ORDER NO. 17 088

ENTERED MAR 15 2017

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE 308

In the Matter of PORTLAND GENERAL ELECTRIC COMPANY, 2017 Annual Power Cost Update.	SUPPLEMENTAL ORDER

DISPOSITION: ANALYSIS PROVIDED FOR DENIAL OF LONG-TERM NATURAL GAS HEDGING PROPOSAL IN ORDER NO. 16-419

I. SUMMARY

In this order, we provide our analysis and rationale for denying Portland General Electric Company's (PGE) long-term natural gas hedging proposal. If we view the proposal as a supply option, we find the potential costs and substantial risks outweigh the benefit to PGE's customers and that the risks are not equitably allocated between customers and shareholders. If we view the proposal as a hedge on natural gas prices, we find its value uncertain and the link to the benefit of long-term retail rate stability unproven. We conclude that PGE did not adequately demonstrate that this proposal is preferable to alternative means of procuring stable supply and ensuring long-term electricity price stability. We are unable, based on the evidence in the record, to find the proposal in the best interest of customers and we deny inclusion of its costs in PGE's 2017 Annual Update Tariff (AUT).

II. PROCEDURAL HISTORY

On April 1, 2016, PGE filed its forecast of the company's 2017 Net Variable Power Costs (NVPC) to update its Annual Update Tariff Schedule 125. As part of the filing, PGE also included a long-term natural gas hedging proposal.

We addressed both requests in Order No. 16-417. First, we adopted a stipulation of the parties that resolved all traditional AUT issues. Second, we separately considered and

rejected PGE's long-term hedging proposal.[1] Due to the limited time to review PGE's proposal and the requested deadline for an order, we stated that we would in a subsequent order provide our complete analysis explaining the rationale for our decision regarding the long-term hedging proposal.

III. DISCUSSION

A. Summary of Long-Term Hedging Proposal

PGE proposes to purchase a non-operating working interest in the drilling, development, and operation of multiple natural gas wells through a new subsidiary created for this purpose, Portland General Gas Supply (PGGS). PGE initially presented this as a hypothetical transaction in its initial NVPC forecast while it pursued a suitable counterparty. PGE then negotiated a potential transaction with a gas and oil producer and submitted for review the resulting term sheet on June 3, 2016 and final definitive agreements on July 22, 2016.[2]

PGE proposes to invest in an initial drilling program to develop a specified number of wells, with the option to drill additional wells in future years.[3] The joint operating agreement between PGE's new subsidiary, PGGS, and the counterparty gas and oil producer would continue as long as the wells produce, which PGE states could be up to 30 years or longer depending on the richness of the geological formation.

PGGS would sell its share of the produced natural gas from the wells to PGE on a cost-of-service basis. PGE states this would satisfy a small portion of its natural gas requirements and be layered on to its existing mid-term strategy. The price paid by PGE would include PGGS's operating costs, capital costs (including return on equity), rate base (including the capital investment to drill the wells), and any credits for other revenue. PGE forecasts a revenue credit for the oil and natural gas liquids (NGLs) that would be produced from the wells along with natural gas. PGE states that it is examining hedging strategies to lock in its forecasted prices for these byproducts.

PGE seeks a prudence determination of this proposal to allow the cost per MMBtu of the purchased natural gas from PGGS to be included in PGE's 2017 NVPC. PGGS's costs would be unitized based on the volume of natural gas produced and then incorporated into PGE's MONET power cost forecasting model like other natural gas hedges. For 2017, the result would be an increase of approximately $0.6 million in NVPC.

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[1] We also denied PGE's related application, submitted in docket UI 376, for approval of the affiliated interest transactions associated with this proposal and waiver of OAR 860-027-0048(4)(e) (the lower-of-cost-or-market rule) for purchases from an affiliate.

[2] Confidential PGE Exhibits 601C (draft term sheet) and 701C (definitive agreements).

[3] PGE clarifies that the contract itself allows for additional drilling, but that would be done only after seeking and obtaining Commission approval. PGE Reply Brief at 10 (Oct 12, 2016).

PGE contends that including these natural gas costs in the AUT is appropriate because Schedule 125 specifically allows updates for hedging and contracts.[4]

PGE would seek to include in future AUTs the cost per MMBtu of the natural gas purchased from PGGS over the life of the wells. For each April 1 filing, PGE would update its cost projections to create PGGS's forecasted revenue requirement.

B. Positions of Parties

1. PGE's Arguments in Favor of Long-Term Hedging Proposal

PGE suggests that its current hedging of forward natural gas requirements, which generally involves purchasing fixed-for-float swaps out to five years, may not sufficiently protect customers against gas price variability. PGE explains that gas price volatility will have more and more impact as PGE's reliance on gas-fired generation increases. PGE points out that the company's gas-fired generation now accounts for 40 percent of its resource portfolio, compared to only five percent in 2006. Given this increased dependence, PGE estimates that a $1 increase in the price of natural gas would result in a $50 million increase to PGE's power costs (absent effects of hedging).[5]

PGE adds that several factors could drive up natural gas demand and increase power costs. These factors include exports of liquefied natural gas, fuel switching to gas and new gas generation, and increased industrial and transportation use. PGE states that its proposal would provide protection against these types of structural market shifts and provide greater diversity among its gas resources. PGE states that long-term hedging would have a stabilizing impact on natural gas costs, which would flow through PGE's power costs to retail electricity rates.

PGE asserts that purchasing a non-operating working interest in natural gas production is the best available means to hedge natural gas prices long-term. PGE maintains that the conventional alternatives—financial fixed-for-float swaps and physical prepay agreements—have limited availability, present risks of counterparty performance and credit, and may involve significant margin requirements. PGE explains that it regularly obtains price indications for financial natural gas hedges with qualified institutions and has not encountered any cost-effective options.

2. Parties' Objections to Long-Term Hedging Proposal

At the outset, Staff, CUB, and ICNU object that the AUT process is not the proper place to evaluate PGE's long-term hedging proposal. They contend the proposal is more like a

[4] PGE points to the language in Schedule 125-1 that states "Contracts for the purchase or sale of power and fuel" and "Changes in hedges, options, and other financial instruments used to serve retail load" will be made in each of the Annual Power Cost Update filings.
[5] PGE/100, Tinker-Sims/9.

ratebased investment than a variable power cost eligible for recovery in Schedule 125. The AUT, the parties argue, is intended to update power costs, such as updates to contracts and hedges, and not to provide for expedited approval of a long-term exploration and production program. The parties see the proposal as a long-term resource decision and suggest that PGE should use integrated resource planning and general rate case mechanisms to plan and demonstrate the prudence of these types of investments. Moreover, Staff, CUB, and ICNU emphasize that their ability to fully evaluate PGE's proposal was limited by the fact that the term sheet, definitive agreements, and documents related to PGE's prudence review were filed more than half-way through these proceedings.

Despite their procedural concerns, Staff, CUB, and ICNU urge that we deny PGE's request on substantive grounds. They believe the evidentiary record demonstrates that any potential benefits from the proposal are far outweighed by the potential costs and risks.

The parties warn that PGE's proposal would likely *cost* customers over time. They maintain that PGE did not comprehensively analyze the potential benefits, costs, and risks and contend that PGE's claim that the proposal is cost effective relies on simplistic analysis that does not withstand stress and scenario testing under differing circumstances. They caution that the actual commodity prices, production costs, and PGE's cost of capital *will vary* from PGE's projections and this risk is not properly accounted for in PGE's calculations. ICNU points out that data from PGE's existing hedging activities and empirically observed risk premiums indicate that the levelized forecasted cost of natural gas prices ultimately are higher than in reality—and the forecast error is exacerbated the farther into the future the estimate goes. Staff conducted a sensitivity analysis to show how altering, even modestly, various inputs to PGE's forecast easily erases the slim margin of projected benefit. Staff argues that PGE should have relied on a portfolio analysis that assumed a range of variables, similar to an integrated resource planning analysis.

Staff, CUB, and ICNU question how effective acquiring natural gas reserves is as a *hedge* compared to purchasing a traditional financial hedging instrument. Based on PGE's projections, by 10 years after drilling is complete, production will be down to 16 percent of the original level.[6] Thus, the parties reason, the vast majority of the value of the proposal could be hedged with a 10-year financial hedging instrument—without the uncertainty of natural gas exploration and production. Staff, CUB, and ICNU caution that, compared to locking in a price with a financial instrument, gas exploration and production introduces numerous additional risks that can only be partially mitigated. The counterparty could go bankrupt or be taken-over. The wells may not produce as forecasted. The byproduct oil and NGLs may not sell as projected. And significantly, a

[6] Staff/500, Kaufman/13 (Figure 2 - Relative Annual Production Value).

host of environmental risks could arise, ranging from increased regulation to contamination. With these risks, the parties warn, the rate effect of the proposal is not predictable, but will depend on a number of different variables.

Staff adds that adopting the proposal could lead to near-term increases in PGE's cost of capital, as rating agencies will be less likely to upgrade, and may even downgrade, PGE's credit rating.

Finally, the parties question PGE's claim that customers are willing to pay a significant premium for long-term electricity price stability. They counter that PGE relies on outdated focus group interviews that are not robust enough to draw any reasonably reliable inferences about customer support for the unprecedented proposal in these proceedings.

C. Analysis and Resolution

PGE's proposed investment in natural gas reserves is without precedent for an Oregon electric utility. Although we previously approved a similar transaction between NW Natural and Encana Oil & Gas, that transaction involved a natural gas utility with a high degree of familiarity with natural gas procurement, and was approved based on an all-party stipulation concluding that the proposed transaction would likely provide benefits to NW Natural's ratepayers.[7] Because PGE seeks approval of an activity that carries risks that are outside the typical experience of an electric utility, we review this proposal with extreme care. PGE's customers should not have to bear the cost of an unsuccessful endeavor into a peripheral business line. Accordingly, PGE has the burden of making a compelling case that the potential benefits outweigh the potential costs and risks—those known and quantifiable, as well as those that may develop under uncertain adverse circumstances. We find that it has not done so here.

To determine whether the proposal clearly provides an overall benefit to customers, we apply generally the criteria used to approve the NW Natural-Encana transaction.[8] In our analysis, we evaluate and consider the value of the proposal both as a natural gas supply option and as natural gas a hedge to provide electricity price stability.

We start by considering the potential benefits, costs, and risks to customers from the proposal viewed as a supply option and the allocation of risks between customers and shareholders. We next examine the electricity price hedging value, if any, derived from

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[7] *In the Matter of Northwest Natural Gas Company, dba NW Natural, Applications for Deferred Accounting Order Regarding Purchase of Natural Gas Reserves (Docket No. UM 1520) and Proposed Purchase of Natural Gas Reserves (Docket No. UG 204)*, Order No. 11-140 (Apr 28, 2011, *supplemented by* Order Nos. 11-144 (May 2, 2011) and 11-176 (May 25, 2011)) (parties agreeing that proposed transaction would likely provide benefits to company's ratepayers and decision to enter into transaction was prudent).

[8] Order No. 11-176 at 4 (focusing on four issues: (1) the reasonableness of cost; (2) price stability; (3) risk mitigation; and (4) the allocation of remaining risks).

the proposal. Finally, we consider whether PGE adequately analyzed and compared a wide range of supply and hedging alternatives and demonstrated the value of pursuing this proposal over other options. To close, we address the parties' concerns about PGE's decision to present this proposal as part of its AUT and the lack of comprehensive analysis from PGE supporting its projection that this proposal will benefit customers.

1. Benefits, Costs, and Risks of Natural Gas Supply Option

We find the potential costs and substantial risks associated with this proposal, when viewed as a natural gas supply option, outweigh the potential benefit to PGE's customers. We further find that the risks are not equitably allocated between shareholders and customers.

To support its claim of customer benefits, PGE relies on its comparison of the net projected costs of the proposal against a forecast of natural gas prices over 30 years.[9] In this calculation, net costs are based on projected PGGS annual revenue requirements and annual projected production volumes over the life of the project. Future prices are based on the forecasted cost of natural gas as used in PGE's integrated resource planning. From this, PGE concludes that the levelized cost of the proposal is at or below the levelized forecasted cost of natural gas—thus the proposal is cost-effective for customers.[10]

We are not willing to approve this type of long-term investment based on the results of one analysis using one set of assumptions that shows a small net benefit to customers. The projected benefit is based on 30-year forecasts of production volumes, production costs, and commodity prices. PGE provided no supplemental analyses using alternative assumptions about future production levels, costs, or prices, or other key assumptions to show the range of possible outcomes for its customers and to stress and scenario test its base comparison. The projected benefit is very small and leaves little room for calculation error or unforeseen adverse circumstances.

In contrast, Staff's analysis, which examined the proposal more robustly using alternative, reasonable assumptions about natural gas, oil, and NGL prices, and well production levels, suggests that the proposal may cost customers significantly.[11] We share Staff's concerns that PGE over-estimates the price of oil and NGLs and that correcting for more reasonable projections turns the proposal's net present value negative, meaning it would increase NVPC by $1 for every $4 invested.[12] Further, Staff notes, if production volumes and cost estimates are also not correct, the loss could be

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[9] PGE/300, Russell-Tooman/17 (explaining if the long-term projected cost of the investment is at or below the current long-term benchmark price at the time the hedge is executed, then the transaction would be deemed to be cost effective).
[10] PGE/700, Sims-Tooman/2 (affirming long-term projected cost remains below current long-term benchmark price).
[11] Staff/500, Kaufman/6.
[12] *Id.* at 4.

even greater. Staff calculates that even with PGE's higher commodity prices, a modest production decrease to the floor of the negotiated production guarantee would turn the proposal's modest net present value negative. In light of these many sensitivities, we agree with Staff that PGE's projected net present value is not substantiated by robust supporting analysis from PGE. We will not rely on what is essentially speculation to approve an investment that has a very real risk of costing customers.

Further, Staff rightly points out that the time profile of benefits and costs to customers under PGE's analysis puts into question PGE's finding of net customer benefits. PGE's analysis shows net costs to customers in the early years and net benefits flowing to customers in the later years. Because forecasts are more questionable the further out they go, more weight should be put on the earlier years of PGE's forecast than later years.

In addition to the speculative nature of customer benefits, we also find that customers bear most, if not all, of the substantial risks associated with this proposal. Although PGE bears the intra-year risk of costs exceeding forecast (any variations would flow through the annual Power Cost Adjustment Mechanism, which is designed to trigger infrequently), customers take on the inter-year risk as costs are updated each year in the AUT.

Most significantly, customers are exposed to the risk that the gas wells do not produce as forecast. As CUB points out in testimony, even when reserves are "proved" or "probable," production risk remains—as evidenced by the end result of the NW Natural-Encana transaction.[13] While the negotiated production guarantee in this case mitigates production shortfalls to some degree, there is still the risk that actual production levels will be significantly below forecast.

Customers also take on the risk that PGE's forecasts of future prices for natural gas, oil, and NGLs will prove to be inaccurate. Inherently, prices will vary from forecasts, yet PGE provides no price guarantees and offers no cost-sharing to spread this risk between shareholders and customers. The cost-of-service natural gas prices that PGGS will charge are not fixed, unlike the NW Natural-Encana transaction that allowed NW Natural to acquire natural gas at substantially fixed prices for a long term.

Finally, any long-term deal poses risks that are difficult to define and mitigate up front—such as a change in ownership of the counterparty, counterparty bankruptcy, changes in regulations, and liability for environmental damage. PGE has not provided sufficient evidence that the terms of the negotiated agreement adequately protect customers from cost increases resulting from the considerable risks that come with this proposal. PGE assures that it has adequately contracted to mitigate these risks but did not offer

[13] CUB/100, Jenks-Hanhan/23-24 (noting that, despite determination that the reserves the company purchased were "proved," actual production at the wells was significantly below forecast).

supporting testimony from a witness who is an expert in counterparty or environmental risks in contracting.

Meanwhile, the proposal seems to pose little risk for PGE and guarantee the company a benefit. The cost-of-service rate charged by PGGS includes *return of* and *return on* the initial investment to drill the wells. In contrast, PGE would not recover a return on its natural gas supply were it to purchase gas on the market or through a short- or long-term supply contract with a gas producer. Further, PGGS is assured a reliable cash flow, even if its costs increase. In this sense, the proposal appears one-sided.

2. Electricity Price Hedging Value

Our review of the record finds no compelling evidence that this proposal will yield demonstrable electricity price stability that would be of value to PGE's customers. Nor do we find persuasive evidence that PGE's customers would be willing to pay more for long-term electricity price stability.

a. Link to Retail Prices

We find that PGE has not adequately demonstrated that this proposal would translate into demonstrable retail electricity price stability.

At the outset, we note that, although PGE claims its proposal would provide protection against structural market shifts and provide greater diversity among its natural gas resources, the company fails to address what goals of electricity price stability it is trying to achieve. Depending on the goal, different courses of action are required. For example, efforts to mitigate short-term steep run-ups in price would differ than those aimed at providing a smooth path in prices over a long-run period of time.

To show how the proposal will mitigate price swings, PGE uses a back cast analysis using data from 2003 to 2016 that compares three scenarios: (1) all gas purchased at spot market prices; (2) 70 percent of gas purchased at spot market prices and 30 percent purchased through a long-term gas hedge; and (3) all gas purchased through a long-term gas hedge.[14] PGE calculates that the difference between purchasing all of its gas at spot market prices versus hedging 30 percent long-term is $4.50/MWh, or seven percent of the average PGE customer's bill for energy charges. PGE notes that when market costs are rising, the hedged costs are less than market, and when market costs are declining, the hedged costs are higher than market. PGE explains that the purpose of long-term gas hedging is not to "beat" the market but to improve price stability, which it says its back cast analysis demonstrates.

[14] PGE/100, Tinker-Sims/17 (Figure 4 - Backcast LT Gas Hedging Example; $ per MWh).

We find this analysis insufficient to demonstrate that the proposal would translate into electricity price stability of value to customers, for three reasons. First, the efficacy of the proposal as a hedge on natural gas price variability remains uncertain. As Staff points out, a market-wide increase in variable production costs would presumably affect both cost of service natural gas and market prices, meaning the proposal would provide no reduction of volatility. Or, independent factors leading to variability in PGGS's cost of service could drive up the proposal's natural gas cost even while market natural gas prices remain stable. The proposal provides little hedging benefit if market natural gas prices remain stable while PGGS's cost of service increases.

Second, even if the proposal successfully mitigates natural gas price variability, the effect on retail electricity prices remains unproven. PGE provides no robust analysis of projected electricity prices and the impact on prices of the proposal over a wide range of futures with different natural gas, oil, and NGL prices, and production levels. Without this level of supporting analysis it remains undetermined whether the potential benefits of the proposal would materialize in retail rates.

Last, as Staff points out, the value of the proposal as a risk-reduction instrument is greatly limited in that the annual production volumes decline sharply after the first few years. We agree that this makes the proposal a relatively ineffective hedge compared to a traditional financial hedging instrument.

b. Customer Value of Price Stability

We are not persuaded by PGE's evidence that its customers are willing to pay more for long-term electricity price stability. We concur with Staff, CUB, and ICNU that PGE provides no meaningful evidence that the value its customers place on stable prices justifies this proposed investment.

To support its claim that customers value retail price stability, PGE cites a February 2006 survey that it included in its 2007 Integrated Resource Plan where business participants, particularly key account customers, indicated they preferred longer-term arrangements with more predictable price increases.[15] PGE also points to a survey in docket UE 228 (PGE's 2012 annual power cost update) where customers indicated they preferred predicable price increases and the statement by ICNU's witness in that docket that "most people, as a general rule, like more stable rates, predictable, but that always comes at a price."[16]

We find these surveys lack the statistical rigor and precision to be relied upon in these proceedings. The 2006 survey submitted by PGE comprises responses from 741 customers indicating whether they prefer that PGE pursue (a) longer-term arrangements

[15] PGE/800, Sims-Faist-Tooman/16; PGE/802, Sims-Faist-Tooman/1.
[16] *Id.* (quoting deposition of witness Schoenbeck in docket UE 228).

that focus on making price increases small and predictable or (b) resources that should have lower average prices but with less predictable price increases. The question posited that PGE could "lock in" small (two to four percent), predictable, annual price increases. This sample size is not convincing in these proceedings and the question posed does not accurately capture the potential costs, risks, and benefits of PGE's natural gas exploration and production proposal. Moreover, as CUB points out, responses from *residential* customers are split: 50 percent prefer longer-term arrangements with predictable increases, 35 percent have no preference, and 15 percent favor lower average prices with less predictable increases. In this docket, ICNU emphatically testifies that its large member customers generally find it less risky to allow rates to fluctuate long-term in response to market conditions than to be locked into a potentially higher price than their competitors.

3. Consideration of Supply and Hedging Alternatives

We find the evidence does not show that that PGE has thoroughly evaluated and compared a wide range of supply and hedging alternatives to show this proposal is part of a least-cost and least-risk portfolio of activities.

With regard to supply, Staff persuasively testified that there is no particular advantage to ownership of natural gas reserves compared to purchasing on the market because natural gas are markets liquid, contracts are straightforward, and transaction costs are not burdensome.[17] CUB similarly affirmed that the competitive market for natural gas is well functioning and will continue to function effectively to deliver natural gas.[18]

With regard to hedging alternatives, as Staff points out in testimony, financial hedges would provide greater natural gas price certainty—for the period the financial hedge lasted—and have less risk. PGE insists that no cost-effective 10-year financial hedging instruments are available but fails to provide in the record any supporting data demonstrating this point.[19] We agree with Staff that PGE's reliance on the purported customer preference for stable rates is undercut by the lack of evidence in the record about the unavailability of less expensive and less risky hedging options to achieve the same objective.

Further, our evaluation of this proposal is made more difficult by the fact that PGE's current hedging policy is limited at best. We typically evaluate the prudence of a hedging

[17] Confidential Hearing Transcript at 69.
[18] *Id.* at 101.
[19] PGE/600, Russell-Toomanl2-3 (explaining PGE met with several banks and energy marketing companies that presented contract or financial hedging alternatives but PGE ultimately determined this proposal represents the long-term gas hedge of best value for customers); PGE/800, Sims-Faist-Tooman/42-43 (stating PGE regularly discusses financial gas hedges with institutions that transact them and has not encountered any 10-year hedges that were cost effective in accordance with PGE's proposed guideline).

transaction within the context of a utility's overall hedging strategy.[20] We first determine whether the overall strategy is prudently designed (for example, it includes sound hedging goals, methodology, and targets, among other things), and then examine whether the utility executed its strategy prudently with respect to a particular transaction.[21]

Here, PGE did not adequately explain or provide analysis of how this long-term hedge would fit within an overall, prudently designed strategy. PGE notes that this long-term hedge would be incremental to its mid-term strategy, yet we are left without a clear understanding of whether this would result in over-hedging. PGE merely states that the proposal fills gaps in its existing mid-term strategy and provides additional protections against volatility. We believe a new undertaking like this should be evaluated within the context of a comprehensive strategy.

4. Review of Proposal in AUT Proceeding

We note that our willingness to approve this long-term hedging proposal as part of the 2017 AUT was greatly impeded by the discrete timetable of the AUT process and the lack of comprehensive analytic support for the proposal from PGE. The parties and this Commission where challenged to thoroughly vet the proposal and evaluate the unique risks that gas exploration and production investments bring within the limited time afforded in the schedule. The schedule allowed for only one round of reply testimony from intervenors, whereas two or even three rounds would have been useful in this docket to develop the record and test PGE's analysis. As stated above, approval of this type of atypical activity will be reviewed with extreme care. In this case, PGE did not meet its burden of clearly demonstrating in these proceedings that the projected benefits outweigh the potential costs and risks.

Nonetheless, we decline to foreclose the ability of PGE to make similar proposals in the context of a future AUT—if certain conditions are met. We believe that a unique, time sensitive, demonstrably beneficial proposal can be properly considered within the parameters of an annual AUT. Before such a proposal is offered in an annual AUT, PGE should first lay a foundation by: (a) developing a comprehensive electricity price hedging strategy that sets forth hedging goals and objectives and thoroughly compares and evaluates a wide range of options for achieving those goals and objectives, and (b) putting the proposal through planning examination that, at a minimum, meets the planning standard of an integrated resource plan. Once we have had the opportunity to consider and acknowledge the reasonableness of the policy, a framework will be in place for timely consideration of a specific proposed transaction that implements that policy.

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[20] *In the Matter of PacifiCorp, dba Pacific Power, 2012 Transition Adjustment Mechanism*, Docket No. UE 227, Order No. 11-435 at 7 (Nov 4, 2011).
[21] *Id.* at 7.

D. PGE's Proposed Guidelines

We take no action on PGE's proposed four guidelines for the Commission to use in determining whether a proposal is prudent.[22] We agree with Staff that PGE's guidelines appear tailor-made to facilitate this proposal rather than to act as a comprehensive approach to analyzing any transaction directed at hedging the risks of long-term natural gas price volatility.

IV. ORDER

IT IS ORDERED that the request to include long-term natural gas hedging costs in Portland General Electric Company's 2017 Annual Update Tariff is rejected.

Made, entered, and effective MAR 15 2017.

Lisa D. Hardie
Chair

John Savage
Commissioner

Stephen M. Bloom
Commissioner

A party may request rehearing or reconsideration of this order under ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-001-0720. A copy of the request must also be served on each party to the proceedings as provided in OAR 860-001-0180(2). A party may appeal this order by filing a petition for review with the Court of Appeals in compliance with ORS 183.480 through 183.484.

[22] PGE/200, Sims-Outama/3.