City of Haven

City Council Meeting
AGENDA
February 5, 2024, at 7:00 p.m.
Haven City Hall, Council Chambers

A. CALL TO ORDER

Moment to Honor Those in Military, First Responders, and other Public Service to our Country & Community

Determine Revisions to Agenda: (Must be added / removed from agenda by motion approved by a majority of those governing body members present and voting.)

B. PUBLIC COMMENT: (Per Ordinance 587, one must sign up in advance of the meeting and provide his / her name and address for the purpose of putting both in the minutes. Remarks limited to five minutes.) None.

C. APPROVE MINUTES: Approve Minutes from Meeting on January 16, 2024.

D. FINANCIALS: Approve Accounts Payable for January 17, 2024, to February 5, 2024

E. AGENDA ITEMS

1. **Appointment of Council President - Council and Mayor**

2. **Personnel Policy – Jennifer Hill, City Attorney**

3. **Committee to Update Capital Improvement Plan – Josephine Gonzalez, City Clerk**

4. **Employee Pay Raises - Josephine Gonzalez, City Clerk**
   a. Resolution - 2024 COLA pay increases for all employees.
   b. Ordinance - establishing City Clerk pay increase.
   c. Ordinance - establishing Chief of Police pay increase.

F. PUBLIC WORKS DIRECTOR, CHAD SWARTZ

1. General Updates
   a. KDHE Cyber Security Assessment
   b. KPP Cyber Security Training
   c. Power flicker Wednesday the 24th. Tripped recloser
   d. Digger truck at Rush Truck Center
   e. Looking into doing some upgrades on South Lift Station
   f. Sending Steve and Jason to pump school.
   g. Compton's lawyer took pics of pool Thursday 2/1/24.

2. Parallel Generation Policy
   a. Ordinance

b. Resolution

3. Shep EV Material Purchase
   a. Materials - $1957.70 Approved 1/22/24 by Mayor Wright
   b. Transformers - $9210.00 Approved 1/22/24 by Mayor Wright
   c. AVEC - $4268.88 Needs approval

4. Clean Rite Proposal for 2024
   a. Quote $16,380/year ($4,095/qtr.)

5. Cronus
   a. Quote for Removing Material - $3,350

G. CHIEF OF POLICE, STEPHEN SCHAFFER

1. General Updates

H. EXECUTIVE SESSION (30 minutes)

"Executive Session (30 Minutes): "I move that the Council recess into executive session pursuant to the non-elected personnel exception in order to review evaluations of Chief of Police and Public Works Director with City Attorney, Jennifer Hill, present, the open meeting to resume at ____ PM."

I. COUNCIL MEMBERS CONCERNS

J. AGENDA PLANNING

K. ADJOURNMENT

MINUTE RECORD
Regular Council Meeting City of Haven

Meeting: REGULAR **Date: January 16, 2024**

THE CITY COUNCIL MEETING IN REGULAR SESSION HELD AT 120 S. KANSAS AVENUE WAS CALLED TO ORDER AT 7:00 PM BY MAYOR ADAM WRIGHT. THE FOLLOWING PEOPLE WERE PRESENT:

Council Members: Christopher Scott, Ciara Powers, Austin Borden, Nicole Sander, and Sherri Schneider.

REVISION TO AGENDA: Mayor Wright wanted to add appointment of council members to city boards to Section E Item 6 of the agenda. Powers moved and Borden seconded. Motion passed unanimously.

Absent: None.

Others: Josephine Gonzalez, Stephen Schaffer, Chad Swartz, Kylie Rush, Cole Rush, Les Banman, Scott Ufford, Kyran Crist, Nick Schneider, and Shauna Schoepf-Pearce.

Public Comment: None

Minutes
Powers moved to approve the minutes of the December 18, 2023, meeting. Scott seconded, and the motion passed unanimously.

Accounts Payable
Borden moved and Scott seconded to approve accounts payable for December 19, 2023, to January 2, 2024, and January 3, 2024, to January 16, 2024.

Adopt Resolution 424
Council reviewed Resolution 424. Powers moved to approve the adoption of Resolution 424 allowing the school district to maintain a beehive. Borden seconded, and the motion passed unanimously.

Haven Fitness Center
Nick Schneider, with the Fitness Center Board, presented a quote from Eck Services for the repair and replacement of a new air conditioning unit. Schneider is asking the city to pay for the cost of the repair.

Schneider further went on to ask the council to possibly consider allowing the Fitness Center to expand into the city office space that is currently being used by the Recreation Department. The Haven Fitness Center would like to move the cardio area into that space.

No action was taken.

Les Banman, Park Board
Requested the approval of Kylie Rush to be appointed to the Park Board. Borden motioned, Scott seconded, and motion passed unanimously.

COLA, Josephine Gonzalez, City Clerk
City Clerk, Gonzalez, presented to council the Cost of Living increase for all employees reflecting a 4% increase in all wages. Borden motioned to approve the 4% cost of living increase retroactive to January 1, 2024. Scheider

seconded. Motion carried.

Gonzalez discussed with the council a request for a pay increase beyond the 4% to bring her more equivalent to the other department heads of the city. The council decided to table the decision until the next council meeting.

Appointment to City Boards
The council and Mayor discussed the appointment of liaison officers to the city boards.

Public Works
Swarz presented to the council a Customer Value Agreement for the standby generator and ATS from Foley Power Solutions. The cost for 2023 is $1,390.84, 2024 is $1,189.77, and 2025 is $1,390.84. Powers motioned to approve the Customer Service agreement with Foley Power Solutions. Sanders seconded the motion. Motion carried.

Police Department
Chief Schaffer said he had a few projects he is working on.

Executive Session
Scott motioned to move into Executive Session to discuss the resignation of the Recreation Department Director and open meeting to resume at 7:45 p.m. Schneider seconded; motion carried.

Borden motioned to extend Executive Session by 5 minutes and regular session to resume at 7:50 p.m. Powers seconded; motion carried.

Schneider motion to extend Executive Session by 3 minutes and regular session to resume at 7:53 p.m. Sander seconded; motion carried.

Regular session resumed at 7:53. No action was taken.

Council Member Concerns
Scott had no concern but wanted to show appreciation for extra time being worked at city hall on Monday night.

Calendar
February 5, 2024, agenda items were discussed.

Council discussed appointment of Council President. Vote for Council President tabled until February 5, 2024, meeting.

Adjournment
At 7:59 PM, adjournment was unanimously approved after a motion from Borden and second from Powers.

_____
Adam Wright, Mayor

Attest:

_____
Josephine Gonzalez, City Clerk

2024 – For 2025 Budgeting Purposes

Recommended Appointees to Capital Improvement Committee:

Stephen Schaffer, Chief of Police

Chad Swartz, Public Works Director

Josephine Gonzalez, City Clerk

Steve Carmichael, Assistant Public Works Director

Kylie Rush, Member

RESOLUTION NO. _____

WHEREAS, the Governing Body of the City of Haven, Kansas, deems it necessary to establish and fix salaries of employees of the City of Haven, Kansas; and

WHEREAS, the Governing Body of the City of Haven, Kansas has determined that the following salaries shall be received as compensation for said services;

BE IT THEREFORE RESOLVED:

Effective Retroactively January 1, 2024:
Assistant City Clerk shall receive as compensation for services $49,400.08 per year.
Public Works Director shall receive as compensation for services $58,344.00 per year.
Meter Reader shall receive as compensation for services $6130.66 per year.
Police Officer #10 shall receive as compensation for services $47,590.40 per year.
Police Officer #2 shall receive as compensation for services $43,264.00 per year.
Part-time police officers shall be paid $18.72 per hour.
Summer Mowing Help shall receive as compensation for services $12.18 per hour.
Park Caretaker shall receive as compensation for services $12.18 per hour.
Janitor shall receive as compensation for services $12.77 per hour.
Burn Site Attendant shall receive as compensation for services $12.77 per hour.
Recreation Director shall receive as compensation for services $12,480.00 per year.
Recreation Secretary / Treasurer shall receive as compensation for services $2496.00 per year.
Field Prep Worker shall receive as compensation for services $8.70 per hour.
City Treasurer shall receive as compensation for services $2,969.51 per year.
Building Inspector shall receive as compensation for services $32.67 per inspection / permit.
Economic Development Coordinator shall receive as compensation for services $18,587.81 per year.

THIS RESOLUTION PASSED AND APPROVED this ____ day of February 2024.

_____
Adam Wright, Mayor

Attest:

_____
Josephine Gonzalez, City Clerk

ORDINANCE NO. _____

AN ORDINANCE ESTABLISHING THE SALARIES OF CERTAIN CITY OFFICIALS AND EMPLOYEES OF THE CITY OF HAVEN, KANSAS.

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF HAVEN, KANSAS:

The City Clerk shall receive, as compensation for services, not less than the sum of $55,000.00 per year. This compensation shall be effective retroactively, beginning January 1, 2024.

This ordinance shall take effect and be in force from and after its passage and publication once in the official City newspaper.

PASSED AND APPROVED this ___ day of February 2024.

_____
ADAM WRIGHT, MAYOR

ATTEST:

_____
JOSEPHINE GONZALEZ, CITY CLERK

ORDINANCE NO. _____

AN ORDINANCE ESTABLISHING THE SALARIES OF CERTAIN CITY OFFICIALS AND EMPLOYEES OF THE CITY OF HAVEN, KANSAS.

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF HAVEN, KANSAS:

The Chief of Police shall receive, as compensation for services, not less than the sum of $57,200 per year. This compensation shall be effective, retroactively beginning January 1, 2024.

This ordinance shall take effect and be in force from and after its passage and publication once in the official City newspaper.

PASSED AND APPROVED this ___ day of February 2024.

_____
ADAM WRIGHT, MAYOR

ATTEST:

_____
JOSEPHINE GONZALEZ, CITY CLERK

ORDINANCE NO. _____

AN ORDINANCE ESTABLISHING THE SALARIES OF CERTAIN CITY OFFICIALS AND EMPLOYEES OF THE CITY OF HAVEN, KANSAS.

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF HAVEN, KANSAS:

The City Clerk shall receive, as compensation for services, not less than the sum of $46,800.00 per year. This compensation shall be effective, beginning January 1, 2024.

The Chief of Police shall receive, as compensation for services, not less than the sum of $57,200.00 per year. This compensation shall be effective, retroactively beginning January 1, 2024.

This ordinance shall take effect and be in force from and after its passage and publication once in the official City newspaper.

PASSED AND APPROVED this ___ day of February 2024.

_____
ADAM WRIGHT, MAYOR

ATTEST:

_____
JOSEPHINE GONZALEZ, CITY CLERK

Smith & Loveless Pump School Agenda and Topics

Section	Title	Duration
1	Pump Overview	20
2	Priming Systems (workbook exercise)	35
Break	BREAK (interactive group quiz)	10
3	Above Ground Pump Stations – Mechanical Operation	30
4	Controls and Pump Features	30
5	How to Maintain Your Above Ground Pump Station	65
Break	LUNCH	60
6	Pump Station Troubleshooting (workbook exercise)	40
7	Electrical Troubleshooting	20
Break	BREAK (interactive group quiz)	10
8	Pump Hydraulics	30
9	Pump Curves (worksheet exercise)	20
Break	BREAK (interactive group quiz)	10
10	Underground Pump Stations	20
11	How to Maintain Your Underground Pump Station	20

Section 1: Pump Overview
The pump overview introduces the speaker and Smith & Loveless the company. This section covers the types of pump stations, the basic components of the S&L pump, impeller functionality, CFDs, impellers, and mechanical seals.

Section 2: Priming Systems
This covers the 2 types of priming systems on S&L pumps – flooded suction and vacuum primed. The presenter covers the basic components of these priming systems. There is a workbook activity in which participants identify the components of 3 vacuum prime- systems.

Section 3: Above-Ground Pump Stations – Mechanical Operation
The basic mechanical process of an above-ground pump station is presented.

Section 4: Controls and Pump Features
This section covers the electrical equipment present in an above-ground pump station as well as the basic electrical process of an above-ground pump station. There is also an emphasis on station operating control systems about relay logic and programable logic controllers (PLCs)

14040 Santa Fe Trail Drive. Lenexa, KS 66215
P: 913.888.5201 F: 913.748.0106
www.smithandloveless.com

Section 5: How to Maintain Your Above-Ground Pump Station
This section covers routine maintenance procedures and schedules. Each procedure is described with a video to show each step of the process. This includes mechanical seal change, vacuum pumps, wafer check valves, motor maintenance, and more.

Section 6: Pump Station Troubleshooting with Compound Gauges
Monitoring the above-ground pump station with compound gauges allows for quick evaluation of the system's operation and when necessary quick troubleshooting. This section covers how to read the compound gauge and how to troubleshoot the issues that might arise in any pumping system. This includes a worksheet.

Section 7: Electrical Troubleshooting
This section touches on troubleshooting electrical issues, including switches, relays, starters, overload coils, and pump rotation.

Section 8: Pump Hydraulics
This section covers how to determine the pumping rate and static and total dynamic head for both above-grade and flooded suction pump stations using measurements taken at the time of pumping. There is also time devoted to examples (both good and bad) of back pressure on the pump station check valve.

Section 9: Pump Curves
This section introduces the use of pump curves when selecting a pump for design conditions. The process includes plotting the design point and determining a pumping system based on brake horsepower lines, impeller diameter lines, maximum suction lift lines, and efficiency lines. Suction and discharge line diameters are also discussed. The design condition is discussed briefly about the system curve when impeller diameters are changed.

Section 10: Underground Pump Stations
This section covers the basic operation and features of the flooded suction pump station. There is a comparison between the two pump types (vacuum primed and flooded suction).

Section 11: How to Maintain Your Underground Pump Station
This section covers the routine maintenance schedules and procedures for the flooded suction pump station. The section provides a basic list of commonly used service tools and spare parts.

Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 25 kW_{AC} or Less for Residential Service and 200 kW_{AC} or Less for Commercial Service

City of Haven, Kansas

February 2024

CONTENTS

PART 1. OVERVIEW

1. PURPOSE:

The purpose of this document is to establish standards for eligible residential and commercial customers ("customer") to interconnect and operate customer-owned inverter-based solar and wind generation facilities with a rated output of 25 kilowatts AC (kW_{AC}) or less for residential service and 200 kilowatts AC (kW_{AC}) or less for commercial service in parallel with the City of Haven("Utility") Electric Distribution System.

2. DEFINITIONS:

a. **AC** – Alternating Current.

b. **Applicable Laws and Regulations** – All duly promulgated applicable federal, state, and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority, including the Ordinances, Regulations, and Utility Rates of the City of Haven.

c. **City** – The City of Haven, Kansas.

d. **Customer** – A residential or commercial electric customer interconnected to the electric distribution system for the purpose of receiving retail electric service that also owns and operates an approved generation facility.

e. **DC** – Direct Current.

f. **Electric Distribution System** – The utility facilities and equipment used to provide electric service to customers, including the customer.

g. **Generation Facility** – For purposes of these Interconnection Standards, the customer device for conversion of solar and wind energy to electricity, as identified in the Interconnection Application, that:

   1. Is an **inverter-based energy facility** with a rated capacity and output of 25 kW_{AC} or less for residential service and 200 kW_{AC} or less for commercial service when including any storage capabilities.
   2. Is owned by the customer.
   3. Is located on the customer's premises.
   4. Serves only the customer's premises (serves no other customers).
   5. Is interconnected with and operates in parallel phase and synchronization with the electric distribution system and is in compliance with these Interconnection Standards.

6. Is sized primarily to offset part of the customer's own electrical energy requirements.

7. Contains a utility-approved mechanism(s) that automatically disconnects the generation facility and interrupts the flow of electricity to the electric distribution system in the event that electric service to the customer is interrupted.

8. Meets all the following generating capacity limitations:

   a. Generator annual energy generation shall not exceed customer's annual energy requirements.

   b. Customer's generator facility shall not exceed customer's total energy usage in the previous 12-month period or 25 kW_{AC} for residential and 200 kW_{AC} for commercial, whichever is less. Generator size may be calculated in kW_{AC}, at the City's discretion, by taking the total kWh usage from the previous 12-month period, dividing it by 365 then multiplying it by 250 then further dividing it by 1000. Or may be calculated by using the customer's estimated average annual demand and shall be calculated by using said customer's historical annual energy usage in kWh divided by 8,760 hours and further dividing by 35% (.35) and multiplying it by 2.

   c. Total customer-owned generating capacity shall not exceed four percent (4%) of the previous year utility peak demand. No generation facility shall be interconnected that would cause total customer-owned generation facility capacity to exceed four percent (4%) of the previous year utility peak demand.

h. **Governmental Authority** – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the customer or any affiliate thereof.

i. **Harmonic Distortion** – Distortion of the normal AC sine wave typically caused by non-linear loads or inverters.

j. **Initial Operation Date** – The date on which the generation facility is operating and is in compliance with the requirements of these Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 25 kW_{AC} or Less for Residential Service and 200 kW_{AC} or less for Commercial Service as determined by the utility.

k. **Interconnection** – The physical connection of a generation facility to the utility electric distribution system.

l. **Interconnection Application** – The customer request to interconnect a new generation facility, or to increase the capacity of, or make a material modification to the operating characteristics of an existing generation facility that is interconnected with the electric distribution system.

m. **Interconnection Standards** – Interconnection Standards shall mean all provisions, forms and related documents described in the collective parts of these Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 25 kW_{AC} or less for Residential Service and 200 kW_{AC} or Less for Commercial Service, or successor document.

n. **Metering Point** – The utility electric meter as shown on the one-line diagram accompanying the customer's interconnection application.

o. **Party** – Individually the utility and the customer; collectively the "parties."

p. **Prudent Utility Practice** – Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Prudent utility practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region by the electric utility industry.

q. **Reasonable Efforts** – With respect to an action required to be attempted or taken by a party under the Interconnection Agreement, efforts that are timely and consistent with prudent utility practice and are otherwise substantially equivalent to those a party would use to protect its own interests.

r. **Renewable Parallel Generation Residential Service rate schedule and Renewable Parallel Generation Commercial rate schedule for the City of Haven. (See Resolution No 425).**

s. **System Upgrades** – Additions, modifications, improvements, and upgrades to the electric distribution system or customer service connection at or beyond the point of interconnection to facilitate interconnection of the customer generation facility.

t. **Utility** – City of Haven, Kansas.

u. **Voltage Flicker** – A variation of voltage sufficient in duration to allow visual observation of a change in electric light source intensity.

3. ELIGIBILITY:

a. Must be a residential or commercial electric customer with a customer-owned inverter-based renewable energy generation facility as defined herein that is interconnected behind the meter (connected to the customer side of the electric meter) and single-phase service at 60 Hertz at a nominal voltage of 120/240 volts or three-phase 120/208 or 277/480 volts furnished through a single bidirectional electric meter. Specific metering shall be at utility discretion.

b. Customer-generator's utility account must be in good standing and in compliance with the City's electric rate schedules, electric utility rules and regulations, and these Interconnection Standards for Installation and Parallel Operation of Customer-Owned Residential and Commercial Renewable Energy Generation Facilities.

c. A generation facility that is not a renewable energy generation facility as defined herein or if such facility has a rated output greater than 25 kW_{AC} for residential customer-generators and 200 kW_{AC} for commercial or industrial customer-generators is subject to separate negotiation with the City and is not eligible to interconnect with the electric distribution system under these Interconnection Standards.

d. For purposes of these Interconnection Standards, an eligible generation facility must:

(1) Be powered by a renewable energy resource as defined in Kansas Statutes Annotated 66-1264 and amendments thereto.

(2) Be owned by the customer-generator.

(3) Be located on a premise(s) owned by the customer-generator.

(4) Serve only the customer-generator's premises (serve no other customers).

(5) Be interconnected with and operate in parallel phase and synchronization with the electric distribution system.

(6) Comply with these Interconnection Standards for Installation and Parallel Operation of Customer-Owned Residential, Commercial and Industrial Renewable Energy Generation Facilities.

(7) Be intended primarily to offset part or all the customer-generator's own electrical energy requirements.

(8) Contain a City-approved mechanism(s) that automatically disconnects the generation facility and interrupts the flow of electricity back onto the electric distribution system in the event that electric service to the customer-generator is interrupted.

(9) Meet all the following generator output limitations:

a. For residential customer-generators, 25 kW_{AC} or less.

b. For commercial customer-generators, 200 kW_{AC} or less.

c. Be appropriately sized to the customer-generator's electric load as determined by the City.

d. Total customer-owned generator rated output in kW_{AC} under the City's parallel generation rate rider shall not exceed four percent (4%) of the previous calendar year City electric system peak demand. No generation facility shall be interconnected that would cause the rated output of all customer-owned generation facilities under the parallel generation rate rider to exceed four percent (4%) of the previous calendar year electric system peak demand.

4. INTERCONNECTION REQUEST:

The customer shall request interconnection of a generation facility by completing and submitting to the utility the attached document entitled 'Interconnection Application." The utility may require additional information or clarification to evaluate the customer interconnection Request. Interconnection applications will be reviewed by the utility in the order in which they are received. If an interconnection application is viewed as incomplete, the utility will provide notice to the customer that the application is not complete, provide a description of the information needed to complete the application, and include a statement that processing of the application cannot begin until the application is complete.

5. ELECTRIC DISTRIBUTION SYSTEM IMPACT ANALYSIS:

The purpose of the distribution system impact analysis is to determine if the generation facility will have an adverse impact on the electric distribution system equipment. After receiving a properly completed Interconnection Application, the utility will analyze the potential impact of the proposed generation facility on the electric distribution system and on other utility customers. Such analyses will be based on prudent utility practice to determine thermal effects, voltage ranges, power quality, system stability, etc., and will include the following:

a. The customer generation facility's proposed interconnection point is on a radial distribution circuit and not a transmission line.

b. The proposed generation facility complies with IEEE 1547 and UL 1741 or successor standards.

c. The proposed generation facility's capacity in aggregation with other generation on the circuit shall not exceed 15 percent (15%) of the total circuit peak demand (kW) as most

recently measured at the substation during the previous 12-month period; nor shall it exceed 15 percent (15%) of a distribution circuit line section annual peak demand (kW).

d. The proposed generation facility, in aggregation with other generation on the distribution circuit, shall not contribute more than 10 percent (10%) to the distribution circuit's maximum fault current at the point on the primary voltage distribution line nearest the proposed interconnection point.

e. The proposed generation facility, in aggregation with other generation located on the distribution circuit, may not cause any distribution protective devices and equipment (including substation breakers, fuse cutouts, and line reclosers, or other customer equipment on the electric distribution system to be exposed to fault currents exceeding 85 percent (85%) of the short circuit interrupting capability).

f. No additional generation facilities shall be interconnected on a circuit that equals or exceeds 85 percent (85%) of its short circuit interrupting capability.

g. No generation facility shall be interconnected that would cause the total interconnected customer-owned generating facility capacity to exceed four percent (4%) of the previous year utility system peak demand.

h. When a proposed generation facility is single-phase and is to be interconnected on a center tap neutral on a 240-volt service, its addition shall not create an imbalance between the two sides of the 240-volt service of more than 20 percent of the nameplate rating of the service transformer.

i. The proposed generation facility installation must be certified to pass an applicable non-islanding test or use reverse power relays or other means to meet IEEE 1547 unintentional islanding requirements.

j. A review of the type of electrical service provided to the customer, including line configuration, and the transformer connection, will be conducted to limit the potential for creating over voltages on the electric distribution system due to a loss of ground during the operation time of any anti-islanding function.

k. When the proposed generation facility is to be interconnected on a single-phase shared secondary line, the aggregate generation capacity on the shared secondary line, including the proposed generation facility, shall not exceed ten kilowatts (10 kW_{AC}).

6. SYSTEM UPGRADES:

The utility shall not be obligated to make upgrades or improvements to its electric distribution system to accommodate the customer's generation facility. Where system upgrades are required prior to interconnection of the generation facility as identified in the system impact study, the utility will provide the customer with an estimated schedule and the customer's cost for said system upgrades.

7. Interconnection Agreement:

After the customer and the utility have identified and mutually agreed on the project scope including the generation facility, system upgrades, and estimated costs (if any), the customer and the utility shall execute the attached document entitled "Interconnection Agreement." The Interconnection Agreement shall be between the utility and the customer and shall not include third parties. Prior to commencement of system upgrades required to allow interconnection of the customer-owned generation facility, customer shall deposit with the utility an amount equal to the estimated cost of said system upgrades. See "Section 4. Interconnection Costs" of the Interconnection Agreement (Part 4) for additional information.

8. Codes and Permits:

a. The customer shall be responsible for procuring all building, operating, environmental, or other permits for the generation facility and for the necessary ancillary structures to be installed that are required by any governmental authority having jurisdiction.

b. The generation facility and interconnecting equipment shall meet all requirements in "Part 2. Technical Requirements" of these Interconnection Standards.

c. The construction and facilities shall meet all applicable building and electrical codes.

9. Certificate of Completion:

Upon completion of the generation facility and prior to the initial operation date of said facility, the customer shall complete and submit a signed copy of the attached document entitled "Certificate of Completion."

10. Normal Operation:

The customer may begin initial operation of the generation facility upon receipt of written approval from the utility.

PART 2. TECHNICAL REQUIREMENTS

1. CHARACTER OF SERVICE:

The electric service shall be 60 cycles per second (60 Hertz) alternating current (AC) at supply voltages and single phase under the residential rate schedule that would apply if the customer did not have an interconnected generation facility.

2. CODE REQUIREMENTS:

The generation facility shall meet all requirements established by the National Electrical Code (NEC), National Electrical Safety Code (NESC), Institute of Electrical and Electronics Engineers (IEEE), Underwriters Laboratories (UL), and the Occupational Safety and Health Administration. Specific applicable codes are shown in Section 9 of this Part 2 below as Standards for Interconnection, Safety and Operating Reliability." In addition, manufacturer's ownership, operation and maintenance manuals or documents and applicable equipment settings shall be provided to the utility with the interconnection application. The utility shall review said manuals or documents as part of the interconnection application review process.

3. GENERATION FACILITY CONTROL:

The control system of the generation facility shall comply with IEEE and UL specifications and standards for parallel operation with the electric distribution system and in particular as follows:

a. Power output control system shall automatically disconnect from the electric distribution system upon loss of system voltage and shall not reconnect until system voltage has been restored.

b. Power output control system shall automatically disconnect from the electric distribution system if system voltage fluctuates beyond plus or minus ten percent (10%).

c. Power output control system shall automatically disconnect from the electric distribution system if the generator fails to operate within the operating frequency range of 59.3 – 60.5 Hz.

d. Inverter output harmonic distortion shall meet IEEE and UL standards.

e. The generation facility shall meet applicable IEEE and UL standards concerning impacts to the electric distribution system with regard to harmonic distortion, voltage flicker, power factor, direct current injection, and electromagnetic interference.

4. LIMITS SPECIFIC TO SINGLE-PHASE GENERATION FACILITIES:

When connected to a single-phase transformer, the generation facility must be installed such that the aggregated gross output is balanced between the two phases of the single-phase voltage and the maximum aggregated gross ratings for all the generating facilities shall not exceed the transformer rating.

4.1 LIMITS SPECIFIC TO THREE-PHASE GENERATION FACILITIES:

The applicant must balance the demand load and the generation facility as nearly as practical between the two sides of a three-wire single phase service and between all phases of a three-phase service. The difference in amperes between any two phases at the customer's peak load should not be greater than 10 percent or 50 amperes (at the service delivery voltage), whichever is greater; except that the difference between the load on the lighting phase of a four-wire delta service and the load on the power phase may be more than these limits. It will be the responsibility of the customer to keep the demand load balanced within these limits.

5. SYSTEM PROTECTION:

The owner of the customer owned generator is responsible for providing adequate protection to electric utility facilities for conditions arising from the operation of generation under all utility distribution system operating conditions. The owner is also responsible for providing adequate protection to its facility under any utility distribution system operating condition whether or not its customer owned generator is in operation. Conditions may include but are not limited to:

a. Loss of a single phase of supply.

b. Distribution system faults.

c. Equipment failures.

d. Abnormal voltage or frequency.

e. Lightning and switching surges.

f. Excessive harmonic voltages.

g. Excessive negative sequence voltages.

h. Separation from supply.

i. Synchronizing generation.

j. Re-synchronizing the owner's generation after electric restoration of the supply.

6. **FAULT CURRENT DISCONNECTION:**

The generation facility shall be equipped with protective equipment designed to automatically disconnect from the electric distribution system during fault current conditions and remain disconnected until system voltage and frequency have stabilized.

7. **RECLOSING COORDINATION:**

The generation facility shall be coordinated with electric distribution system reclosing devices by disconnecting from the electric distribution system during de-energized electric distribution system operation. The generation facility shall remain disconnected until customer is notified by utility representatives that it is safe to reconnect the generation facility.

8. **EXTERNAL GENERATOR AC DISCONNECT SWITCH AND GENERATOR METER:**

The customer shall install an external alternating current (AC) disconnect switch within six (6) feet of the utility electric meter(s) that is visible and readily accessible to utility representatives at all times. This switch shall be clearly labeled as "Generator AC Disconnect Switch." The switch shall be capable of being locked in an open position and shall prevent the generation facility from supplying power to the electric distribution system while in the open position. The customer shall, at no cost to the City, install City approved equipment capable of receiving a City provided electric meter ahead of the above generator disconnect to meter generator output for means of billing, monitoring and system impact studies.

9. **STANDARDS FOR INTERCONNECTION, SAFETY AND OPERATING RELIABILITY:**

The interconnection of a generation facility and associated equipment to the electric distribution system shall meet the applicable provisions of the following publications or successor standards:

a. ANSI/IEEE1547-2003, *Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity).* The following standards shall be used as guidance in applying IEEE 1574:

   1. IEEE Standard 519-1992, *IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems.*

   2. IEC/TR3 61000-3-7, *Assessment of Emission Limits for Fluctuating Loads in MV and HV Power Systems.*

b. UL 1741, *Standard for Inverters, Converters, and Controllers for Use in Independent Power Systems.*

c. ANSI/NFPA 70 (2008), *National Electrical Code.*

d. OSHA (29 CFR § 1910.269).

e. IEEE Standard 929-2000, *IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems.*

f. IEEE Standard C37.90.1-1989 (R1994), *IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems.*

g. IEEE Standard C37.90.2 (1995), *IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers.*

h. IEEE Standard C37.108-1989 (R2002), *IEEE Guide for the Protection of Network Transformers.*

i. IEEE Standard C57.12.44-2000, *IEEE Standard Requirements for Secondary Network Protectors.*

j. IEEE Standard C62.41.2-2002, *IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits.*

k. IEEE Standard C62.45-1992 (R2002), *IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits.*

l. IEEE Standard 100-2000, *IEEE Standard Dictionary of Electrical and Electronic Terms.*

m. ANSI C84.1-1995, *Electric Power Systems and Equipment – Voltage Ratings (60 Hertz).*

n. NEMA MG 1-1998, *Motors and Generators, Revision 3.*

o. IEEE Standard 2030.2, *Guide for the Interoperability of Energy Storage Systems Integrated with the Electric Power Infrastructure (Including use of IEEE 2030.3 testing protocols to establish conformity).*

10. Access and Inspection by Utility:

Customer shall provide the utility reasonable opportunity to inspect the generation facility prior to its interconnection and initial operation date and to witness initial testing and commissioning of the generation facility. The utility may witness any commissioning tests required by IEEE 1547/UL 1741.

Following initial testing and inspection of the generation facility and upon reasonable advance notice to customer, the utility shall have access at all reasonable times to the generation facility to perform on-site inspections to verify that the installation, maintenance, and operation of the generation facility complies with the requirements of these Interconnection Standards. The utility cost of such inspection(s) shall be at utility expense; however, the utility shall not be responsible for any cost customer may incur as a result of such inspection(s). Upon written request, customer shall inform the utility of the next scheduled maintenance and allow the utility to witness the maintenance program and

any associated testing. The utility shall at all times have immediate access to the external generator AC disconnect switch to isolate the generation facility from the electric distribution system.

11. GENERATION FACILITY OPERATION:

a. Customer shall install, operate, and maintain, at customer's sole cost and expense, the generation facility in accordance with the manufacturer's suggested practices for safe, efficient, and reliable operation of the generation facility in parallel with the electric distribution system. Customer shall bear full responsibility for the installation, maintenance, and safe operation of the generation facility. Upon request from the utility, customer shall supply copies of periodic test reports or inspection logs, which will at a minimum be requested annually.

b. Customer shall be responsible for protecting, at customer's sole cost and expense, the generation facility from any condition or disturbance on the electric distribution system, including, but not limited to, voltage sags or swells, system faults, outages, loss of a single phase of supply, equipment failures, and lightning or switching surges.

c. Customer agrees that, without prior written permission from the utility, no changes shall be made to the configuration of the generation facility as approved by the utility, and no relay or other control or protection settings shall be set, reset, adjusted, or tampered with, except to the extent necessary to verify that the generation facility complies with utility-approved settings.

d. Customer shall operate the generation facility in such a manner as not to cause undue voltage fluctuations, power quality issues, intermittent load fluctuation characteristics or to otherwise interfere with the operation of the electric distribution system. At all times when the generation facility is operated in parallel with the electric distribution system, customer shall operate said generation facility in such a manner that no disturbance will be produced thereby to the service rendered by the utility to any of its other customers or to any electric system interconnected with the electric distribution system. Customer understands and agrees that the interconnection and operation of the generation facility pursuant to these interconnection standards is secondary to, and shall not reduce the safety, quality, or reliability of electric service provided by the utility.

e. Customer's control equipment for the generation facility shall immediately, completely, and automatically disconnect and isolate the generation facility from the electric distribution system in the event of a fault on the electric distribution system, a fault on customer's electric system, or loss of a source or sources on the electric distribution system. The automatic disconnecting device included in such control equipment shall not be capable of reclosing until after service is restored on the electric distribution

system. Additionally, if the fault is on customer's electric system, such automatic disconnecting device shall not be reclosed until after the fault is isolated from the customer's electric system.

f. The City shall be notified before any changes are made to the generation facility that occurs after the final approval of interconnection and has the right to no longer allow interconnection if the changes do not meet the qualifications of these standards.

12. RIGHT TO DISCONNECT GENERATION FACILITY:

The utility shall have the right and authority to disconnect and isolate the generation facility without notice, at utility's sole discretion if the utility believes that any of the following has occurred or is occurring:

a. Electric service to customer's premises is discontinued for any reason.

b. Adverse electrical effects (such as power quality problems) on the electric distribution system and/or the electrical equipment of other utility customers attributed to the generation facility as determined by the utility.

c. Electric distribution system emergencies or maintenance requirements.

d. Hazardous conditions existing on the electric distribution system as a result of the operation of the generation facility or protective equipment.

e. Failure of the customer to obtain and maintain required insurance and to provide the utility with proof of insurance within ten (10) days of request.

f. Utility identification of uninspected or unapproved equipment or modifications to the generation facility after initial approval.

g. Recurring abnormal operation, substandard operation, or inadequate maintenance of the generation facility.

h. Noncompliance with the obligations under the Interconnection Agreement. In non-emergency situations, the utility shall give customer notice of noncompliance including a description of the specific noncompliance condition and allow customer a reasonable time to cure the noncompliance prior to disconnecting and isolating the generation facility.

i. Failure to remit payment to the utility for any amounts owed, including but not limited to, amounts invoiced pursuant to Paragraph 15 of this agreement.

j. In the event that the utility disconnects the generation facility for routine maintenance, the utility shall make reasonable efforts to reconnect the generation facility as soon as practicable.

k. The customer retains the option to temporarily disconnect its generation facility from the electric distribution system at any time. Such temporary disconnection shall not constitute termination of the Interconnection Agreement unless the customer exercises its termination rights under Section 16 of Part 2.

13. RATES AND OTHER CHARGES:

a. Customer must participate in the Renewable Parallel Generation - Residential Service rate schedule or Renewable Generation - Commercial Service rate schedule as a condition of interconnecting a Customer-Owned Generating Facility **(Resolution No 425).**

b. Customer must complete and submit to the utility the Renewable Energy Parallel Generation Application for Service in Part 7. The utility shall not approve a Customer-Owned Generation Facility Interconnection Application that does not include a completed Renewable Energy Parallel Generation Application for Service.

c. Terms and conditions of service are contained in the Renewable Parallel Generation – Residential Service rate schedule, Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 25 kW_{AC} or Less for Residential Service and 200 kW_{AC} or Less for Commercial Service.

d. Customer must participate in the electric utility's Renewable Parallel Generation – Residential Service rate schedule or Renewable Parallel Generation – Commercial Service Rate Schedule if the customer wishes to receive credit for any excess energy generated by the customer and delivered to the utility.

14. INSURANCE:

Customer shall at its own expense obtain and continuously maintain bodily injury, property damage liability, and general liability insurance, without any exclusion for liabilities related to the interconnection undertaken pursuant to the Interconnection Agreement. The amount of such insurance shall be a minimum of $100,000 to insure against all reasonably foreseeable liabilities and risks related to the generation facility, the ownership, and operation of such generation facility, and the interconnection itself. Such insurance must be obtained from an insurance provider authorized to do business in the State of Kansas. Customer shall provide proof of insurance to the utility not later than ten (10) days prior to the commercial operation date of the generation facility. Utility shall not interconnect the generation facility absent submission by the customer of proof of insurance in accordance with these Interconnection Standards. Thereafter customer shall provide proof of insurance to the utility within ten (10) days of such request by the utility. Utility receipt of proof of insurance does not imply an endorsement of the terms and conditions of said coverage. Customer shall promptly notify the utility whenever an accident or incident occurs resulting

in injuries or damages that are included within the scope of coverage of such insurance, regardless if the customer intends to submit a claim under such policy. The customer shall present proof of insurance every year within 30 days after the anniversary of the customer's receipt of approval and authorization to energize the generation facility in order to recertify the facility's generation and interconnection for the following year.

15. LIMITATION OF LIABILITY AND INDEMNIFICATION:

a. **Limitation of Liability**

Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees and court fees, relating to or arising from any act or omission in its performance of the Interconnection Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall the utility or the City of Haven be liable for any indirect, special, consequential, or punitive damages.

b. **Indemnity**

Customer assumes all liability for, and shall indemnify, defend and hold the utility and the City of Haven harmless from, any and all claims, losses, costs, and expenses of any kind or character, direct or indirect, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, labor costs, and all other obligations by or to third parties arising out of or resulting from the design, construction, operation or maintenance of the generation facility, or the customer's actions or omissions in breach of its obligations under the Interconnection Agreement. Such indemnity shall include, but is not limited to, financial responsibility for: (a) utility monetary losses; (b) reasonable costs and expenses of defending an action or claim made by a third party; (c) damages related to the death or injury of a third party; (d) damages to utility property; (e) damages to the property of a third party; (f) damages for the disruption of the business of a third party. The limitations of liability provided in this paragraph do not apply in cases of gross negligence or intentional wrongdoing. If the utility or the City of Haven incurs any costs as to which the indemnity provided in this section b. applies, the utility or City of Haven shall invoice the customer for such costs in writing. Customer shall remit payment to the utility or the City of Haven, as appropriate, within 45 calendar days of the date of such invoice.

16. Effective Term and Termination Rights:

The Interconnection Agreement shall become effective when executed by both parties and shall continue in effect until terminated in accordance with the provisions of this section. The Interconnection Agreement may be terminated for the following reasons:

a. Electric service to customer's premises is discontinued for any reason. If electric service is disconnected for any reason or a change occurs in the account holder, a new Interconnection Application must be submitted to the electric utility for consideration.

b. Customer may terminate the Interconnection Agreement at any time by giving the utility at least sixty (60) days prior written notice stating customer's intent to terminate the agreement at the expiration of such notice period.

c. The utility may terminate the Interconnection Agreement at any time following customer's failure to generate energy from the generation facility in parallel with the electric distribution system by the later of two (2) years from the date of execution of the Interconnection Agreement or during any twelve (12) month period following completion of the interconnection provided for by the agreement.

d. The utility may terminate the Interconnection Agreement at any time by giving customer at least sixty (60) days prior written notice in the event the customer generates and delivers to the utility more energy than customer consumes within a calendar year for two consecutive years or more.

e. Either party may terminate the Interconnection Agreement at any time by giving the other party at least sixty (60) days prior written notice that the other party is in default of any of the material terms and conditions of the Interconnection Agreement or these Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 25 kW_{AC} or Less for Residential Service and 200 kW_{AC} or less for Commercial Service, so long as the notice specifies the basis for termination and there is reasonable opportunity for the party in default to cure the default; or

f. The utility may terminate the Interconnection Agreement at any time by giving customer at least sixty (60) days prior written notice in the event that there is a change in an applicable rule or statute affecting the agreement.

Upon termination of the Interconnection Agreement, customer's generation facility shall be permanently disconnected from the electric distribution system.

Termination of the Interconnection Agreement shall not relieve either party of its liabilities and obligations, owed or continuing at the time of said termination.

17. TERMINATION OF ANY APPLICABLE PRIOR AGREEMENT:

From and after the date when service commences under the Interconnection Agreement, the agreement shall supersede any oral and/or written agreement or understanding between the utility and customer concerning the interconnection service covered by the agreement. Any such prior agreement or understanding shall be deemed to be terminated as of the date interconnection service commences under the Interconnection Agreement.

18. FORCE MAJEURE:

For purposes of the Interconnection Agreement, the term "Force Majeure" means any cause or event not reasonably within the control of the party claiming Force Majeure, including, but not limited to, the following: acts of God, strikes, lockouts, or other industrial disturbances; acts of public enemies; orders or permits or the absence of the necessary orders or permits of any kind which have been properly applied for from the government of the United States, the State of Kansas, any political subdivision or municipal subdivision or any of their departments, agencies or officials, or any civil or military authority; unavailability of a fuel or resource used in connection with the generation of electricity; extraordinary delay in transportation; unforeseen soil conditions; equipment, material, supplies, labor or machinery shortages; epidemics; landslides; lightning; earthquakes; fires; hurricanes; tornadoes; storms; floods; washouts; drought; arrest; war; civil disturbances; explosions; breakage or accident to machinery, transmission lines, pipes or canals; partial or entire failure of utilities; breach of contract by any supplier, contractor, subcontractor, laborer or materialman; sabotage; injunction; blight; famine; blockade; or quarantine. A Force Majeure event does not include an act of negligence or intentional wrongdoing.

If either party is rendered wholly or partially unable to perform its obligations under the Interconnection Agreement because of Force Majeure, both Parties shall be excused from whatever obligations under the Agreement are affected by the Force Majeure (other than the obligation to pay money) and shall not be liable or responsible for any delay in the performance of, or the inability to perform, any such obligations for so long as the Force Majeure continues. The Party suffering an occurrence of Force Majeure shall, as soon as is reasonably possible after such occurrence, give the other Party written notice describing the particulars of the occurrence and shall use reasonable efforts to remedy its inability to perform; provided, however, that the settlement of any strike, walkout, lockout, or other labor dispute shall be entirely within the discretion of the Party involved in such labor dispute.

Application No. _____

City of Haven

Customer-Owned Renewable Electric Generation Facility 25 kW_{AC} or Less for Residential Service and 200 kW_{AC} or Less for Commercial Service

This application for Interconnection of a Customer-Owned Renewable Electric Generation Facility 25 kW_{AC} or less for Residential Service and 200 kW_{AC} or less for Commercial Service is considered complete when it provides all applicable and correct information required below. The City of Haven electric utility may require additional information or clarification to evaluate the Interconnection Application. Processing of this application cannot begin until all information is complete.

Processing Fee

❑ A non-refundable processing fee of $150.00 must accompany this application. **[Fee is discretion of the City]**

Customer

Name: _____ Utility Account Number: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Is the generation facility owned by the customer listed above? ❑ Yes ❑ No

Contact (if different from customer)

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Generation Facility Information

Location (if different from above): _____

Inverter Manufacturer: _____

Model: _____

Nameplate Rating: (kW_{DC}) _____ (kVA_{AC}) _____

System Design Capacity: (kW_{DC}) _____ (kVA_{AC}) _____

Energy Source: Solar ❑ Wind ❑ Battery/Storage ❑

Is the generation facility equipment IEEE 1547/UL 1741 certified? ❑ Yes ❑ No
[Note: Requires a Yes for an application to be considered complete.]

If yes, attach manufacturer's documentation and technical specification sheet showing IEEE 1547/UL 1741 certification.

Have all necessary government permits, and approvals been obtained for the project prior to this application?

❑ Yes ❑ No [Note: Requires a yes for an application to be considered complete.]

Is utility accessible external generator AC disconnect switch provided? (Required) ❑ Yes ❑ No

Location of accessible external generator AC disconnect Switch: _____
(e.g., Two feet west of utility electric meter)

Estimated generation facility installation date: _____

Estimated generation facility initial operation date: _____

List components of the generation facility equipment package that are currently certified:

	Equipment Type	Certifying Entity
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____

Equipment Installation Contractor: **Indicate installation by owner if applicable** ❑

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Contact Person (If other than Above): _____
Telephone (Daytime): _____ (Evening): _____
Facsimile Number: _____ E-Mail Address: _____

Electrical Contractor: (If Applicable) **Indicate if not applicable** ❑

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Contact Person (If other than Above): _____
Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Consulting Engineer: (If Applicable) **Indicate if not applicable** ❑

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Contact Person (If other than Above): _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Provide a one-line diagram of the generation facility. The one-line diagram is a basic drawing of an electric circuit in which one or more conductors are represented by a single line and each electrical device and major component of the installation, from the generator to the point of interconnection, are noted by symbols. See attached example.

Provide a site layout of the generation facility and nearby features. The site layout is a basic drawing showing the location of the generation facility, electric utility electric meter, AC and DC disconnect switches, existing electrical panels, disconnects, utility transformers, conduit/conductor runs, and lockout locations.

Copies of manufacturer's specification sheets for all generation facility equipment, inverters, and other proposed generation facility equipment must be submitted with this application.

Customer Signature

I hereby certify that, to the best of my knowledge, the information provided in this Interconnection Application is true. I agree to abide by the terms and conditions of the City of Haven (utility) Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 25 kW_{AC} or Less for Residential Service and 200 kW_{AC} or less for Commercial Service and will return the Certificate of Completion to the utility when the generation facility has been installed and prior to commencing operation of said generation facility.

Signature: _____ Date: _____

----------**City of Haven Utility Use** ----------

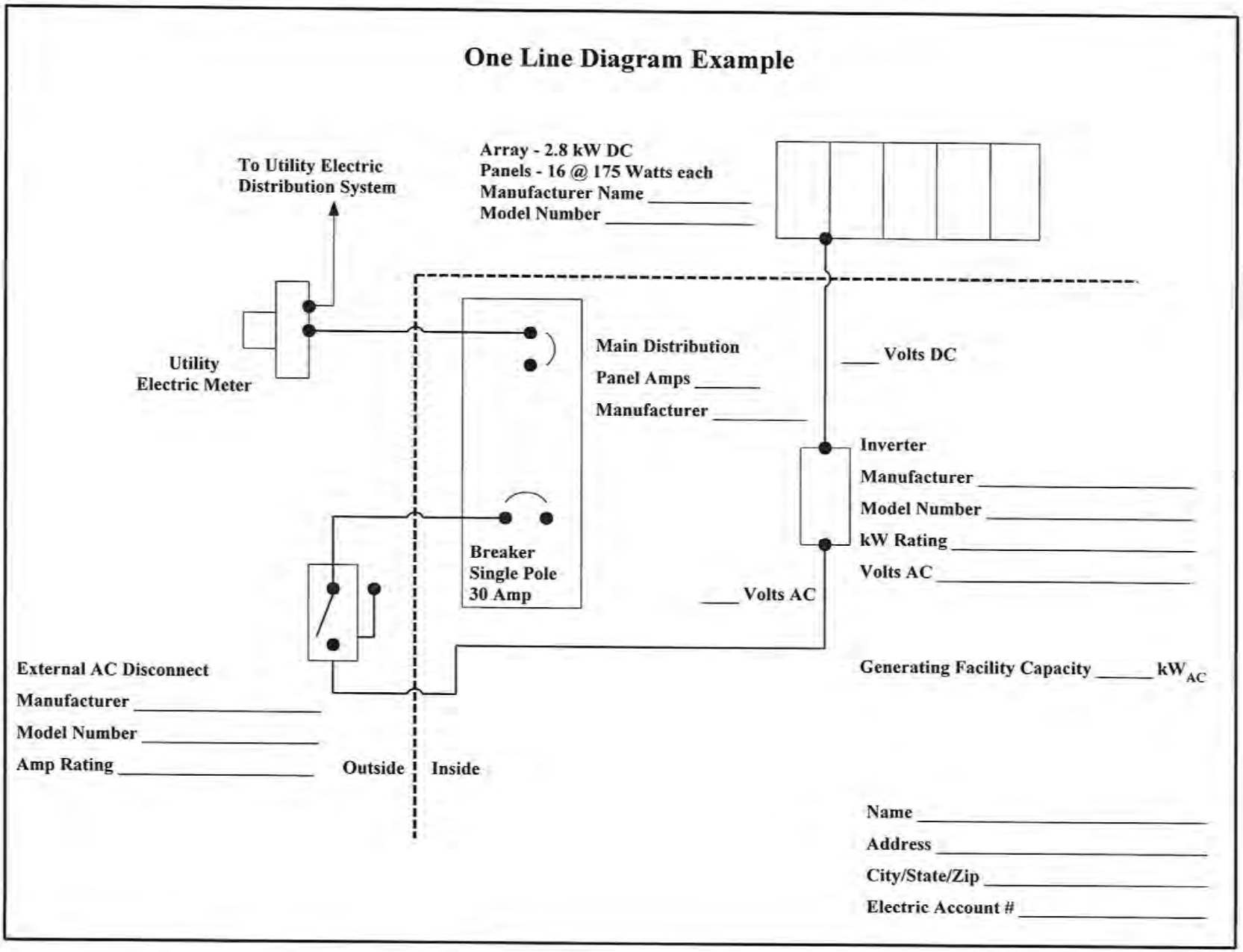
Contingent Approval to Interconnect the Generation Facility

Interconnection of the generation facility is approved contingent upon customer compliance with all terms and conditions of the electric utility's Interconnection Standards and upon return of the Certificate of Completion prior to commencement of commercial operation of said generation facility.

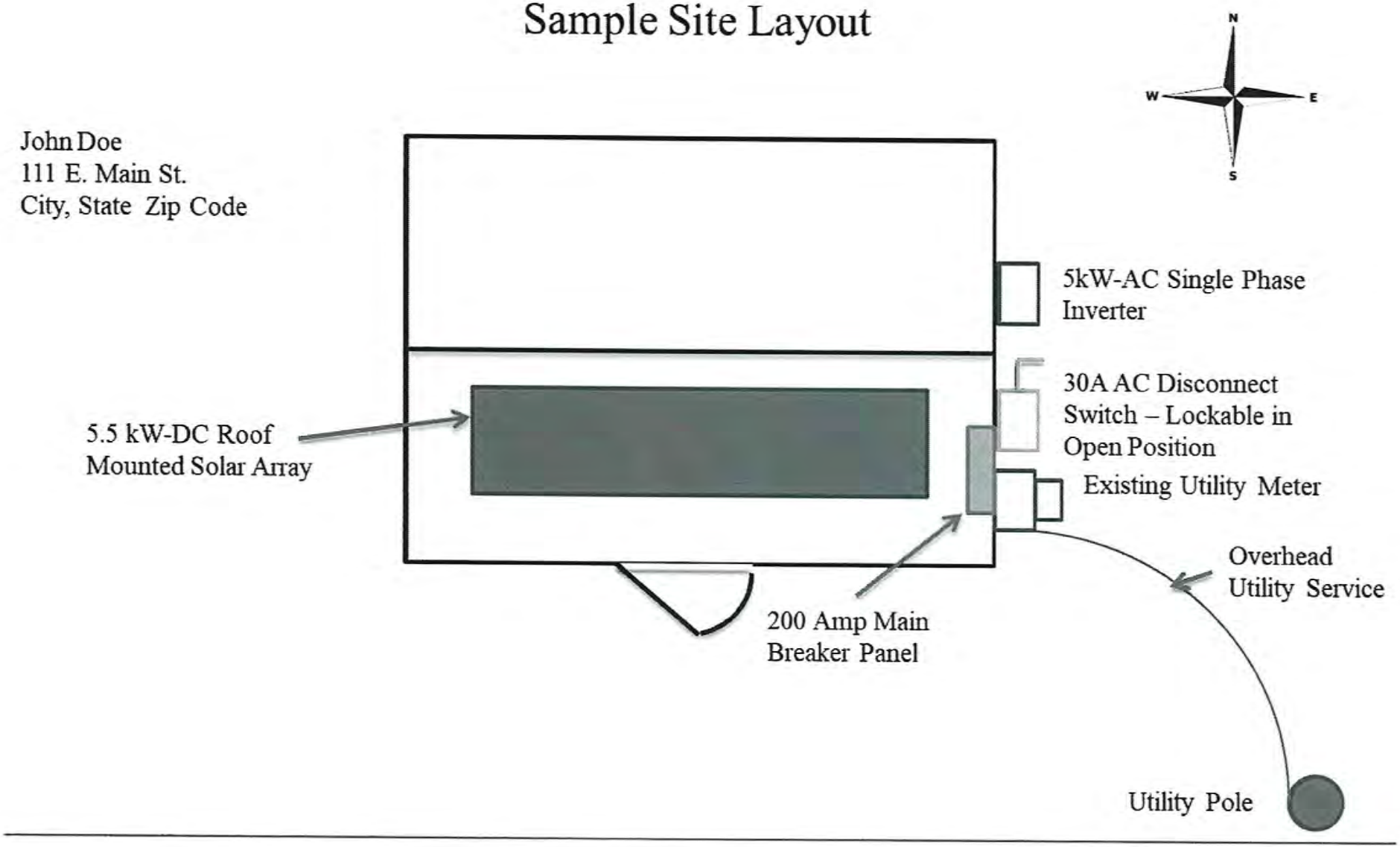
Signature: _____ Title: _____

Date: _____ Application Number: _____

One Line Diagram Example



Sample Site Layout



Application No. _____

City of Haven, Kansas
Customer-Owned Renewable Electric Generation Facility 25 kW_{AC} or Less for Residential Service and 200 kW_{AC} or Less for Commercial Service

This Agreement, ("**agreement**") is entered into by and between the City of Haven, Kansas **("utility")** and _____, ("**customer**"). The customer electric account subject to this agreement is account number _____. Customer and utility are referenced in this agreement collectively as "**parties**" and individually as "**party**."

Recitals

WHEREAS, the utility owns and operates an electric distribution system serving the City of Haven, Kansas, and surrounding area;

WHEREAS, customer owns or desires to install, own and operate a utility-approved renewable, electric generation facility with a rated output of 25 kW_{AC} or less for Residential Service and 200 kW_{AC} or less for Commercial Service, interconnected with and operating in parallel with the utility electric distribution system;

Agreement

NOW, THEREFORE, in consideration of the covenants and promises herein, the parties mutually agree as follows:

1. **SCOPE OF AGREEMENT:**
   This agreement governs the terms and conditions under which the generation facility will interconnect with and operate in parallel with the electric distribution system.

2. **DEFINITIONS:**
   The definitions used in this Interconnection Agreement are those found in Part 1, Section 2 of the utility Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 25 kW_{AC} or Less for Residential Service and 200 kW_{AC} or Less for Commercial Service.

3. **PARALLEL OPERATION:**

Customer shall not interconnect or commence parallel operation of the generation facility until written approval to energize the generation facility under Part 6 of these Interconnection Standards has been provided by the utility. The utility shall have the right to have representatives present during initial testing of the generation facility and its protective apparatus.

4. **INTERCONNECTION COSTS:**

The utility has estimated the costs, including overheads, for necessary system upgrades to its electric distribution system and customer service connection, if any, and has provided a detailed itemization of such costs in the attached description of estimated system upgrade costs. Prior to commencement of system upgrades that are required to allow interconnection of the customer-owned generation facility, customer shall deposit with the utility an amount equal to the estimated cost of said System Upgrades. If the actual costs of said system upgrades are less than the amount deposited by the customer, the utility shall refund the difference to the customer within 60 days of completing said system upgrades. If the actual costs of said system upgrades exceed the amount deposited by the customer, the utility shall bill the customer for the difference. Customer agrees to pay the invoiced amount within 30 days of the invoice date. The utility will supply, own, and maintain all necessary meters and associated equipment utilized for billing. In addition, and for the purposes of monitoring customer generation and load, the utility may install at its expense, load research metering. The customer shall supply, at no expense to the utility, a suitable location for meters and associated equipment used for billing and for load research. All costs related to installation of said meter or meters shall be borne by the customer.

5. **INTERRUPTION OR REDUCTION OF DELIVERIES:**

The utility may require the customer to interrupt or reduce energy deliveries when the utility determines, in its sole discretion, that curtailment, interruption, or reduction is necessary because of maintenance, safety, emergency, Force Majeure, or compliance with prudent utility practice. No compensation or credit will be provided to the customer by the utility for such interruptions or reductions in energy deliveries.

6. **ADVERSE OPERATING EFFECTS:**

The interconnection of the generation facility shall not reduce the reliability and quality of utility electric distribution system service. This includes but is not limited to power quality issues such as harmonic distortion, voltage flicker, and frequency deviations. The utility shall notify the customer as soon as practicable if, based on prudent utility practice, operation of the generation facility causes disruption in or deterioration of service to other utility electric customers or if operating the generation facility could damage the electric distribution system. If, after notice, the customer fails to timely remedy the adverse operating effect, the utility may disconnect the generation facility with no further notice.

7. **COMPLIANCE WITH INTERCONNECTION STANDARDS REQUIREMENTS:**

Customer has read the utility Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 25 kW_{AC} or Less for Residential Service and 200 kW_{AC} or Less for Commercial Service, as adopted by the utility, and agrees to comply with all requirements included therein, including, but not limited to, all insurance and indemnity provisions identified in paragraphs 14 and 15 therein.

8. **ACCESS TO PREMISES:**

The utility shall have access to the customer premises or property and to the external AC generator disconnect switch as permitted in its policies, rules and regulations and Interconnection Standards.

9. **GOVERNING LAW:**

This agreement shall be interpreted and governed under the laws of the State of Kansas, the Ordinances of the City of Haven, and **[Utility Electric Rates and Regulations]**.

10. **DOCUMENTS:**

This agreement incorporates all other provisions and related documents of these Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 25 kW_{AC} or Less for Residential Service and 200 kW_{AC} or Less for Commercial Service as the same may be amended from time to time.

11. **NOTICES:**

All written notices shall be directed as follows:

Customer:	**City of Haven:**
Name: _____	Name: _____
Address: _____	Title: _____
City/State/Zip: _____	City/State/Zip: _____

12. **TERM OF AGREEMENT:**

This agreement shall be in effect when executed by the customer and the City of Haven and shall remain in effect thereafter month to month unless terminated in accordance with the provisions of Section 16 of "Part 2 Technical Requirements".

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this agreement to be executed by their duly authorized representatives. This agreement is effective as of the last date set forth below.

Customer:	**City of Haven:**
_____	_____
Signature	Signature
_____	_____
Print Name	Print Name and Title
_____	_____
Date	Date

PART 5. CERTIFICATE OF COMPLETION

Application No. _____

City of Haven
Customer-Owned Renewable Electric Generation Facility

Is the generation facility installed, tested and ready for operation? Yes_____ No _____

Customer: _____ Utility Account Number: _____

Address: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Location of the generation facility (if different from above): _____

Has the generation facility been installed in accordance with all applicable building codes, permits and ordinances (if applicable)? Yes_____ No _____

Electrician/Service Company:

Name: _____

Address: _____ City/State/Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

License number: _____

Date electric Utility approved Interconnection Application: _____

Application Number: _____

Inspection:

The generation facility has been installed and inspected in compliance with all applicable electrical codes.

A copy of the signed electrical inspection form is attached. ❑Yes ❑No *(If inspection form is not attached)*

_____ _____

Signature of Inspector: Date:

_____

Printed name of Inspector

Insurance:

The generation facility is covered with an insurance policy as described in the technical requirements, 14 and 15.

A copy of proof of insurance is attached. ❑Yes ❑No

PART 6. APPROVAL TO ENERGIZE GENERATION FACILITY

Application No. _____

City of Haven

Customer-Owned Renewable Electric Generation Facility

The City of Haven, having entered into an Interconnection Agreement for the Generation Facility described in the Application noted by number above and having received a Certificate of Completion with proper documentation of the electrical inspection hereby authorizes the generation facility to be energized:

Electric Utility Signature: _____

Title: _____ Date: _____

PART 7. RENEWABLE ENERGY PARALLEL GENERATION APPLICATION FOR SERVICE

Application No. _____

City of Haven

Customer Name: _____

Service Address: _____

City: _____ State: _____ Zip: _____

Utility Account Number: _____

Contact Person: _____

Telephone Number: _____

Address: _____

City: _____ State: _____ Zip: _____

E-Mail Address: _____

This application is for electric service under the City of Haven ("utility") Renewable Parallel Generation – Residential Service rate schedule or Renewable Parallel Generation – Commercial Service for the above customer ("customer"). The customer generation facility is a renewable energy generation facility as defined in utility Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 25 kW_{AC} or Less for Residential Service and 200 kW_{AC} or Less for Commercial Service.

The generation facility qualifies for the Renewable Parallel Generation – Residential Service rate or Parallel Generation – Commercial Service rate schedule as it meets the definitions and requirements of said Interconnection Standards. Total rated output of the generation facility under the Renewable Parallel Generation – Residential Service rate schedule, is _____ kW_{AC}. Customer acknowledges that he/she has read the rate schedule and agrees to all terms and conditions contained therein, including without limitation those specified in the Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 25 kW_{AC} or Less for Residential Service and 200 kW_{AC} or Less for Commercial Service. Specifically, the customer understands and agrees that an electric meter or meters capable of registering the flow of electricity in each direction must be in service at the facility. In addition, and for the purposes of monitoring customer generation and load, the utility may install at its expense, load research metering. The customer shall supply, at no expense to the utility, a suitable location for meters and associated equipment used for billing and for load research. All costs related to installation of said meter or meters shall be borne by the customer. Customer acknowledges and agrees that operation of said generation facility is intended primarily to offset part of customer's electricity requirements, and that the generation facility is not sized to exceed the annual electric energy requirements of the customer's premises. Customer

further acknowledges and agrees that the utility shall not provide credit for surplus energy generated by the generation facility under the Renewable Parallel Generation – Residential Service rate schedule or Renewable Parallel Generation – Commercial Service rate schedule that exceeds the customer's annual energy consumption starting January 1 and ending December 31.

Requested By:

_____

Customer Name

_____

Authorized Signature

_____

Date

Approved By:

_____

Name

_____

Utility Signature

_____

Date

Rejected:

_____

Name

_____

Utility Signature

_____

Reason for Rejection

_____

Date

Ordinance No.

AN ORDINANCE ADOPTING INTERCONNECTION STANDARDS FOR INSTALLATION AND PARALLEL OPERATION OF CUSTOMER-OWNED RENEWABLE ELECTRIC GENERATION FACILITIES FOR RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL CUSTOMERS.

WITNESSETH:

WHEREAS, said Ordinance approved standards and procedures necessary for the health, safety, and welfare of the citizens and city employees for the interconnection of such capacity with the City's electrical system, and

WHEREAS, the governing body finds that new standards and procedures should be adopted;

NOW, THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF HAVEN, KANSAS, AS FOLLOWS:

SECTION 1: There is hereby adopted Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities Dated February 5th, 2024.

SECTION 2: The adopted Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities Dated February 5th, 2024, may be amended and modified in whole or in part by the Governing Body of the City of Haven, Kansas, as deemed appropriate by the Governing Body.

SECTION 3: This Ordinance repeals any other preceding Ordinances.

SECTION 4: This Ordinance shall be effective after it is published in the official city newspaper.

PASSED and **APPROVED** by the Governing Body of the City of Haven, Kansas, on the 5th day.

of February, 2024.

_____

Adam Wright, Mayor

ATTEST:

_____

Josephine Gonzalez, City Clerk

RESOLUTION NO.

AN AMENDMENT TO RESOLUTION NO. 374 ADDING SECTION 7 TO INCLUDE NEW RATES, CHARGES, AND REQUIREMENTS FOR CUSTOMER OWNED RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL RENEWABLE ENERGY GENERATION FACILITIES AND REPEALING ORDINANCE NO. 637

WITNESSETH:

WHEREAS, said Ordinance approved to included updated rates, charges, and requirements for customer owned residential, commercial, and industrial renewable energy generation, and

NOW, THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF HAVEN, KANSAS, AS FOLLOWS:

Section 7. Interconnection Standards for Customer-Owned Renewable Electric Generation Facilities and Distributed Generation.

(a) There is hereby adopted Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities dated February 5th, 2024.

(b) The adopted Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities dated February 5th, 2024, may be amended, and modified in whole or in part by the Governing Body of the City of Haven, Kansas, as deemed appropriate by the Governing Body.

(c) Distributed generation will be offered on first come first served basis to all customers. In no case shall the City be obligated to purchase an amount greater than four percent (4%) of the utility's peak power requirement for the previous year.

(d) Distributed Generation Customers:

Residential Customers: Any residential customer of the City's electric utility that installs an energy producing system or renewable generator with a capacity of 25 kilowatts or less must first successfully complete and have approved the City of Haven's "Interconnection Standards for Installation and Distribution Operation of Customers-Owned Renewable Electric Generation Facilities."
Commercial Customers: Any commercial customer who wish to install an energy producing system or renewable generator with a capacity of 200 kilowatts or less must first successfully complete and have approved the City of Haven's "Interconnection Standards for Installation and Distribution Operations of Customer-Owned Renewable Electric Generation Facilities."

All distribution generation contracts shall comply with the requirements of K.S.A. 66-1,184 et seq., as amended. The cost of any equipment required to be installed for such attachment or metering and installation shall be the sole responsibility of the customer and such equipment shall not cause damage to the City's electric system or equipment or present an undue hazard to City personnel.

(e) Interconnection Application Fee: Residential and commercial customers are subject to a non-refundable processing fee of $150.00 and must accompany a completed Interconnection Application.

(f) Net Monthly Rate:

Base Rate: Determined by customer class described in Section 1. above.

Energy Rate: Determined by customer class described in Sections 2, 3, 4, and 5 above.

Appropriately sized generators (as defined in K.S.A. 66-1,184) owned by customer-generators will at times either generate more electricity than the customer can consume on premises or only meet a portion or none of the customers electricity needs. During periods of time when the generator owned by the customer-generator cannot provide all the customer's electricity needs, the electricity provided by the electric utility will be billed at the same rate as that established for similar rate class customers that do not own generation. During periods of time when the generator owned by the customer-generator produces electricity in excess of its own needs, and such excess electricity is supplied back to the electric utility, the electric utility shall compensate the customer for this excess energy at a rate that is 150% of the utility's monthly system average cost of energy per kilowatt hour, per K.S.A. 66-1,184.

The City may, at its discretion, either pay the customer for excess energy at aforementioned rate or calculate such payment and deduct from the customer's bill as a credit.

PASSED and **APPROVED** by the Governing Body of the City of Haven, Kansas, on the 5th day of February 2024.

_____
Adam Wright, Mayor

ATTEST:

_____
Josephine Gonzalez, City Clerk

City of Haven

QUOTE

120 S Kansas Ave. Haven, KS 67543

Chad Swartz

c.swartz@havencityhall.org
O:620-465-3618
C:620-931-0881

BILL TO

Shauna Schoepf-Pearce
Shep Chevrolet
106 E 2nd, Haven, KS 67543
Shauna.shep@shepchevrolet.com

O:800-468-350
C:316-210-8023

Quote No: #INV00001
Date: 11/29/2023

DESCRIPTION	QTY	UNIT PRICE	TOTAL
25 KVA pole mount transformer (14-16 weeks)	3	3070.00	9210.00
AVEC set and tie in 40' class 3 pole	1	4268.88	4268.88
Materials	1	1957.70	1957.70
COH Equipment	8	100.00	800.00
COH Labor	8	105.65	845.20
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00

SUBTOTAL	17081.78
DISCOUNT	0.00
SUBTOTAL LESS DISCOUNT	17081.78
TAX RATE	7.50%
TOTAL TAX	1281.13
SHIPPING/HANDLING	0.00
Quote Total	$ 18,362.91

Thank you for your business!

The Ark Valley Electric Cooperative Association, Inc.

Street Address: 10 East 10 Street, South Hutchinson, KS 67505
Mailing Address: P. O. Box 1246, Hutchinson, KS 67504-1246
Phone: (620) 662-6661
Fax: (620) 728-5550

Remittance Invoice DATE: 11/28/2023

Estimate City of Haven-Haven Charger pole set

Map location: Shep Chevrolet
106 E. 2nd
Haven KS 67543

Bill to: Attn; Chad Swartz
City of Haven KS
PO Box 356
Haven, KS 67543

Job Scope:

AVEC:
Set and tie in a 40ft class 3 pole with flat framing and ground rod at 37.899128, -97.781963

Haven:
Hydrovac and provide fill dirt if needed.

TOTAL COST **$4,268.88**

Josephine Gonzalez

From: Adam Wright
Sent: Monday, January 22, 2024 2:02 PM
To: Chad Swartz
Cc: Josephine Gonzalez
Subject: Re: Shep Chevrolet EV Charger

Chad,
I approve the ordering of the Electrical items below for the EV upgrade for Sheps. I have shared the information on the approval to the council due to the 16-week lead time.

Thank you
Adam Wright
Phone 620 474-1629
Email a.wright@havencityhall.org

From: Adam Wright <a.wright@havencityhall.org>
Sent: Monday, January 22, 2024 1:58:04 PM
To: Austin Borden <austindrewborden@yahoo.com>; Ciara Powers <hebertciara0@gmail.com>; cbscott63@aol.com <cbscott63@aol.com>; sherri.schneider@gmail.com <sherri.schneider@gmail.com>; nsander8910@gmail.com <nsander8910@gmail.com>
Cc: Josephine Gonzalez <j.gonzalez@havencityhall.org>; Chad Swartz <c.swartz@havencityhall.org>
Subject: Fwd: Shep Chevrolet EV Charger

Good Afternoon council.
Below you will see a request from the Public Works Director asking me to approve the amount to purchase the Electrical items needed for the EV upgrade at Sheps. I spoke with Chad and there is a 16-week lead time on the transformers.. I also spoke to Shauna from Sheps and they will have equipment in before that time. I have given Chad the Approval to go ahead and get these items ordered. I have asked Shauna to give an update about the requested upgrade and how it will benefit the city to partner with them on this project. If you have any questions, please reach out to me or Chad.

Thank you
Adam Wright
Phone 620 474-1629
Email a.wright@havencityhall.org

From: Chad Swartz <c.swartz@havencityhall.org>
Sent: Thursday, January 18, 2024 4:30:57 PM
To: Adam Wright <a.wright@havencityhall.org>
Cc: Josephine Gonzalez <j.gonzalez@havencityhall.org>
Subject: Shep Chevrolet EV Charger

Adam

Shauna has given me the go ahead to order the material needed for the EV charger at Shep's. I explained to her that if the council does not agree to split the cost that they would be responsible for the entire sum. Even though

this money will be reimbursed to the city I still need approval to spend the funds to order the material. Are you able to approve the following so I can get the material ordered or does this need to go in front of the Council?

Transformers - $9,210.00
Materials - $1,957.70

Chad Swartz
Director of Public Works
211 S. Reno
Haven, KS 67543
T: 620.465.3618
C: 620.931.0881
c.swartz@havencityhall.org
www.havencityhall.org

cleanrite
Serving Wichita and Surrounding Areas

1924 E Blake Wichita, KS 67211
www.cleanritepressurewashing.com

January 23, 2024

PROPOSAL

City of Haven
Attn: Chad Swartz
120 S. Kansas Ave.
PO Box 356
Haven, KS 67543

DESCRIPTION	AMOUNT
Quarterly street sweeping of the City of Haven, Haven, KS 67543 (per quarter)	$4,095.00
Total	$16,380

If you have any questions concerning this proposal

Please contact Jason Leger (316) 665-0388

jason@cleanritepressurewashing.com

THANK YOU

CRONUS, LLC
PO Box 185 - 139 S KANSAS AVE
HAVEN, KS 67543-0185
(316) 214-1473 • CronusPros@gmail.com

January 26, 2024

Chad Swartz, Public Works Director
City of Haven
PO BOX 356 – 211 S Reno
HAVEN, KS 67543
C.Swartz@havencityhall.org

Project; Remove existing pile of material located North of maintenance shed

Scope of Work: Load, haul and dispose of mixed material.

Includes;

- Labor & Equipment.
- Loading and hauling mixed pile of material.
- Disposal of mixed material
- Leave site level

Excludes;

- Seeding or erosion control
- Bonding or Bid Security
- Permits or special licensing.
- Traffic control or barricades (will use safety cones and temp fencing if required)
- Any other items not specifically listed in the scope of work.
- Sales Tax -Project Exemption Certificate is not required on this project.

We propose to complete this project and supply the labor, materials, and equipment, for the following price.

- **Total Base project = $ 3,350.00**
- **Three Thousand, Three Hundred-Fifty & NO/100 Dollars.**

Legal limits of General Liability and Workmen Compensation Insurance is included. Any additional insurance requirements such as Waiver of Subrogation, Additional Insured, or specific Insurance Certificate wording may be available at an additional cost.

If approved, please sign and return.

Dean Chesnut

Dean Chesnut
Cronus LLC

_____

Accepted by _____