



City Council Report

Date: May 19, 2022
To: City Council
Through: Marc Heirshberg, Deputy City Manager
From: Frank McRae, Energy Resources Department Director
Anthony Cadorin, Energy Resources Program Manager
Tom Sheber, Energy Resources Coordinator
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Subject: Approval of Resolution authorizing the acquisition of interstate natural gas pipeline transmission capacity through participation in the bidding process, and approving entry of associated contracts upon successful bid.

Purpose and Recommendation

The City of Mesa Energy Resources Department recommends that the City Council authorize the City Manager or his designee to acquire additional firm transportation service with interstate natural gas pipeline companies through participation in the bidding process, and approving entry of associated contracts upon successful bid.

Background

The City of Mesa ("Mesa") purchases natural gas supplies from the Permian Basin in west Texas and the San Juan Basin in the Four-Corners area, which are then transported to its natural gas distribution system through El Paso Natural Gas', a Kinder Morgan Company ("EPNG") network of transmission pipelines. Mesa's transportation contracts attempt to reserve enough pipeline capacity on EPNG's pipeline (measured in Dekatherm per day or Dth/day) to ensure that Mesa can transport enough gas to cover design day weather events with a low likelihood of penalties. Currently, Mesa has reserved pipeline capacity of 9,568 to 32,134 Dth/day on EPNG's system, depending on the month, but generally, it is highest in the winter months and lowest in the summer months. When Mesa uses more gas than its contracted pipeline capacity, EPNG can assess a penalty on the volumes that were flowed above the contracted pipeline capacity. As Mesa's gas customer count, and therefore demand, continues to grow, additional pipeline capacity on the interstate

gas transportation system is required to continue reliable delivery of gas to Mesa's system and to avoid expensive penalties.

Mesa can acquire additional pipeline capacity (or achieve similar results) through various methods, which include:

1. Bidding on expiring contracts for pipeline capacity
2. Requesting a new contract on the existing, currently available pipeline capacity¹
3. Requesting a new contract through system expansion.
4. Building a storage project on Mesa's system to "peak shave".
5. Building and using an LNG terminal to "peak shave".
6. Building an end-of-line distribution compression-storage station to "peak shave" AND provide a facility to fuel CNG vehicles.
7. Buying capacity in a multi-day storage project (Arizona Gas Storage Project)
8. Generating renewable natural gas that is supplied directly onto our system to offset the need for additional pipeline capacity

Mesa has found an expiring contract on EPNG's system that is open for bidding that would provide additional pipeline capacity for future load growth in the months of May through October². Since this is a contract for existing pipeline capacity within EPNG's system, Mesa is not expected to pay higher than the current maximum rate EPNG is allowed to charge to deliver gas to Arizona at \$0.3393 per Dth/day (as listed in its tariff). This is the rate that Mesa is paying for one of its current transportation contracts (the other contract is at a slight discount as a result of the section 11.2 settlement and each contract is for approximately half of the total pipeline capacity).

Table 1 illustrates the pipeline capacity available via this expiring contract and Mesa's expected monthly expense that would be paid if Mesa acquired it:

¹ It should be noted that EPNG's pipeline is currently "fully subscribed" meaning that no new contracts are available for existing pipeline capacity.

² Bids for this capacity are due May 26th, 2022 at 2:00 PM MT

Table 1) EPNG's available capacity in Dth/day and expected monthly expense.

| | May | June | July | August | September | October |
|--------------------------|------------|-------------|-------------|---------------|------------------|----------------|
| Quantity (Dth/day) | 1,880 | 1,780 | 1,780 | 1,630 | 1,670 | 610 |
| \$/Month at current rate | \$19,402 | \$18,370 | \$18,370 | \$16,822 | \$17,235 | \$6,295 |

Mesa has been actively reaching out to both EPNG and Transwestern ("TW", another gas transmission company that supplies the Phoenix metro area) about obtaining an additional 7,000 to 20,000 Dth/day of pipeline capacity to meet future demand. The preliminary responses have been priced much higher per Dth than the posted capacity for the expiring contract:

Table 2) Comparison of Expansion Capacity Rate Options

| | Price (\$ per Dth/day) |
|---|------------------------|
| TW's firm capacity from San Juan to Phoenix. ³ | \$1.00 |
| EPNG's Maricopa line expansion ⁴ | \$1.20 |
| EPNG's Arizona Gas Storage Project (January 2017, subject to significant escalation) ⁵ | \$0.57 - \$0.72 |

Although the posted capacity for bid will not entirely cover all of Mesa's future needs, it will add to Mesa's portfolio that can be used for potential peak power generation in the summer at a cheaper price than the alternative options available.

Discussion

EPNG evaluates bids for pipeline capacity based on a strict present value calculation of the value of each bid. Because EPNG has a maximum tariff rate for its existing pipeline capacity set by the Federal Energy Regulatory Commission, it cannot ask for

³ TW's tariff ([Energy Transfer](#))

⁴ EPNG's verbal preliminary estimate

⁵ Arizona Gas Storage Project, Eloy, Arizona ([kindermorgan.com](#))

bids above this maximum tariff rate⁶. Because the bids are all offered at the maximum tariff rate for the particular capacity under consideration, the present value calculation to determine the winning bidder comes down to the length of the bid provided. Over the past decade, bids have been steadily increasing in length to where winning bids above 20 years are most common. As a result, if Mesa expects to win this capacity, a very long bid, exceeding 20 years, perhaps up to 50 years, will be required.

Because the opportunity to bid on expiring contracts is often on short notice and infrequent, the Energy Resources Department is also asking for authority to make similar bids during the upcoming fiscal year.

Alternatives

Mesa could choose not to bid for the expiring FTSA contract currently posted and due on May 26th and look for another expiring contract in the future; however, expiring contracts that meet the required paths on the EPNG's system to delivery gas specifically to Mesa's distribution system are rare in occurrence and at times can be of a quantity or shape that is not suitable to Mesa's growth needs.

Fiscal Impact

The costs of FSAs are recovered through the purchased natural gas cost adjustment factor (PNGCAF) and are adjusted as frequently as monthly as costs increase or decrease throughout the year.

Coordinated With

The Council Resolution was coordinated with the City Attorney's Office.

⁶ If Mesa purchases pipeline capacity directly from another pipeline capacity holder, that purchase can be at any rate negotiated between the two parties, but if the pipeline capacity is posted on EPNG's bulletin board for bidding, the bid cannot exceed the maximum tariff rate.