ITEM #:	**32**
DATE:	**07-22-25**
DEPT:	**ELECTRIC**

COUNCIL ACTION FORM

SUBJECT: **ENGINEERING SERVICES FOR RECIPROCATING INTERNAL COMBUSTION ENGINE (RICE) ELECTRIC GENERATION FACILITY**

BACKGROUND:

The City's Electric Utility is in the midst of dynamic changes. The primary fuels used in the City's Power Plant ten years ago (coal and refuse derived fuel) are different from those used today (natural gas and refuse derived fuel), and those anticipated to be used in 2027 (natural gas alone). Increasing demand for electric vehicles and other devices has changed how metering infrastructure and rates are used to manage growth in load. Extreme weather events (e.g., the 2020 derecho) and infrastructure investments by neighboring utilities have presented the need and opportunity for additional electric transmission capabilities. Finally, the City's Climate Action Plan has called for significant changes in how energy is produced to serve Ames customers' needs.

In light of these dynamics and considering the infrastructure currently in place to meet the Utility's needs, staff presented a “first-look” of its long-range plan to Council on December 17, 2024. This was followed up with an aggressive 5-year Capital Improvements Plan for the Electric Utility presented and approved by Council earlier this year on June 17, 2025. At this meeting, staff presented the results of studies that were performed by Electric staff and engineering consultants, in the areas of Unit Health Assessment, Generation Alternatives, and Generation Optimization. These studies helped determine the expected remaining life of Unit 7 and Unit 8 as well as determine the best technology to replace Unit 7, provide additional capacity for today's load growth, and eventually replace Unit 8.

On May 1, 2025, staff issued a Request for Proposals (RFP) to hire an engineering firm to serve as the Utility’s consultant to design a generation plant to meet the short and long-term capacity obligations while also considering operational costs and characteristics. The RFP document was posted on AmesBids by the City's Purchasing division. On June 13, 2025, six proposals were received. Proposals were initially evaluated by an evaluation team of City staff based on the the five criteria listed below (weights of each category in parentheses):

1. Experience and qualifications of personnel (35%)
2. Capability of providing the requested services (25%)
3. Proposed schedule and timeline (15%)
4. Thoroughness of the proposal (10%)
5. Cost (15%)

The total points awarded in each category to the firms by the evaluation team are shown in Table 1 below. **The evaluation team scored the proposals on the four qualitative factors only (1-4 from the list above) and did not have access to the cost proposal. The cost was separately scored by Purchasing staff, who did not participate in the scoring on the qualitative factors.**

Table 1. Initial Scores

FIRM	EXP & QUAL	CAPABILITY	PROPOSED SCHEDULE	THOROUGHNESS	COST (Scored By Purchasing)	TOTAL POINTS
Sargent & Lundy Chicago, IL	133	85	45	32	23	318
HDR Engineering Omaha, NE	105	75	45	32	30	287
DGR Engineering Rock Rapids, IA	77	60	36	22	43	238
Olsson Lincoln, NE	63	50	36	20	60	229
Zachry Engineering San Antonio, TX	77	50	33	28	40	228
KCL Engineering Iowa City, IA	56	40	36	24	44	200

The firms proposed a considerable range for the estimated hours of work and the overall cost. Table 2, below, reflects the points and ranking from the evaluation process and the estimated hours and costs.

Table 2. Cost and Hours Detail

FIRM	TOTAL POINTS	RANK	COST	HOURS
Sargent & Lundy Chicago, IL	318	1	$6,885,000	37,790
HDR Engineering, Inc. Omaha, NE	287	2	$5,250,000	28,101
DGR Engineering Rock Rapids, IA	238	3	$3,899,602	37,928
Olsson Lincoln, NE	229	4	$3,586,000	10,730
Zachry Engineering Corporation San Antonio, TX	228	5	$3,485,000	15,982
KCL Engineering Iowa City, IA	200	6	$2,593,345	9,620

The two highest ranked firms were invited to make presentations to the evaluation team. The presentations were evaluated on:

1. Experience (30%)
2. Understanding of the permitting process (20%)
3. Understanding of Ames and our unique needs (20%)
4. The firm's demonstrated approach to meeting the scope of services (20%)
5. The firm's ability to draft specifications that are inviting to contractors (10%)

The scores of the evaluation team for each of these evaluation categories are outlined in Table 3, below:

Table 3. Presentation Scores

FIRM	EXP	PERMITTING	UNDERSTANDING	APPROACH	SPECS	PRESENTATION POINTS
Sargent & Lundy Chicago, IL	144	88	68	92	40	432
HDR Engineering, Inc. Omaha, NE	108	84	84	76	38	390

The points from the initial scoring of the proposals were added to the presentation points to determine the final rankings as shown in Table 4, below:

Table 4. Final Points and Rankings

FIRM	TOTAL FINAL POINTS	FINAL RANKING
Sargent & Lundy Chicago, IL	750	1
HDR Engineering, Inc. Omaha, NE	677	2

After evaluating the proposals, staff determined that the proposal from Sargent & Lundy LLC, Chicago, Illinois is most acceptable. The experience and qualifications of the personnel, along with the significant number of similar projects completed by the firm, best fit the needs of the City. Sargent & Lundy has considerable experience with RICE engines, which sets it apart from other engineering firms for this project. The firm emphasized a thorough approach to the project, including internal checks and balances to ensure that the individual project components align with the overall project objectives. The description of this approach was particularly impressive to the evaluation team.

Because of the more thorough approach to the design work, Sargent & Lundy assumed a greater number of staff hours would be involved in completing the scope. Based on the submitted rates and hours, the estimated cost for the Sargent & Lundy contract is $6,885,000. It is important to note that the actual amount of the contract awarded to Sargent & Lundy will be billed on a time and materials basis with a cost-not-to-exceed $6,885,000. It is important to note that invoices will only be paid according to the rates provided, for actual time spent.

The majority of this contract will be expended in FY 2025/26 as design and engineering is performed. There is currently a balance of $3,050,000 available in the current fiscal year for this project, consisting of $2,000,000 from the adopted FY 2025/26 budget and $1,050,000 in project savings in FY 2024/25, which will be carried over into FY 2025/26. In addition, the adopted 2025-2030 CIP reflects $7,000,000 in FY 2026/27. This amount is earmarked for building/infrastructure, and staff will draft the 2026-2031 CIP to reflect the portion of this funding that is used for engineering.

It is intended to cover these costs from the available balance in the Electric Fund (currently >$50,000,000), and reimburse the Fund when bonds are issued for the entire generation project in FY 2026/27.

The City Council has previously discussed with staff two key components related to this project, which will be covered in further detail during the staff presentation on July 22. These are: 1) the financing of the project and its impact on utility rates, and 2) the location where the future generation will be sited and the feasibility and cost impacts of an alternative location. A presentation will be attached to this report before the close of business on Monday, July 21, which will include discussion of these topics.

ALTERNATIVES:

1. Award a contract to Sargent & Lundy LLC, Chicago, Illinois, for Engineering Services for Reciprocating Internal Combustion Engine (RICE) Electric Generation Facility, in the amount not-to-exceed $6,885,000.

2. Award a contract to another firm.

3. Reject all proposals.

CITY MANAGER'S RECOMMENDED ACTION:

The last time Electric Services expanded its baseload generation capacity was in the 1980s. Customer demands have grown, and generation infrastructure has aged since then. Staff has extensively studied the needs, the life assessment of the existing generation, the power production technologies available, and the financial requirements to afford the additions. It is time to add new generation resources to meet utility requirements.

Obtaining Engineering services from a consultant with extensive RICE plant experience and capability is crucial for the Electric Services Department to ensure success in building a generation plant that meets the short- and long-term capacity obligations currently facing the utility. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No.1 as stated above.