

DOCKET NO UE-130043

DIRECT TESTIMONY OF GLENN A.WATKINS (GAW-1T)

ON BEHALF OF

PUBLIC COUNSEL

JUNE 21, 2013

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GLENN A. WATKINS' EXHIBIT LIST

I. INTRODUCTION AND SUMMARY

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: By whom are you employed and in what capacity?

A: I am Executive Vice President and Senior Economist with Technical Associates, Inc., which is an economics and financial consulting firm with offices in Richmond, Virginia.

Q: On whose behalf are you testifying?

A: I am testifying on behalf of the Public Counsel Division of the Washington Attorney General's Office (Public Counsel).

Q: Please describe your professional qualifications.

A: Except for a six-month period during 1987 in which I was employed by Old Dominion Electric Cooperative as its forecasting and rate economist, I have been employed by Technical Associates continuously since 1980.

During my thirty-two year career at Technical Associates, I have conducted marginal and embedded cost of service, rate design, cost of capital, revenue requirement, and load forecasting studies involving numerous gas, electric, water/wastewater, and telephone utilities, and have provided expert testimony in Alabama, Arizona, Delaware, Georgia, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, North Carolina, New Jersey, Ohio, Illinois, Pennsylvania, Vermont, Virginia, South Carolina, Washington, and West Virginia. I hold an

M.B.A. and B.S. in economics from Virginia Commonwealth University. I am a member of several professional organizations as well as a Certified Rate of Return Analyst. A more complete description of my education and experience is provided in Exhibit No. GAW-2.

Q: What is your ratemaking experience within Washington State?

A: I have testified on behalf of Public Counsel in numerous electric and gas rate cases over the last several years including the 2007, 2009, and 2011 electric and gas rate cases involving Puget Sound Energy,[1] the 2009 Pacific Power and Light rate case,[2] and the 2009 and 2013 Avista rate cases.[3]

Q: What is the purpose of your testimony is this proceeding?

A: Technical Associates has been engaged to review and evaluate the appropriateness of PacifiCorp's Residential fixed customer charges. The purpose of my testimony at this time is to comment on PacifiCorp's proposed fixed monthly charges and provide my analysis and recommendations in this area.

II. RESIDENTIAL RATE DESIGN AND CUSTOMER CHARGES

Q: Please explain PacifiCorp's current and proposed Residential rate structures.

A: Currently, PacifiCorp's Residential rates include a fixed monthly customer charge plus a two-tiered inverted block energy charge rate structure for all energy (KWH) consumed. Although the Company proposes to maintain its current rate structure in this case, it proposes a significant shift in revenue collection from volumetric to

[1] Dockets UE-072300, UG-072301, UE-090704, UG-090705, UE-111048 and UG-111049.
[2] Docket UE-090205.
[3] Dockets UE-090134, UG-090135, and UE-120436.

fixed monthly charges. Specifically, PacifiCorp is proposing to increase the Residential customer charge by 67%, from $6.00 to $10.00 per month.

Q: Is PacifiCorp's proposed 67% increases to Residential customer charges reasonable or in the public interest?

A: No. The proposed increases violate the regulatory principle of gradualism, violate the economic theory of efficient competitive pricing, and are contrary to effective conservation efforts.

Q: Does PacifiCorp's proposal to collect a substantial portion of Residential 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 duplicating 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.[4] 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.

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

A: Under economic theory, efficient price signals result when prices are equal to marginal costs.[5] It is well known that costs are variable in the long-run. Therefore, 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., markets in which 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. I will not explain the calculus involved in determining marginal costs. However, 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. Rather, they 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 prices are variable because prices equal these

[5] 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.

costs.

Q: Please explain how efficient pricing principles are applied to the electric utility industry.

A: Universally, 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 varies with incremental changes. 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. Marginal customer costs measure the incremental change in costs resulting from an incremental change in number of customers.

Particularly relevant here is understanding 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 the number of customers, they only include those costs that directly vary as a result of adding a new customer. Therefore, marginal customer costs only reflect costs such as service lines, meters, and incremental billing and accounting costs.

In every utility marginal cost study I have reviewed or conducted in the academic and regulatory setting, 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. ranging from approximately $6.00 to $8.00

per month.[6]

Q: Please explain how this theory of competitive pricing should be applied to regulated public utilities, such as PacifiCorp.

A: Due to PacifiCorp'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 address fairness or equity. Fair and equitable pricing of a regulated monopoly's products and services should reflect the benefits received for the goods or services. In this regard, those who receive more benefits should pay more in total than those who receive fewer benefits. Regarding electricity usage, i.e. the level of KWH (electric) consumption, is the best, and most direct indicator of benefits received. Thus, volumetric pricing promotes the fairest pricing mechanism to customers and to the utility.

The above philosophy has consistently been the belief of economists, regulators, and policy makers for many years. For example, consider utility industry pricing in the 1800s, when the industry was in its infancy. 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

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

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 paid more, in total, for the utility service because they used more of the commodity.

Q: Is the electric distribution industry unique in its cost structures, which are 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, PacifiCorp's position that its fixed costs should be recovered through fixed monthly charges is incorrect. Pricing should reflect the Company's long-run costs, 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 more simply, those customers who conserve are otherwise more energy efficient, or use less of the commodity for any reason, pay less than those who use more electricity.

Q: How are high fixed customer charge rate structures contrary to effective conservation efforts?

A: High fixed charge rate structures actually 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[7] was a result of national policy (primarily that of Congress) to encourage increased use of domestic natural gas by promoting additional interruptible (and incremental firm) gas usage. The FERC's SFV pricing mechanism greatly reduced the price of incremental (additional) natural gas consumption. This resulted in significantly increasing the demand for and use of, natural gas in the United States after Order 636 was issued in 1992.

FERC Order 636 had two primary goals. The first goal was to enhance gas competition at the wellhead by completely unbundling the merchant and transportation functions of pipelines.[8] The second goal was to encourage the increased consumption of natural gas in the United States. In the introductory

[7] Under Straight Fixed Variable pricing, customers pay a fixed charge that is designed to recover all of the utility's fixed costs.
[8] Federal Energy Regulatory Commission, Dockets RM91-11-001 and RM87-34-065, Order No. 636 (Apr. 9, 1992), p. 7.

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].
>
> Recently, some public utilities have begun to advocate SFV Residential

pricing. The companies claim a need for enhanced fixed charge revenues. To support their claim, the companies argue that because retail rates have been historically volumetric based, there has been a disincentive for utilities to promote conservation or encourage reduced consumption. However, the FERC's objective in adopting SFV pricing suggests the exact opposite. The price signal that results from SFV pricing is meant to promote additional consumption, not reduce consumption. Thus, a rate structure 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 utility company structures, or the business risks confronted by PacifiCorp, that provide a compelling reason to change the accepted wisdom and policies of volumetric pricing for utility services?

A: No. Conservation through efficiency gains has been on-going for many years and is

not a new risk. As a result, even though average Residential electric usage per appliance has been declining, utilities have clearly been able to earn fair rates of return on their investments under volumetric pricing structures. 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 generations of regulators and pricing economists.

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, one of the most important and effective tools that this, or any, regulatory Commission has to promote conservation is, developing rates that send proper pricing signals to conserve and utilize resources efficiently. A pricing structure that is largely fixed, such that customers' effective prices do not properly vary with consumption, promotes the inefficient utilization of resources. 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: A customer's total electric bill is comprised of a base rate component and a fuel cost component. These fuel-related costs are volumetrically priced and represent a significant portion of a customer's bill. Does the volumetric pricing of this 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 utility services that have recently been deregulated?

A: Yes. Retail electric competition for electric 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 services provided by PacifiCorp.

Texas has implemented total retail electric competition 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 two different pricing structures: those with traditional fixed monthly customer charges (regardless of consumption); and, those that have a minimum bill amount. The following is a summary of the current rate structures regarding customer charges for the 28 providers that offer competitive Residential electric service in Texas:

	Number Of Providers	Percentage Of Providers
Fixed charge waived with usage threshold	21	75%
Traditional fixed monthly customer charge	7	25%
Total	28	100%

Of the seven providers that utilize a traditional fixed monthly customer charge, the average customer charge is $6.94 per month. Regarding the 21 competitive providers that waive a fixed fee with a minimum threshold of usage, the average customer charge is $9.14 per month. The details supporting these amounts are provided in my Exhibit No. GAW-3.

From this data, 25% of the providers have maintained the traditional fixed monthly customer charge, and 75% of the providers waive any fixed fees once a minimum level of consumption (KWH) is achieved.[9]

When prices for a service similar to PacifiCorp's operations are established based on competition and determined by the market (customers and sellers), the

[9] As indicated in the notes to Exhibit No. GAW-3 customer charges are waived with minimum monthly usages ranging from of 500 KWH to 2,000 KWH.

resulting rate structure is similar to that found for most other competitive 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. 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. 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: Have you conducted any studies or analyses to indicate the levels at which PacifiCorp's Residential customer charges should be established?

A: Yes. In designing public utility rates, there is a method that produces maximum 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 a direct customer cost analysis and uses 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 metering, records, 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.

Q: Have you conducted direct customer cost analyses applicable to PacifiCorp's Residential class?

A: Yes. I conducted a direct customer cost analysis for PacifiCorp's Residential class. The details of this analysis are provided in my Exhibit No. GAW-4.

As indicated in the exhibit, the Residential direct customer cost is in the range of $7.58 to $7.78.[10]

Q: Why is it appropriate to exclude corporate overhead and other indirect costs in developing Residential customer charges?

A: Like all electric utilities, PacifiCorp 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 PacifiCorp's services simply to be "connected," overhead and indirect costs are most appropriately recovered through volumetric energy charges.

[10] As indicated in Exhibit No. GAW-4, the cost ranges are the result of utilizing a cost of equity range of 9.0% to 10.0%.

Q. Are there any other key policy considerations regarding the appropriate customer charges for PacifiCorp's Residential customers that you would like to address?

A. Yes. In a recent PacifiCorp rate case (Docket UE-100749), the Commission rejected any increase to PacifiCorp's Residential customer charge of $6.00. In that case, the Commission observed the current difficult economic times confronted by ratepayers and that "many customers will view any basic charge increase as an additional increase above and beyond the rates approved in this Order."[11] Furthermore, the Commission opined that lower energy charges (as a result of increasing customer charge rates and revenue) could result in reduced deployment of energy efficiency. Finally, the Commission concluded that "not recovering some of the 'basic' costs through the basic charge does not mean those costs will not be recovered; rather, those costs will just be recovered through the variable charges."[12]

Q: Based on your overall experience as well as the studies and analyses you conducted for this case, what is your recommendation regarding the appropriate customer charges for PacifiCorp's Residential customers?

A: Considering all factors, I recommend a Residential customer charge of no more than $7.00 per month. My recommended maximum increase to Residential customer charge represents a 16.67% increase. Although my recommended maximum Residential customer charge ($7.00) is marginally lower than that produced from my

[11] *WUTC v. PacifiCorp d/b/a Pacific Power and Light Company,* Docket UE-100749, Order 06, Final Order Rejecting Tariff Sheets; Authorizing Increased Rates; and Requiring Compliance Filing, at ¶ 133 (March 25, 2011).
[12] *Id.*

direct customer cost analysis, I have considered gradualism and the impact on small usage customers in limiting this increase to a maximum of $7.00.

Q: Does this complete your testimony?

A: Yes.