

**TOWN OF MEAD, COLORADO  
RESOLUTION NO. 56-R-2023**

**A RESOLUTION OF THE TOWN OF MEAD, COLORADO,  
AUTHORIZING THE ACQUISITION OF A 350KW GENERATOR FROM SMITH POWER  
PRODUCTS, INC. TO BE INSTALLED AT THE TOWN'S WASTEWATER TREATMENT  
FACILITY**

**WHEREAS**, the Town is statutorily authorized to procure and maintain equipment; and

**WHEREAS**, the existing backup generator at the Town's wastewater treatment facility ("WWTF") has developed a significant fuel leak and the estimated repair costs exceed \$32,000; and

**WHEREAS**, the Town's consulting engineer (JVA) is recommending replacement of the existing generator; and

**WHEREAS**, the Town obtained pricing for a new backup generator for the WWTF from four (4) vendors; and

**WHEREAS**, Town Staff and JVA are recommending that the Board of Trustees authorize the acquisition of a Rolls Royce 350KW Generator (the "Generator"), as more specifically described in the *JVA Generator Repair / Replacement Memorandum* dated July 19, 2023 (the "JVA Memo"); and

**WHEREAS**, a copy of the JVA Memo is attached to this Resolution as **Exhibit 1** (the "JVA Memo"); and

**WHEREAS**, the JVA Memo includes a quote from Smith Power Products, Inc. ("SPP") dated May 30, 2023 for the Generator; and

**WHEREAS**, the total purchase price for the Generator is One Hundred Thousand Five Hundred Seventy-Three Dollars (\$100,573.00) ("Purchase Price"); and

**WHEREAS**, the JVA Memo recommends that the Town acquire the Generator from SPP; and

**WHEREAS**, the Board desires to authorize the Town Manager to effectuate acquisition of the Generator from SPP for an amount not to exceed the Purchase Price.

**NOW THEREFORE, BE IT RESOLVED** by the Board of Trustees of the Town of Mead, Weld County, Colorado, that:

**Section 1.** The Board of Trustees hereby authorizes the Town Manager to effectuate the acquisition of the Generator from SPP for a price not to exceed the Purchase Price, which acquisition will be effectuated by purchase order or purchase and sale agreement. The Town Manager shall be authorized to execute the purchase order or purchase and sale agreement, following review and approval of the same by the Town Attorney.

**Section 2. Effective Date.** This Resolution shall be effective immediately upon adoption.

**Section 3. Repealer.** All resolutions, or parts thereof, in conflict with this Resolution are hereby repealed, provided that such repealer shall not repeal the repealer clauses of such resolution nor

revive any resolution thereby.

**Section 4. Certification.** The Town Clerk shall certify to the passage of this Resolution and make not less than one copy of the adopted resolution available for inspection by the public during regular business hours.

**INTRODUCED, READ, PASSED, AND ADOPTED THIS 31<sup>ST</sup> DAY OF JULY 2023.**

**ATTEST:**

By:   
Mary E. Strutt, Town Clerk



**TOWN OF MEAD:**

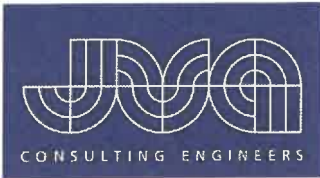
By:   
Colleen G. Whitlow, Mayor

**Exhibit 1**

*JVA Generator Repair / Replacement Memorandum*  
(dated July 19, 2023 – 15 pages)\*\*

\*\* Note: include SPP quote dated May 30, 2023

[Attached.]



www.jvajva.com

Boulder

1319 Spruce Street  
Boulder, CO 80302  
303.444.1951

Fort Collins

213 Linden Street  
Suite 200  
Fort Collins, CO 80524  
970.225.9099

Winter Park

PO Box 1860  
47 Cooper Creek Way  
Suite 328  
Winter Park, CO 80482  
970.722.7677

Glenwood Springs

817 Colorado Avenue  
Suite 301  
Glenwood Springs, CO  
81601  
970.404.3100

Denver

1512 Larimer Street  
Suite 710  
Denver, CO 80202  
303.444.1951

# M E M O

TO: Bo Hurtado, Utilities Operations Manager      DATE: July 19, 2023  
 FIRM: Town of Mead      JOB NO. 1970.1c  
 ADDRESS: 441 Third Street      PROJECT: Town of Mead WWTF  
Mead, CO 80542      SUBJECT: Generator Repair / Replacement

Dear Bo,

JVA and REC assisted the Town of Mead (Town) to obtain quotes for repair or replacement of the Wastewater Treatment Facility (WWTF) Back-up Generator (Generator). A few months ago, the Generator developed a significant fuel leak and the cost to repair the leak (by Smith Power) is over \$32,000 as indicated below. The Generator is approximately 15 years old and over the past three years there have been costly repairs to the Generator amounting to a total of over \$38,000. REC has done a very good coordinating with Smith Power for annual maintenance and repairs to extend the life of the Generator. It is critical that the Generator is reliable during power outage / emergency situations and maintains the treatment processes to achieve compliant effluent in accordance with the WWTF Colorado Discharge Permit System.

JVA and REC solicited quotes for the repair and replacement of the Generator. There were four quotes received as summarized below. Attached to this memo are the quotes received.

Company	Repair or Replacement	Cost	Notes
InPwr, Inc	Replacement	\$188,225	New 350 KW Cummins; Lead time is 52 weeks from PO; Includes removal, installation, and testing
InPwr, Inc	Replacement	\$165,558	New 300 KW Cummins; Available now with PO; Includes removal, installation, and testing
Smith Power Products, Inc	Replacement	\$100,573	New 350 KW Rolls-Royce Gen Set; Available now with PO; Includes removal, installation, and testing
Smith Power Products, Inc	Repair	\$32,947	Reduce by \$7,740 if no temporary Gen Set is used during the repair
Generator Source	Repair	Did not Quote	REC called 4 times and finally stated that they could not get a tech out – too busy

7-10-23



Attn: John McGee

**RE: New Cummings Generators**

InPwr, Inc. is pleased to provide the requested proposal to provide Labor and Material

**Our scope of work includes the following:**

- Remove old generator from pad (Disposal by others)
- Use existing transfer switch, Conduit, and wire.
- Install new generator and perform 4hr load bank test!

**EXCLUSIONS:**

- Any Devices or wiring not listed above.
- Sales Tax

**CLARIFICATIONS AND CONDITIONS:**

- All work to be completed during normal business hours.

New 350 Cummings (Lead time 52 weeks) \$ 188,225.00

New 300 Cummings (Available now COD) \$ 165,558.00

✓ This proposal is valid for a period of 7 days

Thank you again for the opportunity to present this proposal and we look forward to the successful completion of this project. Please contact me directly if you should have any questions regarding this proposal or our scope of work.

Sincerely,  
Tim Smith  
Preconstruction  
InPwr, Inc  
Cell 317-800-0485

**Corporate O**  
10640 Dem  
Suite  
Indianapolis, IN 46

**Denver O**  
4880 Havar  
Suite  
Denver, CO 80

**Los Angeles C**  
2530 Corporate F  
Suite /  
Monterey Park, CA 91

**877.884.:**  
**InPwrInc**



A Rolls-Royce solution



Date: May 30, 2023

Reference: **Town of Mead - Stock DS350 - UI 30645**

We are pleased to offer the following quote for the above project:

- Colorado has adopted NEC 2020. Please see notes 7 & 8 below for clarification/exception.
- Proposal is priced for delivery in 2023. Pricing is based on 30 day quote expiration.
- Due to complete 6/21/2023.

Mike Murphy contacted Smith and they confirmed that the Generator will be rated for 480 VAC

QUANTITY	EQUIPMENT DESCRIPTION	PRICE EACH	TOTAL PRICE
1	Rolls-Royce 350kW Generator Set M/N DS350 Diesel Fuel Derate: 350kW @ 5280 Feet, 104°F 120/240 Volt, 3 Phase, 60 HZ, 1800 RPM Genset Dry Assembly Weight: 14,674 lbs.	Included	Included
1	Freight, Delivery to Site, Initial Fuel Tank Fill and Factory Technician Start-Up w/ Site Load Bank Test	Included	Included
		<b>TOTAL (less tax)</b>	<b>\$100,573.00</b>

**Equipment Description:**

**Generator:**

Application	Emergency Standby (3D)
Frequency	60 Hz
Generator Voltage	240 V ← Mike Murphy contacted Smith and they confirmed that the Generator will be rated for 480 VAC
Phase	3 Phase
Unit Specification	UL2200
IBC Seismic Certification	Without IBC
OSHPD Certification	Without OSHPD
Engine Model	JD6135HFG84 (24volts)
Exhaust Emissions (EPA)	EPA Stationary EMERG T3 (40CFR60)
Radiator Design Temperature	50°C
Temp Rise	130°
Power Output	350 kW
Full Load Amps	1052
Generator Frame and Wire Qty	433/6216 (12 Wire)
Generator Wire Configuration	Delta
OPU/HSD	Level 3 - Maximum Sound Attenuation
Fuel Tank	With Fuel Tank
Control panel	With MGC Controller
Circuit Breaker Options	Single Circuit Breaker
Breaker Wire Color Scheme	Standard Breaker Wire Color Scheme
Paralleling	No Parallel Operation
Acceptance testing	Factory acceptance
Publications	Standard Publications (English)

Country of Operation USA / Canada  
Emission cert. authority 18 US EPA Agency

## 1 SYSTEM CONFIGURATION

### 1.1 System Description

System Description: DG06RJ225A1N

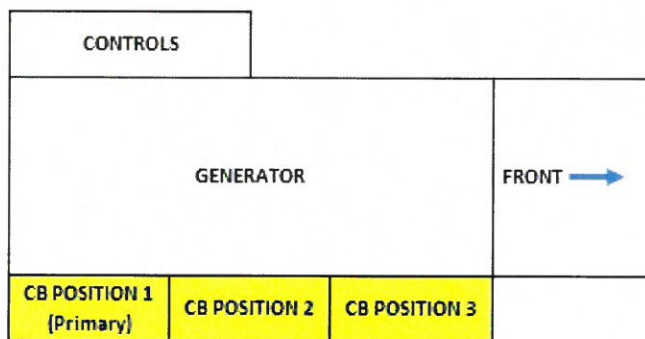
### 1.2 Cooling Package

50 Deg C Cooling System

- Closed loop, liquid cooled, with radiator factory mounted on engine-generator set mounting frame and integral engine-driven coolant pump

### 1.3 Circuit Breaker

Circuit Breaker Mounted Right Side



Top View      Right Side      CB Position 1/CB Position 2/CB Position 3  
left Side      Controls

\* For technical data refer to the circuit breaker enclosure data sheets located on the Business Portal

Service Entrance Rated

#### Circuit Breaker Position 1:

1200 AMP 3P 100% LSI CB SQ-D P-FRAME PGL36120CU33A

#### Circuit Breaker #1 Accessories:

Auxillary Contact (OF1)

LSI Breaker Trip:

- LSI breakers provide protection from long time overload, short time overload and instantaneous short circuit events. Specific overload current values and time delays vary with breaker type and trip unit.

Standard Breaker Wire Scheme:

- Phase 1 (A) is Black label "L1"
- Phase 2 (B) is Orange label "L2"
- Phase 3 (C) is Blue label "L3"
- Neutral is White label "NEU"

### 1.4 Starting Aids



#### Starting Battery (Group 31), Cables & Battery Rack

- Battery Rack mounted and installed
- Battery Group 31 Starting Battery filled with acid
- Qty 2

#### Battery Charger: MicroGenius 2 10A

- 300W
- 10 Amp
- 24V
- NFPA 110
- M3-22-1210-E

#### Battery Charger Mounted & DC Wired

**\*Note\*** - This option will be factory-wired to the distribution panel (if selected)

#### Coolant Preheater

- -20 Deg F Coolant Preheater (240V 1PH - 4000W)
- Model: CL140210-200
- Qty 1

All coolant preheaters have the AC connection wired to the distribution panel (if distribution panel is selected on order) EXCEPT for 480V or 3 Phase water heaters.

### 1.5 Genset Enclosure

#### Level 3 Genset Enclosure

- Weatherproof enclosure constructed of heavy gauge steel or aluminum with fixed storm proof panels. Enclosure consists of a bolted and welded construction. Hinged, lockable double-door access on both sides of the enclosure. Includes UL 94 HF-1 compliant, 1.5" thick sound attenuated foam insulation installed where applicable.

#### Steel Enclosure Type

130mph Wind Rated Steel

Exhaust Scoop - Steel

Sound Attenuation Kit

Roof Foam Kit

Intake Louver (Steel)

Distribution Panel

- 125A 120/240VAC 1PH UL- Listed
- 3R Enclosure

Unit Includes One (1) Convenience Receptacle

Convenience Receptacle is mounted on the same side of the outlet box as the Control Panel/No Control Panel options.

**\*Note\*** - This option will be factory-wired to the distribution panel (if selected)

### 1.6 Vibration Isolation

SUA63015 Pad Isolators

- ¼ inch thick elastomeric pad in rectangular shape placed under the base frame at each of the pre-drilled isolator mounting holes

## 2 ENGINE CONFIGURATION

### 2.1 Engine System

Engine Model: JD 6135HFG84

Oil Drain



**Note Emission Compliance:**

The engines and/or systems, may only be certified to comply with the required country or region specific emission regulations. Where applicable, the engines and/or systems are only certified to those specific emission regulations/standards which are clearly stated in the respective RRPS/MTU defined technical specifications. It is the customer's sole responsibility to ensure that the export/import, installation and use of the engine and/or system complies with the applicable emissions regulations in the country or region where the engine and/or system will be used.

**2.2 Exhaust System**

Unit-Mounted Silencer 6"

- Silencer Model Number: JIJ0Z-06SB-1-18060014 (Qty 1)
- Silencer Model Number: TCSEPZ-06SB06PF-1-18060030 (Qty 1)

**2.3 FUEL SYSTEM**

Non-Extended Fuel Tank matches the genset base footprint

Tank Includes Spill Fill Containment (5 Gallon capacity)

24 HR 700 Gallon Non-Extended Sub Base Fuel Tank

Fuel Water Separator Standard (Single)

Fuel Water Separator

- Water Detection Sensor

**2.4 Air Intake System**

Air Filter (Standard)

MTU Air Filter

- SUA86885
- Qty 1

MTU Air Filter

- XG3012100019
- Qty 1

**3 GENERATOR CONFIGURATION**

**3.1 Generator Specification**

PMG with DVR 2400

- True RMS Sensing - One or Three Phase Connect. Senses 100 to 600 volts  $\pm 10\%$  at 50/60 Hertz. Patented circuitry senses true RMS voltage rather than average for superior load regulation.

Generator Model Number: 433PSL7516 (Base Model: 433PSL6216)

Measuring CT

**4 CONTROL PANEL CONFIGURATION**

**4.1 Control panel**

MGC- 2000 Series

- MTU Onsite Energy's Digital Genset Controller MGC-2000 series is a highly advanced integrated generator set control system. The MGC-2000 series is perfectly focused, combining rugged construction and microprocessor technology to offer a product that will hold up to almost any environment and flexible enough to meet your application's needs. This device provides generator set control, transfer switch control, metering, protection, and

programmable logic in a simple, easy-to-use, reliable, rugged, and cost effective package.

#### Modbus RTU

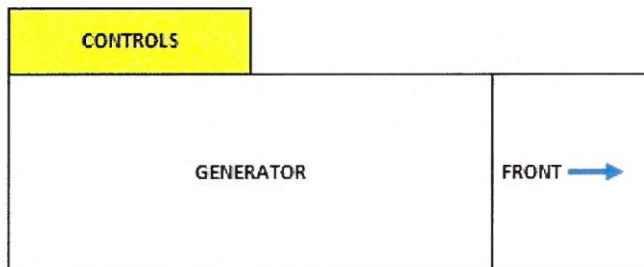
- ModBus RTU connects the MGC to Programmable Logic Controllers by means of communication transmission over serial lines (RS485).

#### Modem RS-232

- The MGC controller includes an external modem interface permitting an external modem to be connected to the controller via RS-232. A dial-out modem enables remote control, monitoring, and setting of the controller. When an alarm or pre-alarm condition occurs, the controller can dial up to four telephone numbers in sequence until an answer is received and the condition is annunciated.
  - Note: Only an external modem interface is provided. The external modem must be supplied by a third party

### Control Panel Mounting

Control Panel Mounted LH Side



Top View

Right Side

left Side

Controls

\* For technical data refer to the circuit breaker enclosure data sheets located on the Business Portal

#### (4) Relay Option

The 4-relay board includes (4) 10 amp form C relays customizable for user defined functionality requirements. Standard outputs are as follows:

1. Engine Run
2. Engine Run
3. Engine Fail
4. Minor Alarm

#### RDP-110 Annunciator Panel

- The RDP-110 is a remote annunciation device used in conjunction with the MGC family of digital generator set controllers to provide remote annunciation of the emergency standby generator system. This panel allows for two programmable alarms, two programmable pre-alarms, and is

compatible with NFPA 110. The MGC detects an alarm or pre-alarm condition and communicates via RS-485 to the RDP-110.

- Unit can be flush or surface mounted.

1 Remote Annunciator

No Parallel Operation

## **5 SERVICES AND AFTER SALES SUPPLY**

### **5.1 Warranty**

General Terms and Conditions of Sale, Warranty and After Sales Supply  
Our offer is based on the attached General Terms and Conditions of Sale for MTU Products (Rev. V-601-1803 MUS & MOE) and the Warranty will be the attached Standard Two (2) Year / 3,000 Hour Basic Standby (3D), Prime (3B), and Data Center Continuous Power (DCCP) (3F) Limited Warranty (SYS-M-GEN-S-026).

## **6 MISCELLANEOUS**

### **6.1 Painting**

Paint Color: RAL 7001 Grey

### **6.2 Documentation**

English

1 Flash Drive

### **6.3 Additional Options**

Mechanical Drawing: Genset Dimensional HSD

- XZG3000100136

Mechanical Drawing: Genset Dimensional HSD

- XZG3000100137

Mechanical Drawing: Fuel Tank

- XZG3000100138

Electrical Drawing: Engine

- XZG30K0000045

Electrical Drawing: Generator

- XZG30K0000048

Electrical Drawing: Breaker Options

- XZG30K0000032

Electrical Drawing: Customer Connections

- XZG30K0000033

Electrical Drawing: MGC 2020

- XZG3064400019

Electrical Drawing: Distribution Panel

- XZG30K0000034

Electrical Drawing: Options Sheet

- XZG30K0000037

Quantity (1) Service Filter Kit:

JD 6135 Service Filter Kit - Standard Air/Oil/Fuel/Single Fuel-Water Separator

- XG3012100019 MTU Standard Air Filter (Qty 1)
- XG3018300005 MTU Oil Filter (Qty 1)
- SUA94008 MTU Fuel Filter - Primary (Qty 1)
- SUA940091 MTU Fuel Filter - Secondary (Qty 1)
- SUA120166 MTU Fuel Filter - Fuel-Water Separator Filter (Qty 1)

**7 FUNCTIONAL TESTING**  
**7.1 Acceptance Testing**  
Standard Commercial Test

**8 SHIPPING CONDITIONS**  
**8.1 Freight**  
Ship unit with fluids installed

**ATS:**

**Notes**

Pricing includes generators, delivery, off-loading (\*see Note 4 exception for indoor installations), initial fuel fill (if applicable,) and two day start-up w/ NFPA 110 two hour (unless otherwise specified) load bank test. Prices valid for 30 days from above date  
FOB: Jobsite

- 1) *Smith Power Products will provide a free inspection of the generator set assembly and associated equipment provided by Smith Power Products at the six month interval from the official warranty start-up date. This inspection is limited to visual inspection of the system. With permission from owner, the unit may be ran to ensure correct operation. If any deficiencies arise during the inspection, the owner will be made aware and any required corrective action will be discussed before proceeding. Inspection will be performed during regular business hours. Inspections are limited to 100 mile round trip from Denver unless coordinated scheduling allows for further distances.*
- 2) *General wiring requirements include, but may not be limited to the following:*
  - *Six (6) #16's between generator controller connection box and each automatic transfer switch.*
  - *Two (2) #16's for 12/24VDC power and one pair of #18's (twisted, stranded, shielded pair) for communication between generator controller connection box and the generator remote annunciator panel.*
  - *Two (2) #16's for communication between generator low voltage connection box and to each generator remote emergency stop (EPO) location.*
  - *If a remote fuel fill station is included in project scope, twelve (12) #16's for communication between generator low voltage connection box and the generator remote fuel fill location.*
  - *If a NEC 700.3 (f) compliant MTS generator docking station is included in project scope, six (6) #16's for communication between generator controller, (1) 120VAC 20A circuit for temporary generator battery charger, (1) 120-240VAC 20-40A circuit for temporary generator block heater (size determined by requirements)*
  - *If there are to be requirements for contact annunciation at the fire alarm panel or elevator controller, those requirements should be confirmed "by others" and notify Smith Power of those requirements.*
  - *Most applications without a unit mounted load center require three (3) 120VAC 15-20A circuits for block heater, battery charger, battery heater, and a unit mounted 120VAC receptacle.*
  - *Use only twisted, stranded cable. **No solid core.***
  - *Specific requirements should be clarified through the submittal process.*
- 3) *Pricing does not include any applicable taxes & is subject to change without further notice. Pricing is valid for 90 days.*
- 4) *Cancellation after approval to order is 20% of project total.*
- 5) *Based on unknown site conditions. Scope of supply above includes fuel for testing procedures and crane services to set the generator on to the concrete pad. Should site access be limited, or obstacles prove difficult, additional costs may be required. Crane reach limited to a single pick and*

within 50' of the crane. Rigging/millwright services excluded for open generator installations inside of a building structure.

- 6) Please note the circuit breakers listed above are Square D type breaker installed at the factory standard. At this time, Smith Power Products, Inc. has been given no information concerning specific circuit breakers necessary for selective coordination. If applicable, additional pricing will be made available for specific breakers, either factory offered or non-factory standard, upon direction of Selective Coordination Study completed before or after bid date. Note, Selective Coordination Study not included in this proposal. Rolls-Royce standard-type breaker information available upon request for inclusion with proposal.
- 7) While Smith Power Products, Inc. is not NETA Certified, we test in accordance to NETA Standards.
- 8) Scope of supply above does not include anchor bolts (if required). The size, quantity, and type of anchors shall be determined by others.
- 9) Colorado has adopted NEC 2020 but not all jurisdictions have implemented. This includes NEC 2020 240.87 for Energy Reduction Maintenance Setting (ERMS) Switch requirements. This NEC requirement is for ERMS on circuit breakers 1200A+. As these changes slowly get implemented across various jurisdictions, Smith Power Products, Inc. takes exception to these requirements unless clearly marked on project one line diagrams as being required. The cost adder to provide is \$5,200.00.
- 10) 2020 NEC 700.10 requires monitoring of the gen set start circuit (not continuous monitoring as previously listed in the 2017 NEC). The code has evolved from "continuous monitoring" to "monitoring" since it was written. Our response to this Code requirement is a logical and practical combination of parts and procedures without introducing unnecessary single points of failure and complex maintenance procedures. The electrical contractor will run one additional gen set start wire per ATS (per Figure 12 or 13 – Start Circuit Monitoring.pdf). This simple and straight forward monitoring method carefully coupled with a monthly gen set testing program elegantly addresses the 2020 NEC 700.10 requirements.
- 11) Unless noted in the equipment description area above, this proposal does not include equipment to comply with the recently adopted changes adopted in 2017 to the National Electric Code, NEC 700.3 (F). For more information and pricing for a specific project, please consult with Smith Power Products, Inc.

NEW RULE: NEC 700.3 (F) - Temporary Source of Power for Maintenance or Repair of the Alternate Source of Power. If the emergency system relies on a single alternate source of power, which will be disabled for maintenance or repair, the emergency system shall include permanent switching means to connect a portable or temporary alternate source of power, which shall be available for the duration of the maintenance or repair. The permanent switching means to connect a portable or temporary alternate source of power shall comply with the following:

- a) Connection to the portable or temporary alternate source of power shall not require modification of the permanent system wiring.
- b) Transfer of power between the normal power source and the emergency power source shall be in accordance with 700.12
- c) The connection point for the portable or temporary alternate source shall be marked with the phase rotation and system bonding requirements.
- d) Mechanical or electrical interlocking shall prevent inadvertent interconnection of power sources.
- e) The switching means shall include a contact point that shall annunciate at a location remote from the generator or at another facility monitoring system to indicate that the permanent emergency source is disconnected from the emergency system.
- f) It shall be permissible to utilize manual switching to switch from the permanent source of power to the portable or temporary alternate source of power and to utilize the switching means for connection of a load bank.



- 12) *ATS Remote Annunciator: As standard practice, a separate remote annunciator for the automatic transfer switch(es) is not included. Per the IBC, Section 911, Fire Command Centers are required in high-rise buildings, usually over 75' in height. The Fire Command Center requires emergency and standby power status indicators to be located in the fire command center room. NFPA 110 requires annunciation for Level 1 emergency power systems with the annunciation being local (located on the equipment) and facility remote annunciation (located on-site but not in the room where the equipment is) or network remote annunciation (off-site.) The generator remote annunciator satisfies this requirement with the EPS Supplying Load indication. ATS Remote annunciator pricing is available on a per-project basis as an adder unless otherwise indicated.*
- 13) *Generator clearances from building structures, building openings, & property lines must be verified for legality. It is the intent of Smith Power Products to provide accurate and comprehensive information. While the specific details below are characteristic of Denver Fire Department requirements, many AHJ's have adopted similar requirements. The requirements of local AHJ's must always be evaluated and may align with those below from [DFD's Generator Install Guideline](#).*
- a) *NFPA 37 dictates that a generator set may not be installed less than 5 feet from a combustible building structure. A diesel generator may be installed no less than 3 feet from a non-combustible building structure providing the structure has either a, 1) minimum one-hour fire rating or, 2) non-combustible generator enclosure is provided.*
  - b) *Standard interpretation of NFPA 37 (22.4.1.1(a)) rules for diesel fuel tanks include a 5 feet set back from a property line for tanks 0-275 gallons, 10 feet for 276-750 gallons, and 15 feet for 751-12,000 gallons. This may be reduced to no less than 5 feet with approval from the AHJ with additional protective measures.*
  - c) *The diesel fuel tank normal vent line must be extended 12 feet above grade and not be terminated within 5 feet of any building opening or property line that can be built upon.*
    - i) *Should all or part of the generator enc/tank be installed under the footprint of an existing building structure, including indoor installations or outdoor installations where a weather protective enclosure is included, all three fuel tank vents must be extended to 12 feet above grade or higher and not be terminated within 5 feet of any building opening or property line that can be built upon.*
    - ii) *Smith Power Products, Inc. excludes providing or installing fuel tank vent extensions indicated by letter "i" above.*
  - d) *For installations where the generator assembly will be installed in close proximity to a building structure, or under the footprint of an existing building structure, including indoor installations or outdoor installations where a weather protective enclosure is included, the generator exhaust must be extended to at least 10 feet above grade or higher, 10 feet from any operable building opening (window/door/intake louver,) zero (0) feet from an inoperable opening/exhaust louver and not be terminated within 5 feet of property line that can be built upon. Should the AHJ require the exhaust to be extended, Smith Power Products, Inc. may be able to provide the extension within our scope at an additional cost. However, any extension that requires anchoring or support to a surrounding structure is excluded by Smith Power Products, Inc.. A qualified installer must be contracted to design and install.*
  - e) *The generator may not be installed closer than 10 feet from a utility transformer unless a 2 hour fire rated barrier installed between the generator and transformer. [Xcel Installation Standards](#)*
- 14) *Unless otherwise described, scope of supply above does not include any required stairs/platforms required to gain access/entry into the enclosure, nor to maintain any NEC clearances as it relates to CB handle height.*

#### **Indoor**

- 15) *Smith Power Products has included a remote fuel fill station & 95% overfill prevention valve in the base price of our proposal for this application. The remote fuel fill station will be located on the exterior of the building which will include spill containment and alarm panel for remote fuel level*

indication. Smith Power Products, Inc. believes that this will be a requirement for this project and should be included as part of the generator scope for uniformity of the system.

- a) The deduct to remove from Smith Power Products, Inc scope is **(\$3,250.00)**.
  - b) Please note that the required fuel piping between the generator and remote fill station must be provided by the installing Mechanical Contractor.
  - c) There is no supplemental fuel pump (if necessary) included with the remote fill station. If it is necessary, it is assumed the installing Mechanical/Piping Contractor will provide this.
  - d) The remote fuel fill station must be located 5 feet above grade and cannot be located within 5 feet of any operable building opening (door/window/intake louvers.)
- 16) Scope of supply above includes a UL-142 local freestanding day tank to be located inside the generator room. In indoor rooms that store diesel fuel, the gallon limitation is 660 gallons and the room must carry a minimum two-hour fire rating. Additional fuel capacity may be allowed with a higher fire rating and AHJ approval.
- a) Please note that the AHJ may require additional protective measures such as a UL-2085 fuel tank. (Please note that a UL-2085 fuel tank will be significantly more expensive than what is included w/ this scope of supply.)
  - b) All required fuel piping from a remote main/bulk fuel tank or remote fuel fill station to the generator day tank will need to be provided by the installing mechanical contractor.
  - c) All required vent piping, terminations, and miscellaneous appurtenances for connection to the generator day tank will need to be provided by the installing Mechanical contractor.
  - d) In a design where a main/bulk fuel tank is provided, it is assumed the provider of the main/bulk storage tank will also include a mounted fuel supply pump. The main/bulk mounted supply pump will need push fuel to the Smith Power Products, Inc. provided local day tank. In this design, a return fuel pump mounted at the local freestanding day tank may be required to push fuel back to the main/bulk storage tank.
- 17) Scope of supply above includes a UL-142 sub-base fuel storage tank which will be installed under the generator assembly. In indoor rooms that store diesel fuel, the gallon limitation is 660 gallons and the room must carry a minimum two-hour fire rating. Additional fuel capacity may be allowed with a higher fire rating and AHJ approval.
- a) Please note that the AHJ may require additional protective measures such as a UL-2085 fuel tank. (Please note that a UL-2085 fuel tank will be significantly more expensive than what is included w/ this scope of supply.)
  - b) All required fuel piping from a remote main/bulk fuel tank or remote fuel fill station to the generator sub-base fuel storage tank will need to be provided by the installing mechanical contractor.
  - c) All required vent piping, terminations, and miscellaneous appurtenances for connection to the generator sub-base fuel storage tank will need to be provided by the installing Mechanical contractor.
  - d) In a design where a main/bulk fuel tank is provided, it is assumed the provider of the main/bulk storage tank will also include a mounted fuel supply pump. The main/bulk mounted supply pump will need push fuel to the Smith Power Products, Inc. provided sub-base fuel storage tank. In this design, a return fuel pump mounted at the sub-base fuel storage tank may be required to push fuel back to the main/bulk storage tank.
- 18) Scope of supply above includes a UL-142 main/bulk fuel storage tank which will be installed in an adjacent room to the generator or external to the building. The tank is of UL-142 construction & will include a supply pump.
- a) Please note that the AHJ may require additional protective measures such as a UL-2085 fuel tank. (Please note that a UL-2085 fuel tank will be significantly more expensive than what is included w/ this scope of supply.)



- b) *All required fuel piping from a remote main/bulk fuel tank or remote fuel fill station to the generator sub-base fuel storage tank or local freestanding day tank will need to be provided by the installing mechanical contractor.*
  - c) *All required vent piping, terminations, and miscellaneous appurtenances for connection to the generator main/bulk fuel storage tank will need to be provided by the installing Mechanical contractor.*
  - d) *In a design where a main/bulk fuel tank is provided, it is assumed the provider of the main/bulk storage tank will also include a mounted fuel supply pump. The main/bulk mounted supply pump will need push fuel to the Smith Power Products, Inc. provided sub-base fuel storage tank. In this design, a return fuel pump mounted at the sub-base fuel storage tank or local freestanding day tank may be required to push fuel back to the main/bulk storage tank.*
- 19) *Scope of supply above includes a critical grade generator exhaust silencer & flex connection that will be supplied loose for the Mechanical contractor's installation inside the generator room.*
- a) *Scope of supply includes gaskets & bolt kits for the supplied flex connections; all others gaskets and fasteners will need to be provided by the Mechanical contractor.*
  - b) *Scope of supply above does not include any required wall/ roof thimbles for penetration to the exterior of the structure. This is to be supplied by the installing Mechanical Contractor.*
  - c) *Scope of supply does not include any required exhaust piping; exhaust insulation, or any additional exhaust accessories. This is to be supplied by the installing Mechanical Contractor.*
  - d) *Scope of supply does not include exhaust system installation. This is to be supplied by the installing Mechanical Contractor.*

**Terms and Conditions**

Net 30 days, subject to review and approval by our Credit Dept. Payment obligations are not dependent or contingent upon the manner in which purchaser may receive payment from others. No retainage against this order will be permitted unless agreed to ahead of time. Warranty is invalid without factory start up.

Start-Up will be done during normal business hours. Additional charges will be applied to start ups requested on weekends or off normal business hours.

**Sincerely,**

***Darrell Caldwell***

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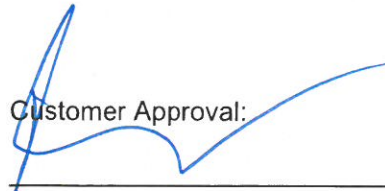
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Customer Approval:



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**Acceptance of Quote**

Prior to ordering equipment or services, please sign and return this proposal along with your company's purchase order as a confirmation of the above terms and conditions.

