Washington Water Power

Executive Summary

Washington Water Power's 1997 Electric Integrated Resource Plan

Optimize

Energy is only the beginning

Business challenges are met with creativity and innovation

Strategy

Opportunities

Meeting competitive challenges in a changing industry

Balancing energy needs with the needs of the environment

Responsibility

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EXECUTIVE SUMMARY

WHAT'S THE PLAN?

WWP's Restructuring into Regulated and non Regulated Business Units

The electric industry is undergoing fundamental change. The Washington Water Power Company's (WWP) report incorporates change between the current state of regulation and the less regulated future utility business. Some of these changes are:

- a split between retail and wholesale activities.
- relying on wholesale markets for short-term resource needs,
- business units for distribution, transmission, and generation, and
- evaluating all business and resource decisions against market prices.

WWP expects to remain an energy services company providing a wide-range of services to energy consumers. One of our major functions will be to maximize the availability of generation and minimize the cost of production.

Corporate Restructuring

In August 1996, WWP was organized into business units in order to be prepared for the industry changes. The "Energy Delivery" business unit will be responsible for the retail delivery side of the business for both electricity and natural gas and the transmission functions. The "Energy Trading and Market Services" business unit will be responsible for production and generation, wholesale marketing, resource optimization, hydro licensing and safety.

WWP's 1997 Electric Integrated Resource Plan

WWP's 1997 Electric Integrated Resource Plan is presented in two spiral-bound documents: this compact *Executive Summary* and the more detailed *Appendices*. The *Appendices* section includes a "Table of Contents"; "Glossary of Terms, Abbreviations and Acronyms"; and a list of "Benchmarks" which provides quick reference to specific issues.

According to the company's latest energy forecast, WWP is surplus until the year 2012. Therefore WWP does not plan to make any resource acquisitions during the next 10-year planning period except for energy efficiency programs authorized under the DSM tariff rider. The company's long-term goal is to remain the preferred provider by maintaining stable and competitive rates for customers.

Executive Summary (continued)

RESOURCE CHANGES SINCE 1995 IRP

Independent Grid Operator (IndeGO)

The company signed an agreement on July 11, 1996 with various Northwest utilities for the purposes of jointly investigating the feasibility of transferring certain operating responsibilities associated with a regional transmission grid to an independent grid operator. It is conceivable that operation of the regional transmission by an independent grid operator may facilitate a competitive electric power market as such market evolves and potentially increase the efficiency of the Northwest transmission system, as well as provide non-discriminatory open access to the regional transmission grid consistent with the Federal Power Act and Federal Energy Regulatory Commission requirements.

In 1996, WWP had 7,781,800 MWh of Retail Sales and 11,175,000 MWh of Wholesale Sales.

Steam Plant

The company is beginning cleanup activities specified in a Cleanup Action Plan approved by the Department of Ecology. Several public meetings were held and property owners notified of the remedial actions being taken and the progress being made. The cleanup plan calls for construction of an underground barrier which will ensure that the oil cannot spread further. Other actions include removal of soils near the surface which contain oil; recovery of oil product that is not bound up in the soil; paving and sealing areas above the remaining oil; and bioventing, a method used to encourage natural microbial action which decomposes the oil.

Wholesale Activities

For the first time in the company's history, WWP during 1996 had more wholesale sales than retail sales. The company expects wholesale marketing activities to maximize the value resulting from WWP's generation resources when energy surpluses are available and minimize the cost of operation when wholesale purchases are required to meet system requirements while maintaining a stable and reliable power system. Wholesale transactions are divided into four time frames, long term, short term trading, pre-schedule and next hour dispatch. For each of these time increments wholesale activity can occur at each of three market hubs, Palo Verde, California-Oregon Border, and mid-Columbia. WWP participates in each of these trading markets.

Executive Summary (continued)

Renewable Resource Study

As part of the now defunct merger process, WWP agreed to pay for a renewable resource study. The company entered into an agreement with JBS Energy, Inc. to prepare the study. After the merger was terminated in June, 1996, WWP decided to continue with the study as it was felt that useful information could be realized from the effort. A final report was presented to the company on January 31, 1997. The report's executive summary is included in the Appendices as Appendix L.

1997 NEAR-TERM ACTION PLAN

WWP's preferred energy strategy provides direction for the company's long-term activities. The company's near-term action plan outlines activities that will support this strategy and improve the planning process. This section describes action items planned for 1997 and 1998. Progress on these activities will be monitored over the two-year planning cycle and reported in the company's next Integrated Resource Plan.

Reduce Company Costs

1. Evaluate the benefits of selling off high cost generating resources by August 1997.
2. When feasible, buy out high cost energy purchase contracts.
3. Reduce operating costs at existing generating plants.
4. Develop strategies to renew low cost energy purchase contracts.

Increase Company Revenues

1. Expand WWP's energy services and Avista Advantage into additional retail markets.
2. Increase wholesale sales through WWP's wholesale section and Avista Energy.
3. Increase customers through expansion of system infrastructure and acquisition, as opportunities become available.
4. Identify and pursue those opportunities that add value to the existing system and provide a positive resource benefit.

Public Process

1. Continue to be involved with the public outreach programs through 1998 and beyond.
2. Continue free flowing exchange of information with TAC members.
3. Provide changes to the IRP process that will be useful in the competitive market era.

Executive Summary (continued)

Demand-Side Management

1. Continue to pursue energy savings through the DSM filing for the next three years (1997-1999) with funding from the tariff rider.
2. Evaluate options to participate in regional, market transformation DSM programs.

Supply-Side Resource Options

1. Continue to pursue the most cost effective options in the hydro relicensing process.
2. Negotiate a favorable long-term extension of the Wanapum and Priest Rapids power sales contracts by December 1997.
3. Develop joint ventures with other companies to market fuel cell technology.

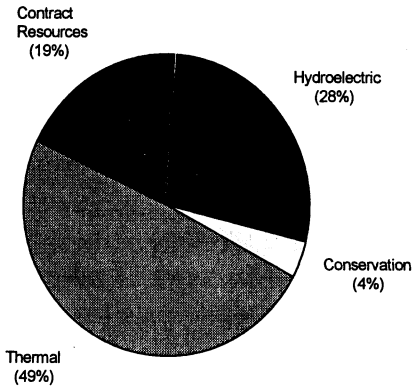
Resource Management Issues

1. Evaluate all resource options against wholesale market price of power.
2. Continue to evaluate the effects to hydroelectric system operation resulting from efforts to protect fish stocks listed under the ESA.
3. Implement the best compliance strategy for the Centralia coal-fired plant.
4. Implement FERC Orders 888 and 889 during 1997.
5. Finalize the discussions on Canadian Entitlements and PNCA by year end 1997.
6. Continue to utilize and incorporate Prosym, an hourly production cost model, into the data/resource analysis used by the company.
7. Use Wholesale Marketing activities to maintain short-term and long-term resource balance.
8. Identify through surveys customer acceptance of a green power tariff and if feasible implement by June 1998.

Current Resource Assessment

WWP's review of resource needs and options includes a forecast of energy and peak customer demand and a full assessment of demand-side and supply-side alternatives. The company's resource picture (see chart on following page) is evaluated often to take advantage of opportunities which benefit both the company and customers.

Executive Summary (continued)



Resource	Energy Capability (in Average Megawatts)
WWP RESOURCES	
Hydroelectric	314 aMW
Thermal	542 aMW
Conservation	40 aMW
CONTRACT RESOURCES	
Hydroelectric	94 aMW
Cogeneration	60 aMW
Utility Purchases	62 aMW
Total Resources	1112 aMW

WWP's slow load growth and corresponding surplus situation has resulted in the pursuit of additional wholesale sale opportunities in order to utilize the surplus and create additional revenues. In addition, the company has several years to determine future needs and to evaluate future resource options. If conditions in the future change, WWP has the time to manage those changes in a way that will be beneficial to itself and its customers. If conditions remain as forecasted, WWP does not need any additional resource for 15 years and will not need to commit itself to expensive resources or purchases. The result will be a continuation of stable rates for WWP's customers, at least for several more years. WWP will also continue to offer some conservation programs in order to maintain the DSM infrastructure already in place and to provide energy services to our customers as a part of our continuing commitment to be a total service company responsive to their needs.

Resource Issues

Fuel Cells

Avista Labs, created in early 1996, is making notable progress in commercialization of fuel cell and natural gas reforming technologies. Located in Spokane, Washington, Avista Labs is a wholly-owned research and development subsidiary of WWP. Work is ongoing at Avista Labs to develop new polymers, electrodes and other components for residential-sized fuel cell power plants.

On June 24, 1997 WWP and Double Tree Hotel Inc. dedicated a fuel cell power plant which was manufactured by ONSI, a division of International Fuel Cell Corporation. The Spokane installation is the first of its kind in the northwestern United States thanks to a unique partnership for alternative energy between WWP, Doubletree, ONSI and the U.S. Department of Energy.

Executive Summary (continued)

Hydro Project Relicensing

WWP is actively engaged in the second-stage of consultation in the FERC relicensing of its 790 MW Cabinet Gorge and Noxon Rapids hydro projects on the Clark Fork River in Northern Idaho and Western Montana. This period of the consultation process centers on the negotiation of requests for studies and information by agencies, tribes, and other participants, and concludes with the company preparing and filing an application for license by February, 1999. This not only represents a critically important effort to preserve the customer and company's most valuable generating assets, and resource options in the future, but it has also become the best-recognized and hopeful "collaborative" relicensing process in the nation.

WWP's Budget for Hydro Relicensing for 1997 is $3.9 million.

Wood Power Contract Buyout

The company, Rayonier and Wood Power entered into a three way agreement that became effective January 6, 1997. The agreement provided a win situation for all three parties. Wood Power wanted to sell the facility as they were now out of the wood products business and did not have control of the fuel supply. Rayonier wanted control of the boiler so they could maximize production. WWP wanted to terminate the high cost power purchase agreement with Wood Power, which had a January 26, 2019 expiration date. WWP looked at the cost of the contract compared to market priced power and determined what price could be paid up front and still show positive revenue figures every year. The company agreed to pay $9.5 million to Wood Power to terminate the long-term purchase power agreement.

Colstrip Fuel

Centralia owners received forgiveness of sales and use taxes on new scrubber construction.

During 1995 and 1996, the Coal Supply Agreement was arbitrated with the supplier, Western Energy Company (WECO). The Arbitrator took the Buyers position that the language of the contract calls for the least cost coal to be mined for the Buyers. The Buyers are allowed to participate in the mine permitting process to enable WECO to acquire a permit to mine the reserves in a least cost mining method. The least cost mining method could result in annual savings to WWP amounting between $450,000 to $750,000. This savings is contingent upon successful permitting with the appropriate agencies, which is hopeful to be completed successfully in 1997.

Centralia Compliance With Clean Air Act

Centralia has been identified as a contributor to air quality problems in the I-5 corridor, Mt. Rainier and nearby Forest Service wilderness areas. In 1995, the Southwest Wahington Air Pollution Authority (SWAPCA) ordered the power plant to reduce its sulfur dioxide emissions by 50% beginning with the phase two implementation of the Clean Air Act (CAA) which takes place 2001. The National Park Service, Forest Service and other groups felt that this was not a sufficient reduction even though this ruling met the limitations of the CAA.

Executive Summary (continued)

Beginning in January of 1996, representatives from the agencies and plant owners began a series of meetings called a Collaborative Decision Making (CDM) Group to attempt to bring all concerns to the table in a non-adversarial atmosphere. The product of the CDM Group was a "Target Solution" that was presented to SWAPCA in a public ceremony in Seattle with Secretary of Interior, Bruce Babbit taking part in the presentation. The Target Solution, if implemented by the owners, would reduce the emissions of sulfur dioxide by 90% by installing sulfur removal equipment and reduce NOx through installation of low NOx burners. Many different options were studied including fuel switching, outside coal, partial scrubbing, time sequenced scrubber installation and others with the target solution emerging as the most cost effective and resulting in the greatest reduction in sulfur dioxide emissions.

The CDM process is unique because for the first time in the nation, regulators and federal land managers have come together with utilities to find consensus on achieving maximum sulfur dioxide controls outside of the traditional legal approach which in other cases has taken up to ten years to reach a decision.

Energy Efficiency Programs

As part of the 1997 through 1999 extension of the energy-efficiency tariff rider, WWP proposed several programs. Some of the proprams were simple renewals of existing programs, while others were programs to be designed and launched in 1997. WWP also made the commitment to adapt programs to changes in the market or technology over the three-year rider period to meet the needs of customers.

Collectively, WWP's programs are estimated to result in 14.5 aMW of savings over the 1997-1999 program period. This estimate of savings ignores the market transformation effect of WWP's non-regional programs and underestimates the likely impact of regional programs. Total estimated tariff rider revenues during the three-year rider period is estimated to be $13.7 million. WWP expenditures on energy efficiency will slightly exceed rider revenue since some programs, such as Natural Gas Awareness, are being funded from non-rider sources. WWP's goal is to actively manage these programs over this three year period, making adjustments as necessary to make optimal use of the funds allotted to energy efficiency.

WWP has no need for new Firm Electric Resources

Preferred Resource Strategy

Based on customer requirements and contractual arrangements, WWP has no need for new firm electric resources to serve retail needs for the next 15 years. While portions of WWP's service territory have experienced a surge in customer growth, long-term energy requirements are being restrained by the use of natural gas in conversions and new construction. Another factor restraining growth is increased energy efficiency through building codes and enhanced appliances.

Executive Summary (continued)

Even with no resource need, WWP is committed to maintaining a DSM presence in its service territory. For the last two years the company has used a tariff rider to finance the DSM activities which has been extended for three years, through 1999. The tariff rider provides a way to expense the cost of the DSM programs so that a regulatory asset is not kept on the books.

The preferred case also assumes that there will be no degradation of generation on the hydro system due to hydro relicensing. WWP expects that the new license will be more restrictive than in the past, but the annual energy production should remain the same. It also assumes that the problems at Centralia will be solved to maintain the integrity of the resource although resulting in an increase in power production costs.

WWP currently has long-term purchase rights to power output from four mid-Columbia River hydroelectric plants owned by three Public Utility Districts. Contracts with Grant County PUD are the first to expire, with Priest Rapids terminating in 2005. WWP is actively pursuing a Grant County offer to extend the sale of Priest Rapids and Wanapum output.

This level of DSM, re-negotiation of mid-Columbia power purchase contracts and some short-term market purchases provides more than adequate firm energy capability to serve WWP's expected needs through the planning horizon. This preferred plan is one of the lowest cost resource scenarios while still maintaining a balance and diversity of resources.

Resource Analysis

Based on the assumptions that WWP will not continue to be the only power supply agent for all of its retail customer loads during the next ten years, and that the company has sufficient resources for all retail loads through the planning horizon, resource planning in the IRP is based on two premises:

1. WWP does not anticipate acquiring new long-term resources to serve retail loads.
2. WWP's goal is to have its cost of production to be at the market rate by 2001 so that the potential amount of stranded generation investment is small or non existent.

In past IRP analysis, load resource balance was the sole trigger mechanism for adding new resources. Now, the load resource balance of an individual utility is no longer the primary trigger mechanism. Because of the availability of wholesale energy, price is the primary mechanism in resource selection. WWP's cost of production also needs to be competitive with wholesale market rates.

Executive Summary (continued)

WWP has identified four primary objectives for its power production business.

1. Minimize unit production cost from physical and contractual resources.
2. Drive the total unit production cost to be at or below competitive market rates by the year 2001.
3. Maximize revenues from generation and related value added services.
4. Operate generation facilities in a socially responsible manner.

The primary focus is on having a cost of production that is at or below the competitive market price of power by the year 2001.

WWP's production costs are not likely to significantly increase or decrease over the next ten years. The company does not anticipate adding any new resources to its portfolio during this period. Future resource additions and dispositions will be based primarily on cost. Resources will be sold or purchased to minimize total net cost. Power generation transactions are unlikely to significantly affect the cost of resources used to serve retail customer load obligations.