

## PREFACE

As part of its long-term resource strategy development, Puget Sound Energy pursues a Least Cost Plan process. The primary purpose of this Least Cost Plan Update is to provide the results of a detailed assessment of the long-term conservation resource potential available to PSE, along with an updated load resource portfolio analysis that incorporates the results of the conservation resource assessment. The August 2003 Least Cost Plan Update, developed in consultation with Commission staff and with public input, is organized into 10 chapters:

### **Chapter I – Executive Summary**

This chapter explains the purpose and goals of the Least Cost Plan Update and presents major findings and conclusions.

### **Chapter II – Conceptual Overview of Electric Resource Analysis**

This chapter provides an overview of the electric resource portfolio analysis approach that PSE has used to prepare the August 2003 Least Cost Plan Update.

### **Chapter III – Forecasts**

This chapter updates the electric-load, gas-price, and AURORA assumptions that were provided in PSE's April 2003 Least Cost Plan.

### **Chapter IV – Electric and Natural Gas Conservation Potential Assessment**

This chapter summarizes the results of an assessment of technical and achievable electricity and natural gas conservation potential in PSE's service area for the 2004-2023 planning horizon.

### **Chapter V – Determination of Need for New Electric Resources**

This chapter provides an update to the levels of need for electric energy and capacity that were identified in the April 30 Least Cost Plan.

### **Chapter VI – Demand Response**

This chapter examines one form of demand-response program to help determine whether peak-oriented demand-response programs could be a more cost-effective alternative than single-cycle combustion turbines.

### **Chapter VII – Electric Portfolio Analysis and Results**

This chapter details the approach, assumptions, and methodology used in the electric portfolio analysis, and summarizes the analysis results.

### **Chapter VIII – Conservation Implementation Issues**

This chapter examines the unique implementation issues associated with acquiring conservation resources as part of a long-term resource strategy.

### **Chapter IX – Long-Term Electric Resource Strategy**

This chapter presents PSE's updated long-term electric resource strategy, based on the integrated load resource portfolio analysis.

**Chapter X – Gas Portfolio Analysis and Strategy**

This chapter describes the approach, assumptions, and methodology used in the gas resource analysis and summarizes the results of the analysis.

**Appendix A – Conservation Resource Assessment Report****Appendix B – Detail on Electric Portfolio Screening Model**