

**Puget Sound Energy 2018 Hedging Plan
Docket UG-180795**

A. Policy Statement and Intersection with Purchased Gas Adjustments (PGAs)

On March 13, 2017, the Commission issued its Policy and Interpretive Statement on Local Distribution Companies' Natural Gas Hedging Practices (Policy Statement).¹ The Policy Statement established the expectation that local distribution companies (LDCs or utilities) develop risk-responsive hedging strategies and limit programmatic hedging approaches that fail to balance upside price risk with hedge loss risk.

While the Commission made clear it would not provide prescriptive methodological guidance, the Commission stated its expectation that LDCs develop a framework for risk mitigation informed by quantitative metrics. Such a framework would enable utilities to measure and monitor market risk conditions, and identify meaningful hedging responses to those risk conditions.

The Policy Statement outlined a general process and timeline for regulatory review of utility hedging plans. In 2017, utilities began filing "preliminary" hedging plans coincident with the annual PGA filings. The Commission's expectation was that the 2018 hedging plans would be the first "comprehensive" hedging plans subject to formal acknowledgment. In these comprehensive hedging plans, the Commission expected utilities to demonstrate they had begun integrating risk responsive strategies into their overall hedging framework.

The Policy Statement also provided guidance on the topics the Commission expected utilities to address in the hedging plans and, thus, the focus of regulatory review. These topics are:

1. Communication of the utility's approach to the basic elements of its overall hedging plan: (a) objectives and goals, (b) exposure quantification, (c) strategic initiatives, and (d) oversight and control;
2. Demonstration that the utility incorporated risk responsive hedging protocols and that these are informed by quantitative metrics; and
3. A retrospective report of the prior year's hedging activities, including (a) a narrative on execution of the strategy, (b) commentary on metrics and tolerances, and (c) discussion of what the utility learned and how this relates to modifications going forward.

The Commission's review of utility hedging plans focuses primarily on these broad topics.

¹ Washington Utilities and Transportation Commission, Docket UG-132019, Policy and Interpretive Statement on Local Distribution Companies' Natural Gas Hedging Practices (Policy Statement) (March 13, 2017).

Natural gas commodity costs are directly passed through to customers via the purchased gas adjustment (PGA) mechanism. Each year, companies submit a PGA filing where a price is set for the cost of gas that will be embedded in customers' rates for the coming year. At the end of the PGA year,² companies file an update to synchronize the differences between the actual costs of gas and the costs collected through rates. The *actual* cost of gas includes hedging gains and losses. Therefore, the effect of a company's settled hedges is included in the annual PGA filing and subject to Commission review and approval. In accordance with the Policy Statement, the Commission expects utilities to include clear identification of hedging losses and gains in the retrospective report so it can review strategies identified in the hedging plan to determine the appropriateness of hedging losses or gains for recovery through the PGA mechanism.

B. Commission Comments on PSE's 2018 Hedging Plan

The Commission reviews and acknowledges hedging plans to encourage each utility to develop the expertise necessary to integrate risk responsive hedging into its overall hedging framework and to execute risk responsive hedges according to the quantitative metrics and protocols it develops. The Commission does not expect utilities to abandon programmatic hedging altogether, and encourages each utility to diversify its hedging portfolio in a manner that helps mitigate the diversity of risks it faces, some of which the utility can measure and respond to, some of which it cannot. The Commission will look at the following three components of a utility's hedging plan:

1. Basic elements of a hedging plan;
2. Risk responsive hedging; and
3. Retrospective report

In its hedging report, PSE outlined its overall approach to risk management which includes financial hedging as well as leveraging transportation diversity and storage assets to mitigate price volatility and to reduce commodity cost through the optimization process. The company's hedging portfolio includes programmatic, discretionary, and risk-responsive hedging strategies. Because the company has developed a risk responsive hedging tool and has begun executing risk responsive hedging protocols, the Commission considers PSE's 2018 Hedging Plan to be consistent with the fundamental direction provided in the Policy Statement.

Below are additional comments on the three general components of PSE's hedging plan.

² The "PGA year" runs from November 1 through the following October 31.

1. Basic Elements of a Hedging Plan

In its Policy Statement, the Commission identified basic elements that it expected would be discussed in each utility's hedging plan, including (a) Objectives and goals, (b) exposure quantification in the risk responsive portion of the plan, (c) strategic initiatives, and (d) oversight and control.

Objectives and Goals. PSE states that the overarching goal of its hedging program is to balance the benefit of customer protection from market price volatility with the cost of hedging. While this goal is consistent with risk-responsive hedging protocols (which aim to manage upside price risk and hedge loss risk simultaneously), it is not clear how PSE defines "balance" or how the company determines whether this goal is being met. The establishment of program objectives could help PSE evaluate whether the company is making progress toward achieving a clearly defined goal. In future hedging plans, the Commission expects that PSE will communicate the specific goals of its hedging activities and measurable objectives in pursuit of those goals.

Exposure quantification. PSE has demonstrated that it quantifies its exposure with a risk responsive hedging model that uses the company's volumetric positions and weekly measurements of market volatility to perform value-at-risk (VaR) calculations. Exposure quantification and assessments of the potential for future price movement governs execution of risk-responsive hedges, which assess the potential for future price.

Strategic Initiatives. PSE did not report on its strategic initiatives. However, as utilities are in the developmental stages of building a risk responsive hedging framework and updating their overall approach to risk management, the Commission expects PSE to provide information and analysis of strategic initiatives after risk responsive strategies are fully implemented.

Oversight and Control. In its hedging plan, PSE described the organizational structure that is expected to provide oversight and control over the company's risk management activities. PSE maintains an Energy Management Committee (Committee) comprised of company officers and directors that provides authority and oversight over PSE's Energy Risk Policy and Hedging Procedures Manual. The Committee is responsible for approving the policies and procedures that govern PSE's hedging program and evaluating recommended changes to the program. PSE's Middle Office Energy Risk Control team updates the company's risk-responsive hedging model on a weekly basis and validates the model output with price and volatility metrics. It is not clear who makes the decision to execute a hedge or what information or protocol definitions that person or organizational unit is using to make the decision to execute a hedge.

PSE also reports that an "Energy Supply Merchant" (Merchant) provides the Committee with information on market conditions, hedging activity, and forecasted hedging costs or gains. Because of the Merchant's prominent role in the sourcing of information used for PSE's hedging activities, the Commission requests PSE provide additional information regarding the Merchant

in future hedging plans, including a description of the entity, its role in influencing hedging policy, and a summary of the contents of the monthly report.

Independent evaluations of the company's hedging plan were not performed. The Commission encourages all companies to perform third-party evaluations of their hedging plans in order to assess their implementation and provide feedback on potential areas of improvement.

2. Risk Responsive Hedging

In the Policy Statement, the Commission noted its expectation that each utility would demonstrate in its 2018 hedging plan that it has begun to incorporate risk-responsive hedging protocols into its overall hedging framework, and that these protocols are informed by quantitative metrics.

PSE's hedging plan demonstrates the company has developed the capacity to operate a risk-responsive hedging program, and indicates it will begin executing a risk-responsive hedging protocol during the 2018-2019 PGA year (i.e., prior to the 2019 PGA filing). The company plans to subject 15 percent of its annual demand to a risk-responsive hedging protocol. PSE has developed a risk-responsive model (RRM) that it will use to assess the value of risk-responsive hedges. The model develops value-at-risk (VaR) calculations that the company uses to assess exposure to upside price risk and hedge loss risk. The company demonstrates that it has developed exposure boundaries, though it is not clear how those boundaries are established or how they relate to defined tolerances.

It is clear that PSE has begun incorporating risk-responsive hedging protocols into its risk management activities, and has made substantial progress in meeting the fundamental objective of the Commission's Policy Statement. The Commission commends PSE for its ability to develop a risk-responsive hedging model and its implementation of risk-responsive hedging protocols guided by current market price, risk metrics, and volatility.

In addition to the newly developed risk-responsive hedging program, PSE also engages in programmatic hedging and employs a discretionary cash cost strategy that increases the company's hedging capacity in response to low market prices. With the implementation of a risk-responsive hedging program, PSE has reduced its programmatic hedges from 50 percent to 35 percent of annual demand. PSE's programmatic hedging activities are highly prescriptive, with hedges apparently being executed on a predetermined schedule, though programmatic hedges can be accelerated based on "market opportunities." The company does not discuss what constitutes a market opportunity. The company also does not provide a meaningful description of its cash cost hedging protocol. The company simply states that it increases its hedging capacity to take advantage of "low price opportunities" and that available hedge volumes are based on a

“low price methodology.” Low price opportunities are undefined and the low price methodology is not discussed.

Because PSE continues to hedge a substantial portion of its demand in a programmatic manner, and because the company ratchets its hedges even further using an undefined discretionary process, the Commission requests that PSE provide a thorough discussion of these activities and their underlying rationale in future hedging plans. The company’s next hedging plan should include clear definitions for “market opportunities” and “low price opportunities,” a discussion of the company’s “low cost methodology,” and an explanation of how these defined opportunities and methodology trigger hedging transactions or changes to authorized hedge volumes.

3. Retrospective Report

In its Policy Statement, the Commission requested that each utility include a retrospective report of the prior year’s hedging activities, including a (a) narrative on execution of strategy, (b) commentary on metrics and tolerances, and (c) discussion of learnings and how they relate to modifications going forward.

PSE did not produce a retrospective report consistent with the expectations laid out in the Policy Statement. Rather, PSE reported a high-level summary of its hedging activities for the period November 2017 – October 2018. In addition, it is not clear why PSE has included prospective hedging results for the period November 2018 – October 2019 in its retrospective report, as that period has not yet come to pass. The purpose of the retrospective report is to provide a perspective of the company’s results during the previous year. The information PSE included provides very little insight into the management and performance of the company’s hedging portfolio.

A retrospective review of hedge performance is a helpful exercise to calibrate ongoing hedging practices, evaluate the company’s internal decision-making process, and adaptively manage its hedging program. Therefore, the Commission requests that in future hedging plans PSE provide a more thorough assessment of its retrospective hedging activities, including the development and evolution of metrics and strategic approach. PSE should also provide information related to the data used for the hedge execution and indicate whether the hedge was executed pursuant to programmatic hedging, defensive hedging or cash cost strategies. This document will help the Commission and interested parties understand how the company is managing its hedging activities and how those activities relate to the PGA results.

C. Commission Guidance for PSE's 2019 and Future Hedging Plans

The Commission encourages PSE to continue improving its risk responsive strategies while maintaining an approach that is consistent with the policy guidance, and offers the following additional guidance concerning hedging plan content and hedging documentation, as it relates to the PGA.

Future Hedging Plans

The Commission requests that PSE take the following additional actions when preparing its hedging plans in future years:

1. Include a clear definition of the goal of its hedging activities as well as measurable objectives in pursuit of that goal;
2. Identify all changes to hedge policies and practices including relevant documentation that supports the changes;
3. Define "market opportunities" and "low price opportunities" in the context of PSE's programmatic portfolio. The company should identify what metrics it uses to decide that market conditions are favorable for triggering a hedging transaction. The company should also describe its "low cost methodology";
4. Discuss whether there is value in updating the RRM inputs more frequently (such as on a daily basis). Provide justification if the company considers more frequent market updates unnecessary or non-applicable to the RRM;
5. Provide a description of the Merchant and its role in influencing hedging policy, and a summary of the contents of the monthly report;
6. Produce a retrospective hedging report, including hedging results, consistent with the guidelines provided in the policy statement. Hedges included should be the ones executed and settled in the previous PGA year along with the metrics associated with the decision to hedge;
7. Demonstrate how exposure boundaries are established in the RRM and how they relate to defined tolerances;
8. Provide a comprehensive list of the individuals involved in the hedging decision-making process, including individual responsibilities of each member, decision-making hierarchy, and other relevant details to understand how hedging decisions are made;
9. Provide a list of source documents that were used or that influenced the ongoing design or assessment of the company's hedging program; and
10. Perform independent evaluations on hedging plan practices.

PGAs and Hedging Documentation

The company should provide the following in future PGA filings and, where appropriate, in the retrospective report:

1. Detail of all financial instruments that aim to reduce exposure in the natural gas markets;
2. Hedging program results, including costs associated with transactions (i.e., broker's fees or other necessary expenses) and how those costs are allocated;
3. Descriptions of the relationship, if any, between natural gas hedging gains or losses that are flowed through electric power costs versus the hedges that are part of the natural gas operations;
4. A description of multijurisdictional cost allocations for hedging transactions; and
5. A list of individual hedging transactions with identification of:
 - a. Gains and losses;
 - b. Hedged price;
 - c. Commodity price at settlement date;
 - d. Type of hedge executed (e.g., fixed-price physical, financial derivative);
 - e. Hedge strategy (e.g., programmatic, defensive, cash cost strategy); and
 - f. Reason for execution (e.g., tolerance exceedance, upper or lower control limit breach, time expiration).