

EXHIBIT NO. _____ (EMM-30C)
DOCKET NO. _____
2003 POWER COST ONLY RATE CASE
WITNESS: ERIC M. MARKELL

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

Docket No. _____

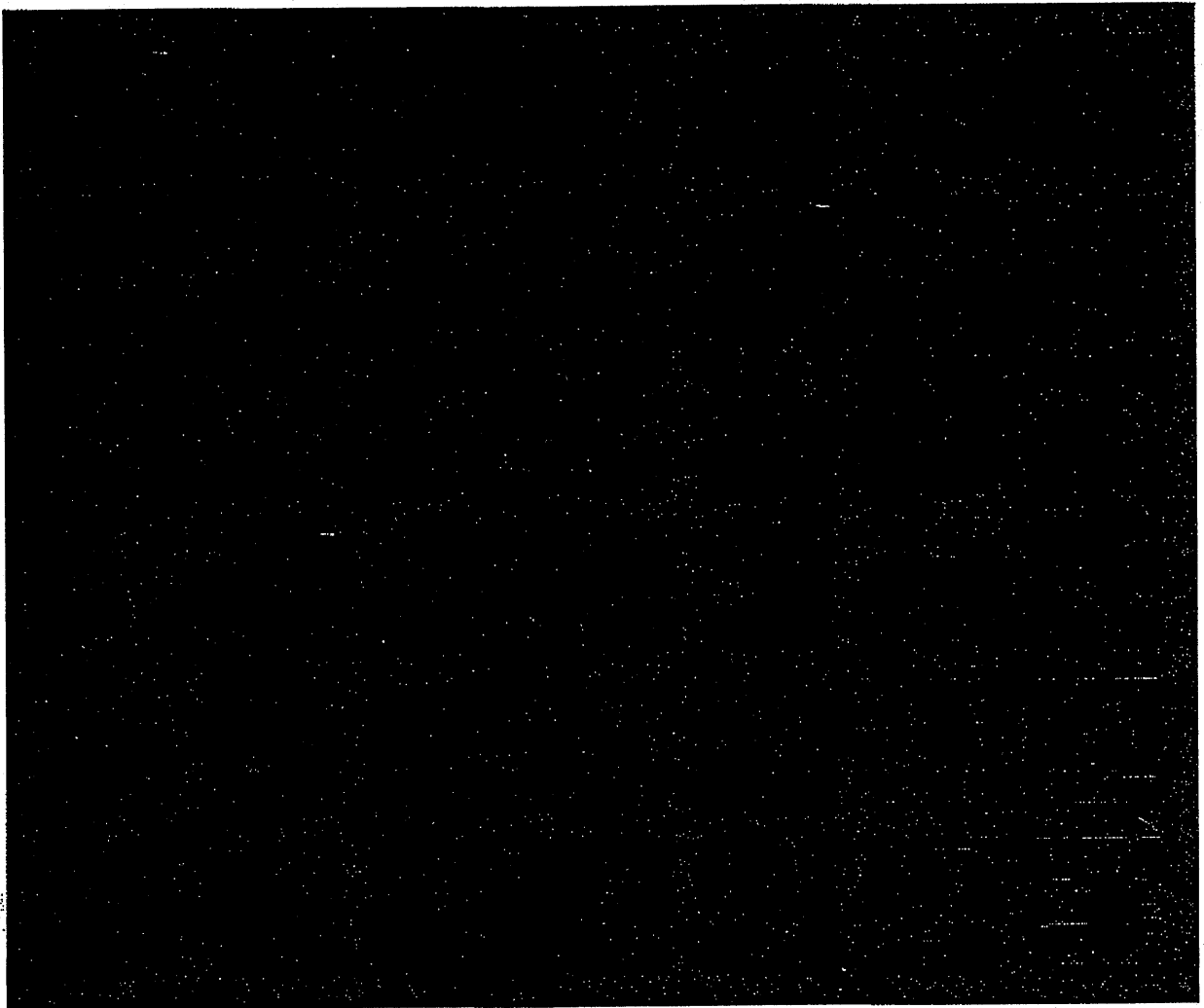
v.

PUGET SOUND ENERGY, INC.,

Respondent.

DIRECT TESTIMONY OF
ERIC M. MARKELL
ON BEHALF OF PUGET SOUND ENERGY, INC.

STANDARD & POOR'S
CORPORATE
FINANCE
CRITERIA



Utilities

The utilities rating methodology encompasses two basic components: business risk analysis and financial analysis.

Evaluation of industry characteristics, the utility's position within that industry, its regulation, and its management provides the context for assessing a firm's financial condition and a view of the forces that will shape the utility's future. Ratings are prospective: S&P is concerned with what will affect creditor protection today and tomorrow rather than what determined it yesterday. Historical analysis is a tool for identifying strengths and weaknesses, and provides a starting point for evaluating financial condition.

Utilities credit analysis factors	
Business Risk	Financial Risk
<ul style="list-style-type: none"> • Markets/competitive position • Fuel/power supply • Operating efficiency • Regulatory treatment • Construction risk/asset concentration • Nonutility activities • Management 	<ul style="list-style-type: none"> • Earnings protection • Capital structure • Cash flow adequacy • Financial flexibility/capital attraction

The credit analysis of utilities is evolving as utilities are treated less as regulated monopolies and more as entities faced with a host of challengers in a competitive environment. Marketplace dynamics are supplanting the power of regulation, making it critically important to reduce costs and/or market new services in order to thwart competitors' inroads.

Markets & service area economy

The backdrop for assessing a utility's franchise is economic, social, and political, as the strength and staying power of product demand is rooted in a specific service territory. A deteriorating service territory obviously is cause for concern. A decreasing customer base means spreading fixed costs more narrowly. Without growth in a utility's sales base, revenue gains can come about only through rate increases, which regulators would be reluctant to impose on a sagging economy. A growing economy, on the other hand, may offer promising sales growth—as long as the utility has the available capacity to realize the benefits of that growth.

At the macro-economic level, the analyst tries to discover any secular consumption trends and the reasons behind them. Specific items addressed include the size and growth

rate of the market; diversity of the customer base; and trends in demographics, employment, and per capita income.

Furthermore, S&P evaluates historical and prospective sales patterns by customer class and industry dependence. For example, heavy industrial concentration is viewed as reason for caution since it may expose the utility to cyclicity of demand. A large residential component, on the other hand, produces a more stable and predictable revenue stream.

Competitive climate

Competition is mounting in the electric utility industry as a result of excess generating capacity and lower barriers to entry. This has already produced declining prices for many wholesale and retail customers in some parts of the country. Over the coming years, more and more customers will be in a position to demand lower prices—and not just those with large industrial loads. With the declining cost of incremental generation and advances in substitute energy source technology (such as the fuel cell), retail competition seems inevitable.

The competitive factors analyzed include: percentage of sales that are wholesale; industrial and commercial customer concentration; customer class rate differentials; and rate design and flexibility. The regional context obviously is important, so the regional capacity situation and transmission constraints are examined. In all cases, though, high rates create vulnerability to substitution over time.

Similarly, gas utilities are analyzed with regard to their competitive standing in the three major areas of demand: residential, commercial, and industrial. Details regarding the components of the industrial classification are considered. Although regulated as holders of monopoly power, natural gas utilities have for some time been actively competing for energy market share with fuel oil, electricity, coal, solar, wood, etc. The long-term staying power of market demand for natural gas cannot be taken for granted. However, distributors and pipelines that are situated to serve new origins of demand—such as gas-fired turbines and cogeneration facilities for electricity peaking, natural gas-powered vehicles, and natural gas cooling systems—have lower overall market risk.

Natural gas pipelines are judged to carry somewhat higher business risk than distribution companies because they face competition in every one of their markets. Being the pipeline of choice is a function of attractive rates, services provided, or capacity available in each particular market. Periodic discounting of rates to retain customers puts pressure on profitability. To the extent a pipeline

serves utilities versus industrial end users, its stability is greater.

Of all utilities, telecommunications companies face the most rapid pace of change. The local exchange monopoly is surely—but not slowly—being dismantled. Competition is accelerating, as technological and regulatory changes create alternative access from new rivals (including cable television companies) who can now connect to the telephone network.

However, there are mitigating factors that should stabilize telecommunications firms' credit quality over the intermediate term. New switching and signaling systems installed in the late 1980s and extensive deployment of fiber optic cable are now providing large payoffs. The multiple benefits include operating economies and lower maintenance costs. Furthermore, the technological underpinnings for the much-vaunted "information superhighway" are in place. Telcos can, therefore, look to new sources of high-margin revenue. Ancillary services, such as call waiting and Call ID, are very attractive now. With the capability to deliver vast amounts of multimedia and interactive services, telcos have the potential to capture a share of the entertainment and transactional revenues of the future. A company's ability to compete by introducing and marketing new services is an increasingly important—even critical—rating factor.

Fuel/Power supply

Assessment of present and prospective fuel and power supply is critical to every electric utility analysis. For gas pipeline and distribution companies, gauging the long-term natural gas supply position is an important consideration. There is no similar analytical category for telephone utilities.

For electric utilities, emphasis is placed on reserve margins, fuel mix, transmission capability, heat rates, busbar costs, fuel contracts, and purchased power arrangements. The adequacy of generating margins is examined at the national, regional, and individual company levels. However, the reserve margin picture is muddled by the imprecise nature of peak load growth forecasting, and such factors as Canadian capacity availability, plant shutdowns due to age, new Nuclear Regulatory Commission rules, acid rain remedies, possible fuel shortages, problems associated with nontraditional technologies, etc. Even apparently ample reserves may not be what they seem. Moreover, the quality of capacity is just as important as the size of reserves. Companies' reserve requirements differ, depending on individual operating characteristics. For example, as generating facilities become larger, particularly with respect to available capacity, margins should correspondingly widen to ensure service reliability.

Fuel diversity provides flexibility in a changing environment. Potential supply disruptions and price hikes can raise rates and ignite political and regulatory pressures that ultimately lead to erosion in financial performance. Thus, the ability to alter generating sources and take advantage of lower-cost fuels is viewed favorably.

Dependence on any single fuel means exposure to the specific problems associated with it. Electric utilities that rely on oil or gas face the potential for shortages and rapid price increases. Utilities that own nuclear generating facilities face the big unknown of costs for decommissioning. Coal-fired capacity has major environmental problems, stemming from concerns over acid rain and the "greenhouse effect."

Purchasing power from neighboring utilities, qualifying facility projects, or independent power producers may help the generating capacity picture to a large degree. In fact, there has been a growing reliance on purchased power arrangements as an alternative to expensive new plant construction. The utility avoids financial stress, construction and prudence review risks, and reduces regulatory lag. A purchased power arrangement can also enhance supply flexibility and fuel diversity, be a very effective source of short- or intermediate-term capacity, and help maximize load factors. Notwithstanding the benefits of purchasing, such a strategy has risks of its own. By entering into a firm long-term purchased-power contract that contains a fixed-cost component, utilities can incur substantial market, operating, regulatory, and financial risks. Moreover, regulatory treatment of purchased power removes any upside potential that might help offset the risks. Utilities are not compensated through incentive rate-making; rather, purchased power is recovered dollar-for-dollar as an operating expense.

To analyze the financial impact of purchased power, S&P employs the following financial methodology. The net present value of future annual capacity payments (discounted at 10%) represents a potential debt equivalent—the off-balance sheet obligation that a utility incurs when it enters into a long-term purchased power contract. However, S&P adds to the utility's balance sheet only a portion of this amount, recognizing that such a contractual arrangement is not entirely the equivalent of debt. What percentage is added is a function of S&P's qualitative analysis of the specific contract and the extent to which market, operating, and regulatory risks are borne by the utility. For unconditional, take-or-pay contracts, the range is from 40% to 80%—with the average hovering around 60%. A lower factor typically is assigned for system purchases from coal-fired utilities and a higher factor is usually designated for unit-specific nuclear purchases. The range for take-and-pay performance obligations is between 10% and 50%. As a practical matter, purchased power risk usually is not significant until purchased power exceeds 10% to 15% of total generating capacity.

For gas pipeline and distribution utilities, long-term supply adequacy of methane obviously is critical. Reliability and diversification—geographic and corporate—of gas sources limit both pricing and supply-adequacy risks. With the shrinkage of the gas supply "bubble", distributors and pipelines lacking long-term supply commitments are increasingly exposed to the volatility and uncertainty of the spot market. Nevertheless, with many regulators requiring least-cost purchasing rather than best-cost, distributors are forced to depend more heavily on cheaper,

but not necessarily more reliable, spot market gas. Moreover, with the advent of pipeline open-access transportation, supply management for distributors is becoming more complex; the freedom to deal directly with producers instead of strictly with pipelines in procuring gas is tempered by the need for greater management sophistication to ensure an efficient supply portfolio. Many smaller distributors, which often have trouble attracting management talent, may not be equipped to deal with the dynamics of a changing supply environment.

In pipeline analysis, connections with varied reserve basins and many wells within those basins are of great importance. Diversity of sources helps offset the risks arising from natural production declines eventually experienced by all reserve basins and individual wells. Moreover, such diversity can enhance a pipeline's attractiveness as a merchant or transporter of natural gas to distributors and end users seeking to buy the most economical gas available for their needs.

Operations

In this category, S&P attempts to evaluate the nature of operations from the perspective of cost and quality of service. The analyst seeks to identify those areas that require management attention in terms of time or money and that, if unresolved, may lead to political, regulatory, or competitive problems. Cost of service is compared against the costs of other utilities in the same regulatory jurisdiction and operating situation. For electric utilities, reliability is also important. The status of utility plant investment is reviewed with regard to generating plant availability and utilization, as well as for compliance with existing and contemplated environmental and other regulatory standards. The record of plant outages, equivalent availability, and capacity factors are examined.

Operation of nuclear facilities has proven to be a special challenge for most utilities, so operating performance of a nuclear plant can be critical in determining credit quality. Moreover, due to the trend of rising operating and maintenance expense associated with nuclear plants and substantial escalation of decommissioning estimates, S&P has become more conservative regarding nuclear utilities and operations.

Favorable nuclear operations offer significant opportunities to reduce costs. On the other hand, if a nuclear unit runs poorly, or not at all, the attendant risks are great. Nuclear facilities tend to represent significant portions of their operators' electric-generating capability and assets. The loss of a productive nuclear unit from both power supply and rate base can interrupt the revenue stream and create substantial additional costs for repairs and improvements and replacement power. The ability to keep these stations running smoothly and economically directly influences the ability to meet electric demand, the stability of revenues and costs, and, by extension, the ability to maintain adequate creditworthiness.

For gas pipeline and distribution companies, the degree of plant utilization, the physical condition of the mains and lines, adequacy of storage to meet seasonal needs, "lost and unaccounted for" gas levels, and per-unit nongas operating and construction costs are important factors.

For telephone companies, cost-of-service analysis focuses on the relative degree of plant modernization, staffing levels, and maintenance costs. Quality-of-service measures include trouble reports, public service commission complaints, held orders, benchmark service levels, and the incidence of commission-ordered upgrade programs and poor-service penalties.

Regulatory treatment

Regulation plays a key role in shaping overall financial performance. S&P's utility group meets frequently with regulatory commission and staff members, both at S&P offices and at commission headquarters, demonstrating the importance S&P places on the regulatory arena for credit quality evaluation. Input from these meetings and from review of rate orders and their impact weigh heavily in S&P's analysis.

S&P does not "rate" regulatory commissions. State commissions typically regulate a number of diverse industries, and regulatory approaches to different types of companies often differ within a single regulatory jurisdiction. This makes it all but impossible to develop inclusive "ratings" for regulators.

Regulatory rate-setting actions are reviewed on a case-by-case basis with regard to the potential effect on creditworthiness. To be viewed positively from a bondholder's perspective, regulatory treatment should allow consistent performance from period to period—given the importance of financial stability as a rating consideration—and focus on cash generation, rather than noncash returns. Furthermore, authorization of high rates of return is of little value unless the returns are earnable. Regulators must also facilitate a utility's ability to compete. This may take the form of allowing pricing flexibility, allocating costs to relatively captive customers, or just stepping out the way.

S&P's evaluation of regulation also encompasses the administrative, judicial, and legislative processes involved in state and federal regulation. These can affect rate-setting activities and other aspects of the business, such as competitive entry, environmental and safety rules, facility siting and securities sales.

Construction risk/Asset concentration

S&P follows the progress of major projects to assess if they are well-managed or troubled. The size or magnitude of an electric utility's construction program or a particular asset relative to net worth or net plant in service is an important consideration. Obviously, investment in a single asset representing a significant percentage of total investment suggests high risk. Where substantial asset concentration exists, the financial profile of a company may experience

wide swings depending on the asset's performance. Heavy asset concentration is most noticeable in utilities involved with costly nuclear units.

Nonutility activities

In the past, utilities generally remained single-purpose business enterprises, with the bulk of products and services subject to regulation but only modest market competition. However, the ongoing evolution of business practices and legal frameworks has permitted diversification into nonutility, nonregulated lines of business. This process is very evident in the gas utility sector, where an overwhelming majority of companies either own or are affiliated with nonutility operations. In the telephone industry, too, almost all utilities with rated debt either own nonutility businesses or are subsidiaries of diversified holding companies. For a variety of reasons, electric utilities have lagged in the move to diversify, although greater participation has been the trend in recent years, and that trend is expected to continue.

Where nonutility business exposure exists, S&P analyzes the credit quality of those operations (both present and prospective) using the appropriate industrial benchmarks and criteria. The overall assessment of a utility's risk and financial health is a function of the combined business segments, weighted by the investment in each. In instances where a utility company is affiliated with nonutility businesses through a holding company, factors that contribute to common or separate credit risk are analyzed to determine the impact on the utility's credit quality (*see page 42*).

Management

Evaluating management is of paramount importance to the analytical process since management decisions affect all areas of a company's operations. While regulation, the economy, and other outside factors can influence results, it is ultimately the quality of management that determines the success of a company.

S&P assesses management's commitment to a given level of credit quality. This may be evidenced in their business strategies and financial track record and by well-reasoned planning for the future, including contingency planning. Management quality is also indicated by thoughtful balancing of public and private priorities, a record of credibility, and effective communication with the public, regulatory bodies, and the financial community.

S&P's private meetings with senior management significantly augment the public record—as well as providing an opportunity for management appraisal. These discussions are very useful for the candid interpretation of recent developments and provide executives with a forum for the presentation of goals, objectives, and strategies. S&P encourages such visits and conducts roughly 300 formal utility management meetings each year.

Earnings protection

In this category, pretax cash income coverage of all interest charges is the primary ratio. For this calculation, allowance for funds used during construction (AFUDC) is removed from income and interest expense. To identify total interest expense, S&P disaggregates from operating expenses the interest component of various off-balance sheet obligations, such as leases and some purchased-power contracts, and includes them in interest expense. This provides the most direct indication of a utility's ability to service its debt burden. AFUDC and other such noncash items do not provide any protection for bondholders. While considerable emphasis in assessing credit protection is placed on coverage ratios, this measure does not provide the entire earnings protection picture. Also important are a company's earned returns on both equity and capital, measures that highlight a firm's earnings performance. Consideration is given to the interaction of embedded costs, financial leverage, and pretax return on capital.

Capital structure

Analyzing debt leverage goes beyond the balance sheet and covers quasi-debt items and elements of hidden financial leverage. Noncapitalized leases, sale/leaseback obligations, debt guarantees, receivable sales, and purchased-power contracts are all considered debt equivalents and are reflected as debt in calculating capital structure ratios. By making debt level adjustments, S&P can compare the degree of leverage used by each utility company.

Furthermore, assets are examined to identify undervalued or overvalued items. Assets of questionable value are discounted to more accurately evaluate asset protection.

Some firms use short-term debt as a permanent piece of their capital structure. Short-term debt also is considered part of permanent capital when it is used as a bridge to permanent financing. Seasonal, self-liquidating debt is excluded from the permanent debt amount, but this situation is rare—with the exception of certain gas utilities. Given the long life of almost all utility assets, short-term debt may expose these companies to interest-rate volatility, remarketing risk, bank line backup risk, and regulatory exposure that cannot be readily offset. The lower cost of shorter-term obligations (assuming a positively sloped yield curve) is a positive factor that partially mitigates the risk of interest-rate variability. As a rule of thumb, a level of short-term debt that exceeds 10% of total capital is cause for concern.

Similarly, if floating-rate debt and preferred stock constitute over one-third of total debt plus preferred stock, this level is viewed as unusually high and may be cause for concern. It might also indicate that management is aggressive in its financial policies.

A layer of preferred stock in the capital structure is usually viewed as equity—since dividends are discretionary and the subordinated claim on assets provides a cushion for providers of debt capital. S&P assumes that a preferred component of up to 10% is a permanent wedge

in the capital structure of utilities. It is not viewed by utilities—as many industrial firms would—as a temporary option for companies that are not current taxpayers that do not benefit from the tax deductibility of interest. Accordingly, even limited-life or redeemable preferred receives equity treatment. However, floating-rate preferred and money market perpetual preferred are problematic; a rise in the rate due to deteriorating credit quality tends to induce a company to take out such preferred stock with debt.

Cash flow adequacy

Cash flow adequacy relates to a company's ability to generate funds internally relative to its needs. It is a basic component of credit analysis because it takes cash to pay expenses, fund capital spending, pay dividends, and make interest and principal payments. Since dividend payments are important to maintain capital market access, S&P looks at cash flow measures both before and after dividends are paid.

To determine cash flow adequacy, several quantitative relationships are examined. Emphasis is placed on cash flow relative to debt, debt service requirements, and capital spending. Cash flow adequacy is evaluated with respect to a firm's ability to meet all fixed charges, including capacity payments under purchased-power contracts. De-

spite the conditional nature of some contracts, the purchaser is obligated to pay a minimum capacity charge. The ratio used is funds from operations plus interest and capacity payments divided by interest plus capacity payments.

Financial flexibility/Capital attraction

Financing flexibility incorporates a utility's financing needs, plans, and alternatives, as well as its flexibility to accomplish its financing program under stress without damaging creditworthiness. External funding capability complements internal cash flow. Especially since utilities are so capital intensive, a firm's ability to tap capital markets on an ongoing basis must be considered. Debt capacity reflects all the earlier elements: earnings protection, debt leverage, and cash flow adequacy. Market access at reasonable rates is restricted if a reasonable capital structure is not maintained and the company's financial prospects dim. S&P also reviews indenture restrictions and the impact of additional debt on covenant tests.

S&P assesses a company's capacity and willingness to issue common equity. This is affected by various factors, including the market-to-book ratio, dividend policy, and any regulatory restrictions regarding the composition of the capital structure.

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