

# PacifiCorp's Semi-Annual Hedging Report

August 15, 2017

Attachment C

## **PacifiCorp Semi-Annual Hedging Report Attachment C – Definition of Hedge Terms**

**Averaging-in.** This is a strategy to hedge or balance positions over a long period of time rather than all at once.

**Balancing.** The process of buying or selling physical products to offset the open physical position.

**Basis Risk.** The risk that offsetting investments in a hedging strategy will not experience price changes in entirely opposite directions from each other. This imperfect correlation between the two investments creates the potential for residual gains or losses in a hedging strategy, thus not fully eliminating the risk of the position.

**Day-ahead.** Refers to transactions executed on the preschedule day defined by the Western Electricity Coordinating Council (WECC), which may be one or more days prior to delivery.

**Financial Swap.** A derivative in which two parties agree to exchange one stream of cash flows for another. The cash flows are based on the values of one or more underlying products or instruments, such as oil, natural gas, and electricity.

**Fixed for Floating Swap.** An arrangement between two parties (counterparties), in which one party pays a fixed rate on a given quantity of underlying commodity, while the other pays a floating rate.

**Fixed Price Exposure.** The Company's open position that is subject to price risk.

**Fixed Price Physical.** In the futures or over the counter market, two parties enter into a bilateral contract in which one party agrees to deliver a set quantity and quality of the underlying commodity at a specified location, while the other party agrees to purchase the commodity for a fixed price.

**Forward Price Curve (FPC).** The set of current prices for products to be delivered at various times in the future.

**Fundamental Analysis.** A method of evaluating a security that entails attempting to measure its intrinsic value by examining related economic, financial and other qualitative and quantitative factors. Fundamental analysts attempt to study everything that can affect the security's value, including macroeconomic factors (like the overall economy and industry conditions) and company-specific factors (like financial condition and management). The end goal of performing fundamental analysis is to produce a value that an investor can compare with the security's current price, with the aim of figuring out what sort of position to take with that security (underpriced = buy, overpriced = sell or short).

**Hedge Gain or Loss.** The difference between the contracted price of a hedge and the current market price index, multiplied by the volume of the hedge.

**Hedge.** Making an investment to reduce the risk of adverse price movements in an asset, and consequently reducing the benefit of favorable price movements of that asset. Normally, a hedge consists of taking an offsetting position in a related security, such as a futures contract. The Company may hedge its electricity and natural gas requirements using a variety of instruments. Also known as a price hedge.

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**Index Price Physical.** A product with a contract price tied to a published index, that has a fixed volume and delivery period, and that is physically delivered at a specified location.

**Mark-to-market (MtM).** Refers to accounting for the fair value of an asset or liability based on the current market price of the asset or liability, or for similar assets and liabilities, or based on another objectively assessed "fair" value. MtM accounting can change values on the balance sheet frequently, as market conditions change.

**Market Liquidity.** An asset that may be sold without causing a significant movement in the price and with minimum loss of value is said to trade in a liquid market. The less this is possible, the less liquid the market is said to be.

**Technical Analysis.** A method of evaluating securities by analyzing statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a security's intrinsic value, but instead use charts and other tools to identify patterns that some believe may suggest future activity.

**Marking-to-market.** The accounting act of recording the price or value of a security, portfolio or account to reflect its current market value rather than its book value.

**Off-peak hours.** All hours that are not peak hours. Also known as light load hours (LLH).

**Open Position.** The net of the Company's requirements and hedges, measured over a particular time period such as a month or a year. The open position may be either physical or fixed price exposure.

**Option.** A financial derivative that represents a contract sold by one party (option writer) to another party (option holder). The contract offers the buyer the right, but not the obligation, to buy (call) or sell (put) a security or other financial asset at an agreed-upon price (the strike price) during a certain period of time (American) or on a specific date (exercise date, European).

**Peak hours.** In the Western Interconnection Monday through Saturday hours ending 7 through 22 Pacific Prevailing Time (PPT), excluding certain holidays. Also known as heavy load hours (HLH).

**Physical Position.** The net of physical requirements and physical transactions.

**Price Discovery.** The process of determining the price of an asset in the marketplace through the interactions of buyers and sellers.

**Profit and Loss report.** The change in MtM value of a portfolio, typically over a fixed time interval (such as one day or year to date).

**Prompt month.** The first month following the current month.

**Real-time.** Refers to transactions executed during the day of delivery. Also known as hour-ahead.

**Requirements.** The Company's expected natural gas consumption due to economic natural gas fired generation, taking into account natural gas and electricity wholesale market prices and

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operating reserve requirements. The Company's expected surplus or deficit electricity needs taking into account its entire generation, load and contracts portfolio absent hedges.

**Spot Price Forecast.** A view of the prices at which products will ultimately settle.

**Spot Price.** The current price at which a particular commodity can be bought or sold at a specified time and place. Normally refers to prices within the month of delivery, such as hour-ahead, day-ahead, or balance of month, and not forward prices.

**Spread Transaction.** A buy / sell pair of transactions which net to zero volume, but may have different locations (points of delivery), time of delivery, price, or counterparty.

**To-Expiry Value-at-Risk (TEVaR).** TEVaR is a calculation to estimate, at a given confidence level, the amount of financial loss PacifiCorp could sustain through expiration as a result of an adverse movement of prices applied to commercial and trading's (C&T) open linear position. TEVaR is calculated on the combined power and natural gas fixed-price exposure for four consecutive 12-month rolling periods using a to-expiry holding period, a 95 percent confidence level, forward prices, forward volatilities, and historical correlations between power and natural gas prices.

**Underlying.** The underlying of a derivative is an asset, basket of assets, index, or even another derivative, such that the cash flows of the (former) derivative depend on the value of this underlying.

**Value-at-risk (VaR).** For a given portfolio, probability and time horizon, VaR is defined as a threshold value such that the probability that the MtM loss on the portfolio over the given time horizon exceeds this value (assuming normal markets and no trading in the portfolio) is the given probability level.

**Volatility.** A statistical measure of the dispersion of returns for a given security or market index. "Historical" volatility is measured by using the standard deviation of historical returns from that same security or market index. "Implied" volatility is the volatility which is implied by quoted option prices in the market, based on a given option model. Commonly, the higher the volatility, the riskier the security.