# THE STATE OF NEW HAMPSHIRE BEFORE THE NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DE 23-044

Liberty Utilities (Granite State) Corp. d/b/a Liberty

Tyr Energy, LLC Call Option- White Paper Details

# A. <u>Purpose of Document</u>

During the March 20, 2024, hearing in the above docket the Commission requested an update on the status of a White Paper and supporting analysis of hedging energy costs using options contracts. Liberty has engaged Tyr Energy, LLC ("Tyr") to perform the analysis and author a White Paper for \$17,000. This document will provide the Commission with established timelines, cost, and contents of the White Paper stemming from Order No. 26,984. The White Paper will be prepared by Tyr within eight weeks after receiving Commission approval.

## B. Contents

Tyr will provide the hedging mechanics, liquidity, expected effectiveness, and perceived assessment of the premiums of purchasing a Locational Marginal Price Call Option ("Call Option" or "Option") for Liberty-Granite State's Small Customer Group ("SCG").

## 1. Hedging Mechanics

The White Paper will detail the Option implementation, settlements during the covered period, Day-Ahead (DA) and Real-Time (RT) energy purchase management, and a discussion of reporting and measurements of effectiveness.

#### 2. Hedge Liquidity in the ISO-NE Market

Potential counterparty products will be provided with a discussion of market liquidity and depth. Current indicative pricing, potential pricing impacts such as small hedge sizes, will also be discussed.

# 3. Analysis of Hedge Effectiveness

An analysis will be conducted to simulate the cost of supplying Granite State's load in the market with and without the evaluated hedges. The analysis will include an

estimate of expected total and average power costs for the blocks taken to the ISO-NE spot market, plus the potential hourly, daily, and monthly volatility of these costs under various hedging (or no hedge) scenarios. Additionally, a historical assessment of performance, based upon the last 5 years of ISO-NE settlements will be provided.

## 4. Hedge Premiums

PowerSIMM, an energy analytics platform developed by Ascend Analytics used to model portfolio risk and hedging options, will be used to evaluate 10% and 20% premiums for impact on expected average power costs and cost volatility. Analysis of future spot market price and load uncertainty will also include a historical assessment and demonstration of hedge impacts.

# C. Costs

PowerSIMM model outputs and the requested White Paper, as described above, will total \$17,000.

## D. <u>Summary</u>

If approved by the Commission, Tyr, with guidance from Liberty-Granite State and the Commission, will produce PowerSIMM model run and the White Paper requested in Order No. 26,984. The White Paper will provide analysis and discussion related to the use and effectiveness of hedges to manage price volatility for the portion of Liberty-Granite State's SCG that is expected to be purchased in the ISO-NE DA and RT energy markets. Primary hedges to be considered in the underlying analysis are daily call options at a fixed strike price. The intent of the hedging activity would be to would provide a safeguard to a designated portion of Liberty-Granite State's load that is participating in the spot market from potential volatility in wholesale energy prices.