

Action Plans

One of PSE's main objectives is to pursue acquisition of both demand- and supply-side resources that will accrue long-term benefits to our customers. The short-term, two-year electric and gas plans presented in sections I and II of this chapter outline specific actions for implementing the long-range integrated resource plans discussed in this 2009 IRP. Section III reports on the efforts PSE has made to address the Action Plan items developed in the 2007 IRP.

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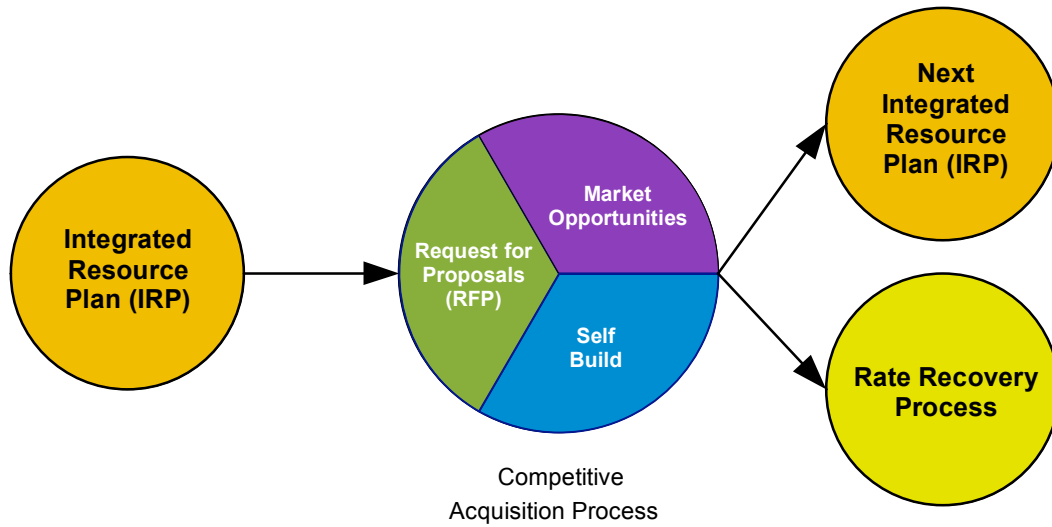
Developing the Integrated Resource Plan is an important process that gives PSE a structured opportunity to:

- *Think Broadly.* To consider different futures and understand implications those different futures might have on alternative resource strategies.
- *Consider Different Perspectives.* To obtain input from stakeholders that have a variety of experienced, informed perspectives about long-term energy markets, environmental issues, and other issues related to resource planning.
- *Make Reasoned Judgments.* To combine robust quantitative analysis and non-quantitative factors (reasoned qualitative analysis) into clear, well-supported conclusions that will help meet customer demands at the lowest reasonable cost.
- *Inform the Resource Acquisition Process.* To develop and refine analytical approaches and information that will assist the resource acquisition processes.
- *Communicate.* To describe the market conditions we face, and our thinking about the implications these conditions have for the resource decisions that must be made.

In some states, integrated resource planning is nearly synonymous with resource acquisition analysis. In Washington state, the IRP informs the acquisition processes rather than simply providing a shopping list of resources to acquire. Analysis in this IRP relies on generic resources to explore strategic issues, such as natural gas supply diversity. The resource acquisition process employs specific information about specific resources. The primary function of the IRP, beyond simply meeting regulatory requirements, is to inform our resource acquisition process.

Figure 9-1 illustrates the relationship between the IRP and activities related to resource acquisitions. Specifically, the chart shows how the IRP directly informs the formal RFP process. In Washington, the formal RFP process for demand-side and supply-side resources is just one source of information for making acquisition decisions. Market opportunities outside the RFP and self-build (or PSE demand-side resource programs) must also be considered when making prudent resource acquisition decisions. Figure 9-1 also illustrates how the resource acquisition process itself informs subsequent IRPs. As shown below, the IRP's primary purpose is to inform the acquisition process; it is not a substitute for the resource-specific analysis done to support specific acquisitions.

Figure 9-1
Relationship between the IRP and the Acquisition Process



I. 2009 Electric Resources Action Plan

The conclusions drawn from this IRP analysis support the following actions with regard to electric resources.

Assessment of Resource Needs

The 2009 IRP illustrates that PSE is relying on 1,200 MW of short-term market resources (less than three years in duration) to meet approximately 20% of our customers' resource needs. As the region becomes increasingly capacity constrained, physical liquidity of short-term market will become more of a concern. During the two-year action plan, we will focus efforts on assessing whether this level of reliance on short-term markets should be revised. Additionally—and in light of our reliance on short-term markets—we will continue to refine the resource need assessment pertaining to the 5% loss of load probability and interaction of operating and planning reserve margins.

Demand-side Resources

PSE will plan and implement electric demand-side resource programs, mainly energy efficiency programs, consistent with the guidance provided in this plan. Electric energy efficiency targets and programs will also be established to comply with the requirements of the Washington Energy Independence Act, RCW 19.285. We will work with external stakeholders in the Conservation Resource Advisory Group (CRAG) process to develop program goals, targets, and tariff filings to implement this strategy. Such processes will rely on updated avoided cost inputs and more specific assessments of achievability based on specific programs that are designed.

Wind and Other Renewables

PSE will continue working toward meeting our obligations under Washington's renewable portfolio standard. We will continue to implement strategies of moving deeper into the development process for renewables. Additionally, we will continue to remain active in exploring cost-effective opportunities as they appear during the formal RFP process and other market opportunities that may present themselves.

Thermal Resources

PSE will look to fill the remaining resource needs with a combination of purchased power agreements and/or natural gas-fueled power plants: peakers and combined cycle combustion plants. Our goal will be to meet resource needs through the formal RFP process, seek opportunities to acquire resources through bilateral negotiations, and consider self-build natural gas alternatives. PSE will also actively monitor and participate in policy, regulatory, and technology developments affecting the viability of new resources.

II. 2009 Natural Gas Resources Action Plan

The conclusions drawn from this IRP analysis support the following actions with regard to natural gas resources:

Gas Demand-side Resources

PSE will plan and implement natural gas demand-side resource programs consistent with the guidance provided in this plan. We will work with external stakeholders in the CRAG process to develop program goals, targets, and tariff filings to acquire cost effective and achievable energy efficiency savings. Such processes will rely on updated avoided cost inputs and more specific assessments of achievability based on specific programs that are designed.

Diversity of Supply Considerations and Pipeline Expansions

PSE is currently exposed to a single supply basin for the majority of its natural gas supplies, a situation that places the company and its customers in a position of physical supply and price risk. A thorough investigation into the benefits of such a strategy needs to take place, so that PSE may evaluate the costs and benefits of increasing supply diversity in a comprehensive way.

Regional LNG Storage

PSE will continue working with others in the region to identify and more fully define regional LNG peaking opportunities. This will entail exploring whether the needs identified in the gas resource plan can be met by expansion of existing facilities in the region. PSE also will include initial activity to begin assessing development of self-build alternatives.

III. Report on 2007 Electric Resource Action Plan

This section reviews the efforts PSE has made to address the Action Plan items developed in our 2007 Electric IRP.

Demand-side Resources

PSE will work toward significantly increasing our electric demand-side resource programs, mainly energy efficiency programs. We will work with external stakeholders in the CRAG process to develop program goals, targets, and tariff filings to implement this strategy. Our processes will rely on updated avoided cost inputs and more specific assessments of achievability based on specific programs that are designed.

Report: Completed. The company hosted several CRAG meetings that helped develop goals, targets and regulatory filings. Consistent with the guidance provided in the 2007 IRP, PSE increased our energy efficiency savings targets in 2008-09 over the previous two year period. Electric energy efficiency targets increased 32%, from a total of 40 aMW for 2006 and 2007 to a total of 53 aMW for the 2008 and 2009 plan years. We expect to exceed the 2008-09 program targets. PSE had an incentive to increase our acquisition of demand-side resources through the Electricity Conservation Incentive Mechanism. The Washington Utilities and Transportation Commission (WUTC) approved this mechanism in Docket No. UE-060266, by replacing the penalty-only structure with a new penalty-and-reward mechanism. In addition to our energy efficiency programs, we also introduced a single-family residential electric-to-gas fuel conversion program and commercial and residential direct load control demand response pilots.

Wind and Other Renewables

PSE will continue working toward meeting obligations under Washington's renewable portfolio standard. We will develop and begin implementing strategies to move deeper into the development process for renewables. Additionally, we will continue to remain active in exploring cost-effective opportunities as they appear during the formal RFP process and to other market opportunities that may present themselves.

Report: Completed. The company executed a Joint Development Agreement with RES to build, construct, own and contract wind generation in Columbia and Garfield Counties, moving deeper into the development process. We entered into the Klondike 3 wind purchased power agreement through the 2007 RFP process, we completed the in-fill project at Hopkins Ridge, adding four turbines and increasing the nameplate capacity of the facility by 7 MW, and we initiated the Wild Horse expansion project which will add 22 turbines and increase the nameplate capacity of the facility by 44 MW.

Base Load/Thermal Resources

PSE will take an opportunistic approach to filling the remaining resource needs with a combination of purchased power agreements and/or natural gas-fueled power plants. We will look to meet resource needs through the formal RFP process, seek opportunities to acquire resources through bilateral negotiations, and consider self-build natural gas alternatives. PSE will also actively monitor and participate in policy, regulatory, and technology developments affecting the viability of new coal resources.

Report: Completed. PSE has acquired, or extended contracts to retain, or is proceeding with the acquisition of, additional resources. These include: (i) short-term and long-term purchased power agreements (PPA), including a four-year winter PPA agreement with Barclays Bank PLC, a four-year and three-month PPA with Credit Suisse to replace a PPA executed with the now bankrupt Lehman Brothers PPA, a five-year PPA extension with Puget Sound Hydro LLC, and a four-year winter on-peak PPA with Powerex; (ii) the acquisition of the Mint Farm Generating Station from Wayzata Investment Partners; (iii) the acquisition of the Fredonia Generating Units No. 3 and No. 4, which PSE currently leases; (iv) the lease buyout of Whitehorn units 2 and 3; and (v) the acquisition of the Sumas Cogeneration Facility.

IV. Report on 2007 Gas Resource Action Plan

This section reviews the efforts PSE has made to address the Action Plan items included in the our 2007 Natural Gas IRP.

Gas Demand-side Resources

PSE is looking for opportunities to increase our gas programs where it is feasible. We will work with external stakeholders in the CRAG process to develop program goals, targets, and tariff filings to acquire cost effective and achievable energy efficiency savings. Such processes will rely on updated avoided cost inputs and more specific assessments of achievability based on specific programs that are designed.

Report: Completed. PSE hosted several CRAG meetings that helped develop goals, targets and regulatory filings. Consistent with the guidance provided in the 2007 IRP, PSE increased our energy efficiency savings targets in 2008-09 over the previous two year period. Gas energy efficiency targets rose 26%, from 4.2 million therms for 2006-07 to 5.3 million therms for 2008-09. The company expects to exceed the 2008-09 program targets.

Capacity Alternatives

PSE will continue working with others in the region to identify and more fully define regional LNG peaking opportunities. We will also continue to monitor transportation capacity alternatives that are tied to potential regional LNG import facilities. Additionally, we will monitor potential pipeline alternatives that could increase supply diversity.

Report: Completed. The company engaged in dialogue with others in the region regarding several specific potential capacity alternatives. As demonstrated by analysis in this 2009 IRP, a considerable effort has been made to identify and analyze commercially viable alternatives to balance the portfolio's access to Rockies gas supply.

Supply Alternatives: Imported LNG

PSE will work with other regional market participants to help determine if an LNG import facility in the region would be commercially viable, cost effective, and otherwise desirable for the market. If so, we will take reasonable actions to help encourage and/or participate in such development to benefit our customers.

Report: Completed. The company continued participating in regional dialogue with regard to potential LNG import facilities to assess the availability of long-term gas supply contracts with potential suppliers, if an import terminal is developed in the Northwest. Such market opportunities have not been available.

Generation Fuel Planning

Increasing reliance on natural gas-fired generation creates issues, some of which may be quite different than concerns for meeting needs of gas sales customers. PSE will define and prioritize these issues, develop plans for investigating potential solutions, and commence implementation of such solutions as appropriate. We will discuss such activity with our IRPAG members and other stakeholders to the extent that such discussions do not compromise our ability to achieve commercial benefits for our customers.

Report: Completed. PSE acquired two natural gas capacity resources to support generation fuel. We purchased the equivalent of 25,500 decatherms (Dth) per day of Westcoast Energy T-South pipeline capacity commencing November 1, 2009 through October 31 2018, with renewal rights, to serve a portion of its gas-fired generation fleet. PSE purchased Northwest Pipeline (NWP) transportation capacity to serve Mint Farm. Generation fuel planning was integrated more closely in this planning cycle than in the past. Diversity of supply analysis presented in Chapter 6, and discussed with the IRP Advisory Group, highlighted the potential timing issues of joint planning and capacity acquisitions.