



City of Denton

City Hall
215 E. McKinney Street
Denton, Texas
www.cityofdenton.com

AGENDA INFORMATION SHEET

DEPARTMENT: Procurement

ACM: Cassey Ogden

DATE: June 6, 2023

SUBJECT

Consider adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to authorize the spend for an insurance binder to Archer Contingent Energy Risk, LLC, for forced outage insurance for the Denton Energy Center for the Summer of 2023; providing for the expenditure of funds therefor; and providing an effective date (RFP 8254 – authorizing the spend for Power Plant Forced Outage Insurance Coverage for the Summer of 2023, and awarding such insurance binder to Archer Contingent Energy Risk, LLC, in the not-to-exceed amount of \$1,050,000.00).

STRATEGIC ALIGNMENT

This action supports Key Focus Area: Promote Sustainability and the Environment.

INFORMATION/BACKGROUND

The twelve (12) generating units of the Denton Energy Center consist of mechanical, electrical, and control systems that, despite using best practices to maintain the systems, are subject to forced outage due to unforeseen equipment malfunctions. The length of time of these forced outages is normally short in duration but can happen during periods of very high wholesale market prices. Some forced outages, where the malfunction of equipment requires a protracted period of time to repair, could take one or more units out of the wholesale market during those high wholesale market price periods.

The effect of not having generating units available to generate can be financially significant to both the DEC proforma (net income) and potentially to electric rate-payers through the Energy Cost Adjustment. The Risk Management Policy, approved by Council on May 25, 2021, under Ordinance 21-765, requires DME to purchase outage insurance to hedge this forced outage risk and thus limit potential losses. Insurance was previously procured and approved this year on January 10, 2022, under Ordinance 23-101.

In establishing the annual power supply budget for DME, the Energy Management Organization (EMO) determines the amount of energy to be purchased to meet the electrical demand of the customers of DME for each hour of each day. The renewable energy hourly supply is then delivered to the electric grid to offset against that hourly electric demand. Any shortage quantities are filled by the lower of the projected wholesale market hourly price or the generating cost of the DEC. Consequently, when the DEC is not available to meet the hourly demand due to forced outages, the EMO must purchase the energy from the wholesale market at the then-applicable hourly wholesale electric price. While the DEC is a very small contributor to the overall energy supply in ERCOT, on days of potential wholesale energy shortages, its inability to generate can, and does, cause the wholesale price to rise in the vicinity of Denton – ERCOT North Hub. This is due to the supply and demand relationship that sets the wholesale market price at each

price node. Because these potential forced outage episodes are random and are correlated with higher wholesale prices, to the extent DME can cost-effectively purchase insurance to insulate customers from high-price periods, it will be prudent and is considered a best practice in the generation sector of the electric utility industry.

To put the risk in perspective, in 2019 during the week of August 12th, the wholesale price of energy was above \$5000/MWh for over 12 hours. Had half the DEC units been unavailable due to a forced outage, the cost to replace the energy that would have been generated, and that was counted on in developing the power supply budget, would have been \$6,750,000. The objective of the DME Hedge Plan (a confidential chapter of the Risk Management Policy) objective is to manage the Energy Cost Adjustment fund balance within +/- \$5,000,000. The forced outage risk of the DEC units is a major risk variable that requires hedging. Table 1 depicts the one-hour cost implications for a forced outage of a specified number of generating units and associated hourly wholesale market prices.

Table 1
One-Hour Forced Outage Costs

Number of Units	Wholesale Price (\$/MWh)								
	\$1,000	\$1,500	\$2,000	\$2,500	\$3,000	\$3,500	\$4,000	\$4,500	\$5,000
2	\$37,500	\$56,250	\$75,000	\$93,750	\$112,500	\$131,250	\$150,000	\$168,750	\$187,500
4	\$75,000	\$112,500	\$150,000	\$187,500	\$225,000	\$262,500	\$300,000	\$337,500	\$375,000
6	\$112,500	\$168,750	\$225,000	\$281,250	\$337,500	\$393,750	\$450,000	\$506,250	\$562,500
8	\$150,000	\$225,000	\$300,000	\$375,000	\$450,000	\$525,000	\$600,000	\$675,000	\$750,000
10	\$187,500	\$281,250	\$375,000	\$468,750	\$562,500	\$656,250	\$750,000	\$843,750	\$937,500
12	\$225,000	\$337,500	\$450,000	\$562,500	\$675,000	\$787,500	\$900,000	\$1,012,500	\$1,125,000

The February 2021 winter weather event also demonstrates how valuable forced outage insurance would have been. For approximately 48 hours, the DEC could not operate due to an interruption of fuel supply and the consequent term to unfreeze the cooling system. Using the above table, the damages associated with this term were \$2.025 million per hour. For the 48-hour period, the damages at \$9,000/MWh totaled \$97.2 million. Prior forced outage policies included the interruption of fuel supply as a valid event for a claim. While the probability of such a prolonged fuel supply interruption is low, it nevertheless remains a potential in the event of a natural gas pipeline disruption. Forced outage insurance in North America is offered by a limited number of providers - Archer Contingent Risk, Swiss Re, and AEGIS are the providers - because they must have excellent credit and demonstrated history of providing the product and settling claims. These providers are backed/underwritten in full or at least in part by Lloyds of London or Swiss Re, one of the largest reinsurance providers in the world. They are qualified bidders and DME has shared the required historical forced outage information and preventative maintenance plans/actions with potential bidders.

The City of Denton Procurement Department issued a Request for Proposal for Forced Outage Insurance in April 2023. The specification provided the bidders with the term(s) of the insurance (June 2023 through September 2023) – the term will ultimately be determined by DME - the deductible amount stated as either a dollar amount per claim or the number of DEC Engines ‘units’ or both, that would have to be impacted by a forced outage before a claim could be filed, the maximum payout of the policy and the mechanics of how the payout will be calculated. Bidders provide an indicative and non-binder offer for the policy but more importantly will provide Procurement, Risk Management, and DME with the standard terms and conditions for the policy and the form of a Binder Agreement. The Binder Agreement will be the document that is executed by the City Manager on the day that DME determines it would like to lock in the policy

amount. Because the providers use energy and weather derivatives to hedge their risk on the date that the Binder Agreement is expected, the premium will be determined using live market prices on that date and DME will enter into the agreement with the lowest-cost provider on that date.

DME is seeking Council's approval to permit the City Manager to execute the Binder Agreement on the date determined by the EMO. The authority to transact will be limited to a not-to-exceed amount of \$1,050,000.

Request for Proposals was sent to 247 prospective suppliers. In addition, specifications were placed on the Procurement website for prospective suppliers to download and advertised in the local newspaper. One (1) proposal was received, and references were checked to ensure the vendor can provide the services requested in the Scope of Work. The proposal was evaluated based upon published criteria including experience, financial security, and value proposition. The department is awarding the contract to Archer Contingent Energy Risk, LLC.

NIGP Code Used for Solicitation:	941 -(Service Only) - Equipment Maint, Repair, & Related Services for Power Generation & Transmission Equip. & 953 - (Service Only) – Insurance & Insurance Services, (All Types)
Notifications sent for Solicitation sent in IonWave:	247
HUB-Historically Underutilized Business Invitations sent out:	21
SBE-Small Business Enterprise Invitations sent out:	62
Responses from Solicitation:	1

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

This item will be presented to the Public Utilities Board (PUB) on June 12, 2023, retroactively, due to the June 15, 2023 deadline to have an insurance binder in place.

RECOMMENDATION

Award the authority to spend for forced outage insurance of the Denton Energy Center to Archer Contingent Energy Risk, LLC, in a not-to-exceed amount of \$1,050,000.

PRINCIPAL PLACE OF BUSINESS

Archer Contingent Energy Risk, LLC
Leawood, KS

ESTIMATED SCHEDULE OF PROJECT(S)

This is for the Summer of 2023.

FISCAL INFORMATION

These services will be funded by Denton Municipal Electric Operating Funds. The budgeted amount for this item is \$1,050,000.

EXHIBITS

Exhibit 1: Agenda Information Sheet
Exhibit 2: LLC Members
Exhibit 3: Ordinance

Respectfully submitted:
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Purchasing Manager

For information concerning this acquisition, contact: Terry Naulty, 940-349-7567.

Legal point of contact: Marcella Lunn at 940-349-8333.