



North Carolina Department of Administration

Pat McCrory, Governor
Bill Daughtridge, Jr., Secretary

Division of Purchase and Contract
Patti Bowers, State Purchasing Officer

Contract Award Certification Date: November 17, 2015

Bid/File Number: 201501303

Commodity: 690-43
STANDBY POWER SUPPLY GENERATORS

To:
John Dixon
National Power Corp.
4541 Preslyn Drive
Raleigh, NC 27614

From:
Sandy Anderson
919-807-4518
sandy.anderson@doa.nc.gov
Division of Purchase and Contract

Agency Requisition Number: 11543391

I am pleased to inform you that, following the evaluation process, the Division of Purchase and Contract proposes to accept your offer in relation to the above commodity. You will be contacted with further details and instructions by the using agency.

Item(s)
Generators on an as needed basis in accordance with IFB specifications.

Award Amount:
\$38,610.00

Using Agency:
DEPARTMENT - Transportation
James McCormick
Raleigh, NC 27611

Delivery: 30 Days

Contract Term:
11/17/2015 - 11/16/2018

Please Note: Unit subject to Quality Acceptance Inspection prior to payment.

1. This is not a purchase order. Do not make shipment until you have received an official order from the using agency.
2. Invoices should be made out to the using agency and forwarded directly to them for payment.
3. The exact items certified and ordered must be shipped. No substitutions shall be made without prior approval of the Division of Purchase and Contract.
4. Applicable North Carolina Sales and use tax shall be added to invoices as a separate item.
5. Please note the contract award description above, the contract awarded to you may be a portion of the contract, rather than the complete contract.

Sandy Anderson

Signature



**STATE OF NORTH CAROLINA
Division of Purchase and Contract**

Refer ALL Inquiries regarding this IFB to:

Sandy Anderson
Sandy.Anderson@doa.nc.gov
919.807.4518

Invitation for Bids # 201501303 – Standby Power Supply Generators

Bids will be publicly opened: October 29, 2015

Contract Type: Agency Specific Term Contract

Commodity No. and Description: 690-43 Generators: Over 25 MW/Power Plant: Incl. Parts & Accessories

Using Agency: Department of Transportation

Requisition No.: 11543391

EXECUTION

In compliance with this Invitation for Bid, and subject to all the conditions herein, the undersigned Vendor offers and agrees to furnish and deliver any or all items upon which prices are bid, at the prices set opposite each item within the time specified herein. By executing this bid, the undersigned Vendor certifies that this bid is submitted competitively and without collusion (G.S. 143-54), that none of its officers, directors, or owners of an unincorporated business entity has been convicted of any violations of Chapter 78A of the General Statutes, the Securities Act of 1933, or the Securities Exchange Act of 1934 (G.S. 143-59.2), and that it is not an ineligible Vendor as set forth in G.S. 143-59.1. False certification is a Class I felony. Furthermore by executing this bid, the undersigned certifies to the best of Vendor's knowledge and belief, that it and its principals are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal or State department or agency. As required by G.S. §143-48.5, the undersigned Vendor certifies that it, and each of its sub-Contractors for any Contract awarded as a result of this IFB, complies with the requirements of Article 2 of Chapter 64 of the NC General Statutes, including the requirement for each employer with more than 25 employees in North Carolina to verify the work authorization of its employees through the federal E-Verify system. G.S. 133-32 and Executive Order 24 (2009) prohibit the offer to, or acceptance by, any State Employee associated with the preparing plans, specifications, estimates for public Contract; or awarding or administering public Contracts; or inspecting or supervising delivery of the public Contract of any gift from anyone with a Contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization. Failure to execute/sign bid prior to submittal shall render bid invalid and it WILL BE REJECTED. Late bids cannot be accepted.

VENDOR: National Power Corporation		
STREET ADDRESS: 4541 Preslyn Drive	P.O. BOX:	ZIP:
CITY & STATE & ZIP: Raleigh NC 27616	TELEPHONE NUMBER: 919-861-6934	TOLL FREE TEL. NO: 800-790-1672
PRINCIPAL PLACE OF BUSINESS ADDRESS IF DIFFERENT FROM ABOVE (SEE INSTRUCTIONS TO VENDORS ITEM #11):		
PRINT NAME & TITLE OF PERSON SIGNING ON BEHALF OF VENDOR: JOHN S. DIXON		FAX NUMBER: 919-790-9714
VENDOR'S AUTHORIZED SIGNATURE: John S. Dixon	DATE: 10-29-15	E-MAIL: john.dixon@natpow.com

Offer valid for at least 90 days from date of bid opening, unless otherwise stated here: _____ days. After this time, any withdrawal of offer shall be made in writing, effective upon receipt by the agency issuing this IFB.

ACCEPTANCE OF BID

If any or all parts of this bid are accepted by the State of North Carolina, an authorized representative of the Division of Purchase and Contract shall affix his/her signature hereto and this document and all provisions of this Invitation for Bid along with the Vendor bid response and the written results of any negotiations shall then constitute the written agreement between the parties. A copy of this acceptance will be forwarded to the successful Vendor(s).

FOR STATE USE ONLY: Offer accepted and Contract awarded this 17 day of November, 2015, as indicated on the attached certification, by Sandy Anderson, Authorized Representative of Purchase & Contract.

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1.0 PURPOSE AND BACKGROUND

The Department of Transportation, Divisions of Highways (DOT) is soliciting bids from qualified Vendors in order to establish an Agency Specific Term Contract for Standby Power Supply Generators.

Bids shall be submitted in accordance with the terms and conditions of this IFB and any addenda issued hereto.

2.0 GENERAL INFORMATION

2.1 INVITATION FOR BIDS DOCUMENT

The IFB is comprised of the base IFB document, any attachments, and any addenda released before Contract award. All attachments and addenda released for this IFB in advance of any Contract award are incorporated herein by reference.

2.2 E-PROCUREMENT SOLICITATION

ATTENTION: This is an E-Procurement solicitation. See paragraph #18 of Attachment E: North Carolina General Contract Terms and Conditions.

The Terms and Conditions made part of this solicitation contain language necessary for North Carolina’s Statewide E-Procurement Services. It is the Vendor’s responsibility to read these terms and conditions carefully and to consider them in preparing the offer. By execution of its bid, Vendor agrees to and acknowledges acceptance of all terms and conditions, including those related to E-Procurement usage. General information on the E-Procurement Services can be found at: <http://eprocurement.nc.gov/>.

2.3 IFB SCHEDULE

The table below shows the *intended* schedule for this IFB. The Contract Lead will make every effort to adhere to this schedule.

ACTION	RESPONSIBILITY	DATE & TIME
Issue IFB	State	October 16, 2015
Submit Written Questions	Vendors	October 21, 2015
Submit Bids	Vendors	October 29, 2015

2.4 BID QUESTIONS

- **Purpose:** Upon review of the IFB documents, Vendors may have questions to clarify or interpret the IFB in order to submit the best bid possible. To accommodate the Bid Questions process, Vendors shall submit any such questions by the above due date.
- **Instructions:** Written questions shall be e-mailed to Sandy.Anderson@ncdoa.gov by the date and time specified above. Vendors should enter “IFB # 201501303 – Questions” as the subject for the email. Questions submittals should include a reference to the applicable IFB section and be submitted in a format shown below:

Reference	Vendor Question
IFB Section, Page Number	Vendor question...?

Questions received prior to the submission deadline date, the State’s response, and any additional terms deemed necessary by the State will be posted in the form of an addendum to the Interactive Purchasing System (IPS), <http://www.ips.state.nc.us>, and shall become an Addendum to this IFB. No information, instruction or advice provided orally or informally by any State personnel, whether made in response to a question or otherwise in connection with this IFB, shall be considered authoritative or binding. Vendors shall be entitled to rely *only* on written material contained in an Addendum to this IFB.

2.5 BID SUBMITTAL

- **Instructions:** Sealed bids, subject to the conditions made a part hereof and the receipt requirements described below, shall be received at the address indicated in the table below, for furnishing and delivering those items as described herein. Refer to Section 2.6 BID CONTENTS for details on required content of submitted bids.

MAILING ADDRESS FOR DELIVERY OF BID VIA U.S. POSTAL SERVICE	OFFICE ADDRESS FOR DELIVERY BY ANY OTHER MEANS, SPECIAL DELIVERY, OVERNIGHT DELIVERY, OR BY ANY OTHER CARRIER
BID NUMBER: 201501303 NC Department of Administration Division of Purchase and Contract 1305 Mail Service Center Raleigh, NC 27699-1305	BID NUMBER: 201501303 NC Department of Administration Division of Purchase and Contract 116 West Jones Street, Room 4062, 4 th Floor Raleigh, NC 27603-8002

IMPORTANT NOTE: It is the responsibility of the Vendor to have the bid physically in this Office by the specified time and date of opening, regardless of the method of delivery. **This is an absolute requirement.** The time of delivery will be marked on each bid when received, and any bid received after the bid submission deadline will not be accepted or evaluated. Sealed bids, subject to the conditions made a part hereof, will be received at the address indicated in the table in this Section, for furnishing and delivering the commodity as described herein.

All risk of late arrival due to unanticipated delay—whether delivered by hand, U.S. Postal Service, courier or other delivery service or method—is entirely on the Vendor. Note that the U.S. Postal Service generally does not deliver mail to the street address above, but to the State’s Mail Service Center. Vendors are cautioned that bids sent via U.S. Mail, including Express Mail, may not be delivered by the Mail Service Center to the agency’s purchasing office on the due date in time to meet the bid deadline. All Vendors are urged to take the possibility of delay into account when submitting a bid.

Vendors shall deliver one (1) signed, original executed bid response, one (1) copy of the signed original executed bid, one (1) electronic copy (on CD, DVD or flash drive) of its bid to the address identified in the table in this Section. Include only bids in response to this IFB in a sealed package. Address package and insert bid number as shown in the table in this Section. The electronic files shall not be password-protected, shall be in .PDF or .XLS format, and shall be capable of being copied to other media including readable in Microsoft Word and/or Microsoft Excel.

Bids shall be marked on the outside of the sealed envelope with the Vendor’s name, Bid number and date and time of opening. If Vendor is submitting more than one bid, each bid shall be submitted in separate sealed envelopes and marked accordingly. For delivery purposes, separate sealed bids from a single Vendor may be included in the same outer package.

Attempts to submit a Bid via facsimile (FAX) machine, telephone or electronic means, including but not limited to e-mail, in response to this Invitation for Bids will not be accepted. Bids are subject to rejection unless submitted with the information above included on the outside the sealed bid package.

Critical updated information may be included in Addenda to this IFB. It is important that all Vendors proposing on this IFB periodically check the State’s IPS website for any Addenda that may be issued prior to the bid opening date. All Vendors shall be deemed to have read and understood all information in this IFB and all Addenda thereto.

Contact with anyone working for or with the State regarding this IFB other than the State Contract Lead named on the face page of this IFB in the manner specified by this IFB shall constitute grounds for rejection of said Vendor’s offer, at the State’s election.

2.6 BID CONTENTS

For each of Vendor’s bid, Vendors shall populate all attachments of this IFB that require the Vendor to provide information and include an authorized signature where requested, as outlined below. Vendor IFB responses shall include the following items and they should be arranged in the following order:

- a) Completed and signed version of EXECUTION PAGE, and signed receipt pages of any addenda released in conjunction with this IFB
- b) Completed version of ATTACHMENT A: PRICING FORM
- c) Completed version of ATTACHMENT B: LOCATION OF WORKERS UTILIZED BY VENDOR
- d) Completed and signed version of ATTACHMENT C: DESCRIPTION OF EXECUTIVE ORDER #50 form that confirms that no price match opportunity is requested
- e) ATTACHMENT D: INSTRUCTIONS TO VENDORS
- f) ATTACHMENT E: NORTH CAROLINA GENERAL CONTRACT TERMS AND CONDITIONS
- g) ATTACHMENT F: EQUIPMENT PREVENTIVE MAINTENANCE QUESTIONNAIRE FORM (EPMQ)

3.0 METHOD OF AWARD AND BID EVALUATION PROCESS

3.1 METHOD OF AWARD

All qualified bids will be evaluated and award or awards will be based on lowest responsive bid meeting specifications.

While the intent of this IFB is to award a Contract to single vendor for all line items, the State reserves the right to make separate awards to different Vendors for one or more line items, to not award one or more line items or to cancel this IFB in its entirety without awarding a Contract, if it is considered to be most advantageous to the State to do so.

If a Vendor selected for award is determined by the State to be a non-resident of North Carolina, all responsive bids will be reviewed to determine if any of them were submitted by a North Carolina resident Vendor who requested an opportunity to match the price of the winning bid, pursuant to Executive Order #50 and G.S. 143-59 (for more information, please refer to ATTACHMENT C: DESCRIPTION OF EXECUTIVE ORDER #50 AND CERTIFICATION. If such bid(s) are identified, the State will then determine whether any such bid falls within the price-match range, and, if so, make a Contract award in accordance with the process that implements G.S. 143-59 and Executive Order #50.

The status of a Vendor's e-Procurement Services account(s) that is in arrears by 91 days or more at the time of bid opening shall be considered a relevant factor in determining whether to award a Contract under this IFB.

3.2 PERFORMANCE OUTSIDE THE UNITED STATES

Vendor shall complete ATTACHMENT B: LOCATION OF WORKERS UTILIZED BY VENDOR. In addition to any other evaluation criteria identified in this IFB, the State may, for purposes of evaluating proposed or actual contract performance outside of the United States, also consider how that performance may affect the following factors to ensure that any award will be in the best interest of the State:

- a) Total cost to the State
- b) Level of quality provided by the Vendor
- c) Process and performance capability across multiple jurisdictions
- d) Protection of the State's information and intellectual property
- e) Availability of pertinent skills
- f) Ability to understand the State's business requirements and internal operational culture
- g) Particular risk factors such as the security of the State's information technology
- h) Relations with citizens and employees
- i) Contract enforcement jurisdictional issues

3.3 BID EVALUATION PROCESS

1. Bids are requested for the items as specified, or item(s) equivalent in design, function and performance. The State reserves the right to reject any bid on the basis of fit, form and function as well as cost. All information furnished on this bid may be used as a factor in determining the award of this contract.
2. At that date and time specified as the bid opening, the package containing the bids from each responding firm will be opened publicly and the name of the Vendor and the price(s) bid announced.
3. The State shall review all Vendor responses to this IFB to confirm that they meet the specifications and requirements of the IFB. The State reserves the right to waive any minor informality or technicality in bids received.
4. For all responses that pass the initial review process, the State will review and assess the Vendors' pricing. The State may request additional formal responses or submissions from any or all Vendors for the purpose of clarification or to amplify the materials presented in any part of the bid. Vendors are cautioned, however, that the State is not required to request clarification, and often does not. Therefore, all bids should be complete and reflect the most favorable terms available from the Vendor. Prices bid cannot be altered or modified as part of a clarification.
5. Bids will be evaluated, based on the award criteria identified in Section 3.1 METHOD OF AWARD.

Upon completion of all evaluations, the State will make Award(s) based on the evaluation and post the award(s) to IPS under the IFB number for this solicitation.

Award of a Contract to one Vendor does not mean that the other bids lacked merit, but that, all factors considered, the selected bid was deemed most advantageous and represented the best value to the State.

Vendors are cautioned that this is an invitation for bids, not a request or an offer to contract, and the State reserves the unqualified right to reject any and all offers at any time if such rejection is deemed to be in the best interest of the State.

NOTE: During the evaluation period and prior to award, all information concerning the bid and evaluation is confidential, and possession of the bids and accompanying information is limited to personnel of the issuing agency and any third parties involved in this procurement process, and to the committee responsible for participating in the evaluation. Any attempt on behalf of a Vendor to gain such confidential information, or to influence the evaluation process (e.g., contact anyone involved in the evaluation, criticize another Vendor, offer any benefit or information not contained in the bid) in any way is a violation of North Carolina purchasing law and regulations and shall constitute sufficient grounds for disqualification of Vendor's offer from further evaluation or consideration in the discretion of the State.

4.0 REQUIREMENTS

This Section lists the requirements related to this IFB. By submitting a bid the Vendor agrees to meet all stated requirements in this Section as well as any other specifications, requirements and terms and conditions stated in this IFB. If a Vendor is unclear about a requirement or specification or believes a change to a requirement would allow for the State to receive a better bid, the Vendor is urged and cautioned to submit these items in the form of a question during the question and answer period in accordance with Section 2.4.

4.1 CONTRACT TERM

The Contract period shall be from date of award and continuing for a period of three (3) years subject to the continuation of the program and the availability of funds.

4.2 PRICING

Bid prices shall constitute the total cost to Buyer for delivery fully assembled and ready for use, including all applicable charges for shipping, delivery, handling, administrative and other similar fees. Vendor shall not invoice for any amounts not specifically allowed for in this IFB. Complete ATTACHMENT A: PRICING FORM and include with Bid.

4.3 ESTIMATED QUANTITIES

All product quantities listed in the IFB are estimates based on the State's historical and anticipated needs during the twelve (12) month period. The State shall not be obligated to purchase the amount represented by the estimated quantities contained herein or any other quantities.

It is the intent that the State will make an initial purchase according to the number of units indicated for each item under Attachment A "FURNISH & DELIVER" section. Additional units with the same or different features may be purchased during the contract period. It shall be understood and agreed that the State (agency) may purchase more or less than these estimated quantities during the contract period. No maximum or minimum quantities are guaranteed. The State will be responsible only for items received. The State shall not be obligated to purchase in excess of its normal requirements.

4.4 OVERAGE

Full count delivery with no shortage. Any overage shall have been included in prices quoted herein. Using agency will pay only for quantity actually ordered.

4.5 PRODUCT IDENTIFICATION

SUITABILITY FOR INTENDED USE

Vendors are requested to offer only comparable items which will provide the equivalent capabilities, features and diversity called for herein. The State reserves the right to evaluate all bids for suitability for the required use and to award the one best meeting requirements and considered to be in the State's best interest.

MAKE AND MODEL

Manufacturer's name and model/catalog numbers used are for the sole purpose of identification and to establish general quality level desired. Such references are not intended to be restrictive and comparable products of other manufacturers will be considered. However, Vendors are cautioned that any deviation from specifications must be pointed out in its bid. Also Vendor must include with its bid sufficient documentary evidence to demonstrate the qualitative, functional, operational, organizational and conformational equivalence of the bid item to the specified item.

4.6 TRANSPORTATION AND IDENTIFICATION

The Vendor shall deliver Free-On-Board (FOB) Destination to the location listed below with all transportation costs included in the cost of items.

When an order is placed using a purchase order, the purchase order number shall be shown on all packages and shipping manifests to ensure proper identification and payment of invoices. If an order is placed without using a purchase order, such as via phone, the Buyer’s name shall be show on all packages. A complete packing list shall accompany each shipment. Vendors shall not ship any products until they have received an order.

4.7 DELIVERY

The Vendor shall deliver Free-On-Board (FOB) Destination to the following location:

NCDOT
Equipment and Inventory Control Unit
4809 Beryl Road
Raleigh, NC 27606

- *The equipment delivery entrance is located in the 600 block of Blue Ridge Road, marked by a sign that reads:
--NCDOT New Equipment Delivery*
- *(Delivery Note: Deliveries are accepted at the Equipment and Inventory Control Unit between the hours of 7:30 a.m. and 2:00 p.m. on Monday through Friday except State approved holidays, ONLY.)*

Successful Vendor must complete delivery within ninety (90) consecutive calendar days after receipt of purchase order.

For completion by Vendor: Delivery will be made from Eagle, WI (city, state) within 70 consecutive calendar days after receipt of purchase order. Promptness of delivery shall be used as a factor in the award criteria.

4.8 SERVICE UPON DELIVERY

Units shall be complete, serviced and ready for operation when delivered. All self-propelled equipment to have at least 10 gallons of fuel in the tank. A North Carolina Safety Inspection or a Federal Safety Inspection is required to be completed and documentation furnished for all applicable equipment.

4.9 FIRE EXTINGUISHERS (WHEN APPLICABLE)

Rechargeable fire extinguishers of adequate size shall be mounted on each unit in accordance with the Society of Automotive Engineers (SAE), National Fire Protection Association (NFPA) or Federal Motor Vehicle Safety Standards (FMVSS) requirements, if applicable.

4.10 TRAINING

Training is required and the successful Vendor shall furnish a qualified representative to instruct the owner’s operators in proper operation, maintenance and service of the equipment for a minimum period of eight (8) hours in fourteen (14) location(s), statewide. For “Agency Specific Term Contracts” the State reserves the right to require training for any additional units purchased during the contract period. The number of training locations may increase or decrease with each purchase order based on the quantity of items purchased. After a period of six (6) months a trouble shooting and repair training session shall be held by a repair technician instructing owner’s mechanic in the repair techniques at a location appropriate for DOT needs, each for up to 8 hours as deemed appropriate. All training sessions shall be coordinated with and at the convenience of DOT through the office of the Equipment Plant and Maintenance Manager, (919) 733-2220.

4.11 REFERENCES

Vendors shall provide at least three (3) references for which your company has provided goods of substantially the same features and quantity to those solicited herein. The State may contact these users to determine the goods provided are substantially

similar to those bid herein and Vendor’s performance has been satisfactory. Such information may be considered in the evaluation of the bid.

COMPANY NAME	CONTACT NAME	TELEPHONE NUMBER
NC DOT	Charles Jones	919-835-8063
Penick Village	George Braddock	910-692-0300
Handy Sanitary District	Steve Zeigler	336-302-7081

4.12 DESCRIPTIVE LITERATURE

Each bid must be accompanied by two (2) copies of complete descriptive literature, specifications, certifications, and all other pertinent data necessary for thorough evaluation of the item(s) bid and sufficient to determine compliance of the item(s) with the specifications. Failure to include such information shall be a sufficient basis for rejection of the bid.

4.13 CATALOGS & MANUALS

Vendor shall provide DOT Production Control Manager of the Equipment & Inventory Control Unit the following:

- A. One (1) operator’s manual for the specific make & model of equipment shall be in each piece of equipment when delivered. **Failure to furnish will delay payment.**
- B. Two (2) electronic format copies of descriptive parts catalogs, operator’s manual and shop/service manuals containing OEM Part Nos. covering all systems, components and accessories for the specific make & model of equipment purchased. These are to be delivered to the DOT Production Control Manager at 4809 Beryl Road within ten (10) days after receipt of purchase order.

DOT reserves the right to refuse delivery of any equipment until the electronic or paper manuals have been received, approved and accepted. Payment will not be rendered by DOT until manuals are received and determined to be suitable for use in DOT’s electronic infrastructure.

DELIVERY AUTHORIZATION MUST BE RECEIVED FROM THE PRODUCTION CONTROL MANAGER BEFORE ANY EQUIPMENT IS DELIVERED.

- C. Two (2) electronic format copies of updates to the parts catalog and shop manuals for the specific make and model of equipment delivered shall be furnished to the State at the same time such updates are furnished to a dealer. Expenses incurred by the State as a result of the vendor failing to provide updates under section C will be passed to the vendor.

Electronic Format: The successful Vendor shall be responsible for providing the electronic media as described above in Adobe Portable Document Format or an electronic format pre-approved by DOT.

- D. In lieu of electronic format, the State will accept two (2) original paper versions of items listed above. Paper version is to be presented in 8.5” by 11” portrait presentation.

NOTE: Parts catalogs, service manuals, operator’s manuals, or other material needed to satisfy these requirements are not to be bid as separate items. All materials shall be furnished as specified and applicable to the equipment bid, at no additional cost. The vendor specifically agrees that such material supplied under this section may be copied or reproduced in any manner for use by DOT.

4.14 STANDARD EQUIPMENT

Any additional equipment or accessories listed in manufacturer’s current literature, as standard but not listed in these specifications must also be furnished.

4.15 PRICE ADJUSTMENTS

Prices bid by the Vendor shall be firm for the first Contract term.

Price increase requests shall be submitted in writing to the State, which shall include the reason(s) for the request and contain

supporting documentation of the need. Price increases will be negotiated and agreed to by both the State and Vendor in advance of any price increase going into effect. The State is not obligated to accept pricing adjustments or increases and reserves the right to accept or reject them in part or in whole. Price de-escalation or decreases may be requested by the State at any time.

It is understood and agreed that orders will be shipped at the established Contract prices in effect on dates orders are placed. Invoicing at variance with this provision will subject the Contract to cancellation.

4.16 INVOICES

Vendor shall invoice the Ordering Entity. The standard format for invoicing shall be Single Invoices meaning that the Vendor shall provide the Buyer with an invoice for each order. Invoices must include detailed line item information to allow Buyer to verify pricing at point of receipt matches the correct price from the original date of order. At a minimum, the following fields must be included on all invoices:

- Vendor’s Billing Address, Vendor’s Federal ID Number, NC Vendor ID Number, Customer Account Number, NC Contract Number, Order Date, Buyers Order Number, Manufacturer Part Numbers, Vendor Part Numbers, Item Descriptions, Price, Quantity, and Unit of Measure
- Payment terms to be net 30 days after receipt of invoice and acceptance of equipment.
- All invoices for this contract should be mailed in duplicate to:

NCDOT
Fleet and Material Management Unit
4809 Beryl Road
Raleigh, NC 27606

4.17 WARRANTY

Vendor warrants that equipment furnished on this bid will be new and of good material and workmanship. Defective parts found to be free of negligence or accident will be replaced free of charge for 24 months from respective dates the machines are put in operations. Such replacement is to include all parts, labor, freight, and travel to site where equipment is down (statewide locations). In addition, any specific provisions in the manufacturer’s standard warranty that exceed the above requirement become part of the warranty for this contract.

Vendor is advised that deviations taken to the above warranty paragraph may cause nullification of your bid. Bidder specifically agrees to above warranty paragraph by signature of the “Execution of Bid” contained herein.

4.18 SERVICE AVAILABILITY

Adequate and satisfactory availability of repair parts, supplies, and ability to meet warranty and service requirements are necessary. The State reserves the right to satisfy itself by inquiry or otherwise as to Vendor’s capabilities in this regard.

List below firm’s nearest location of user from which service and parts for the offered equipment are available:

FIRM	LOCATION	PHONE
(1) National Power Corp	Raleigh NC	888-646-8596
(2) NPC	Jacksonville NC	888-646-8596
(3) NPC	Ft. Mill, SC	888-646-8596

4.19 REPAIR PARTS DELIVERY

Vendor shall maintain access to a complete inventory of repair parts for the offered equipment, located within the United States, for ten (10) years after the date of acceptance of the equipment. Critical repair parts from this inventory shall be received by the designated repair depot within five (5) working days after request. “Critical repair parts” are defined as those parts, which are essential for the safe and proper operation of the machine.

For critical repair parts, liquidated damages of \$25.12 per working day shall be levied against the Vendor and deducted from parts invoice(s) for each working day that completed delivery is in excess of the five day limit. Liquidated damages in regards to parts will only apply in cases where the parts order has been placed with the bidder.

The State may waive the above repair parts penalty in any instance where such non-performance, in the determination of the State, is due to factors other than those under control of the Vendor and/or manufacturer.

4.20 DEMONSTRATION

Prior to award and upon written request, the State reserves the right to request a demonstration of the exact model offered herein. The demonstration would be for the purpose of observing the equipment in operation, which may answer concerns not otherwise addressed in the bid document or literature provided by the vendor. The demonstration would be performed by the Vendor or an authorized representative, at the manufacturer's plant or another mutually acceptable site. The demonstration will be free of any charge to the State. If requested, the Vendor should be prepared to demonstrate the equipment within 30 days after written notification. Such demonstration does not constitute full and final approval of the equipment. All units will be inspected for compliance with the specification upon receipt at the destination required.

4.21 PRE-CONSTRUCTION MEETING

The state reserves the right to require a pre-construction meeting to be held in Raleigh, NC prior to fabrication of the equipment. A representative of the successful Vendor, who has technical expertise and the authority to make decisions regarding mechanical aspects of the machine shall be present at the meeting. The meeting is to be scheduled by agreement between the successful Vendor and DOT.

4.22 PILOT MODEL

The State reserves the right to require that a pilot model be made available within **thirty (30)** days after receipt of purchase order. The pilot model shall be inspected, and approved before any units are shipped. Inspection for compliance with specifications shall be at Vendor's plant or another site acceptable to the State, and final inspection and acceptance of all other units will be made at the N.C. Division of Highways Equipment and Inventory Control Unit, Raleigh, NC.

If required, a pilot model unit will be available for inspection within _____ days after receipt of purchase order.

4.23 LIQUIDATED DAMAGES

Liquidated damages shall be assessed and deducted from invoice for failure to complete delivery by the guaranteed delivery date shown in the "delivery" clause. These damages will be calculated at \$25.12 per day, per unit, for any units delivered past the guaranteed delivery date. Failure to provide associated materials (service & parts manuals, etc.) as requested will result in delay of payment.

4.24 GENERAL REQUIREMENTS

- A. Units offered shall meet or exceed the specifications set forth herein. Any Vendor that provides ratings or data on the model offered above the published rating for that model offered in order to meet specifications, will be disqualified.
- B. Failure to furnish lists, documents and catalogs as required in this bid will constitute incomplete delivery. This may delay payments, and may be cause for assessment of liquidated damages.

4.25 COLOR:

Units supplied under this specification shall be painted with a lead free "North Carolina DOT Yellow" which will be visually inspected for suitable match in the following manner. Prior to the finish painting of equipment and upon request the successful Vendor will be provided a paint chip by the North Carolina Department of Transportation which has been prepared utilizing a minimum of one (1) mil thickness of lead-free white primer/sealer and a minimum of two (2) mil thickness of lead-free PPG # 931588. The successful Vendor shall be required to return the DOT paint chip and furnish two (2) 3 1/2" x 8" painted panels representing the finished color for approval. If approved, one panel will be returned to Vendor and the other will be retained by State for color comparison. Color of equipment must then match the color-approved panel. The Vendor must furnish a copy of the current MSDS sheet for the paint used which indicates that the paint is lead free with the submitted color chips.

Paint which has met the North Carolina DOT Yellow color specification includes but is not limited to: PPG # 931588.

Wheel discs, stainless steel, polished aluminum and molded plastic parts are exempt from this requirement and are acceptable in the manufacturer's standard color.

4.26 INSTRUCTIONS FOR TITLE INFORMATION (WHEN APPLICABLE):

THE PREPARATION OF MCO (MANUFACTURER'S CERTIFICATE OF ORIGIN) AND MVR-1 (MOTOR VEHICLES TITLE APPLICATION) ARE TO BE AS FOLLOWS:

MCO: In the space indicating *Name of Purchaser(s)*, without abbreviations or exceptions, shall always read as follows:

**NC Department of Transportation
Division of Highways
4809 Beryl Road
Raleigh, NC 27606**

The name of the selling Dealer must match on the front and the back of the MCO. Also the GVWR and the Shipping Weight must be filled in on the MCO.

THE MCO MUST BE NOTARIZED. IF ANY OF THE ABOVE REQUIREMENTS FOR THE MCO ARE NOT MET, THE MCO WILL BE REJECTED.

MVR-1: The seller is required to fill in only the *Vehicle Section* of this form. NCDOT will fill in the remainder of this form.

This form can be found at no charge online at www.ncdot.org/dmv/forms/

4.27 EQUIPMENT PREVENTATIVE MAINTENANCE QUESTIONNAIRE (EPMQ) Form

A completed Equipment Preventative Maintenance Questionnaire (EPMQ) form with supporting documentation must be submitted by the successful Vendor **within ten (10) days after receipt of Purchase Order***. A blank EPMQ form is included in this bid. (Attachment F) The EPMQ form consists of blanks in which servicing information is to be listed for the equipment furnished. This is a generic form and blanks that are not applicable are to be completed with N/A. The information supplied on the EPMQ form is entered in a DOT Division of Highways equipment database that is accessible by all of our shops.

Supporting documentation is required with submission of every form.

This supporting documentation can consist of a manual or any part of a manual that supports the service information provided on the EPMQ form. DOT will accept an owner's manual, operator's manual, parts manual, service manual, technical manual, bill of material, engineering technical document or copies of pages from any of these manuals that contain the required service information. DOT must be able to verify any copies of manuals or pages furnished came from the manufacture's manual for the make and model of equipment being provided.

THE DOT WILL REFUSE DELIVERY OF EQUIPMENT UNTIL THE SUCCESSFUL VENDOR HAS PROVIDED A COMPLETE AND ACCURATE EPMQ FORM WITH SUPPORTING DOCUMENTATION TO THE PROCUREMENT SECTION OF THE EQUIPMENT & INVENTORY CONTROL UNIT. IF APPLICABLE, PAYMENT WILL BE WITHHELD AND LIQUIDATED DAMAGES INCURRED FOR FAILURE TO PROVIDE A COMPLETED EPMQ FORM WITH SUPPORTING DOCUMENTATION.

***SPECIAL NOTE:**

DOT will refuse delivery of any equipment until this form has been provided complete and accurate. This is a generic form therefore fill in only the items that apply to your product.

4.28 SAMPLE MAINTENANCE ITEMS:

Vendor shall provide one complete set of any filters, including but not limited to oil, fuel, hydraulic or water, used on the offered unit to perform preventative maintenance, with the first unit delivered. Failure to comply with this requirement will result in delay of payment.

5.0 PRODUCT SPECIFICATIONS

5.1 GENERAL SPECIFICATIONS

Vendor shall provide units that are are, 1) intended for outside, semi-permanent installation, 2) shall be equipped with manual or automatic transfer switches, and 3) must have silencing suitable for use in residential areas per the following specifications.

5.2 GENERATOR SPECIFICATIONS

Section 1: GENERAL

1. DESCRIPTION OF SYSTEM

- A. Provide a Standby power system to supply electrical power in event of failure of normal supply, consisting of a liquid cooled engine, an AC alternator and system controls with all necessary accessories for a complete operating system, including but not limited to the items as specified hereinafter.

Yes No
- B. Provide manual or automatic transfer switch as described elsewhere in this specification so that the system comes on-line, and on restoration of utility power retransfer load to normal power, shuts down the generator and returns to readiness for another operating cycle.

Yes No

2. REQUIREMENTS OF REGULATORY AGENCIES

- A. An electric generating system, consisting of a prime mover, generator, governor, coupling and all controls, must have been tested, as a complete unit, on a representative engineering prototype model of the equipment to be sold.

Yes No
- B. Transfer switch must be UL listed for use in emergency systems.

Yes No
- C. The generator set must conform to applicable National Electrical Code and applicable inspection authorities.

Yes No
- D. The generator set must be UL 2200 listed as a stationary engine generator assembly.

Yes No

3. MANUFACTURER QUALIFICATIONS

- A. This system shall be manufactured by a manufacturer who has been regularly engaged in the production of engine-alternator sets, manual and automatic transfer switches, and associated controls, thereby identifying one source of supply and responsibility.

Yes No
- B. To be classified as a manufacturer, the manufacturer of the generator set must manufacture, at minimum, engines or alternators.

Yes No
- C. The manufacturer shall have printed literature and brochures describing the standard series specified, not a one of a kind fabrication.

Yes No

Section 2: ENGINE-GENERATOR SET

1. Engine

- A. The prime mover shall be a liquid cooled engine of 4-cycle design. Engine(s) shall meet all applicable EPA requirements for engine type and size at time of delivery.

Yes No
- B. The engine is to be cooled with a unit mounted radiator, fan, water pump, and closed coolant recovery system providing visual diagnostic means to determine if the system is operating with a normal engine coolant level. The radiator shall be designed for operation in 110 degrees Fahrenheit, 43 degrees Celsius ambient temperature.

Yes No
- C. The intake air filter with replaceable element must be mounted on the unit. Full pressure lubrication shall be supplied by a positive displacement lube oil pump. The engine shall have a replaceable oil filter with internal bypass

and replaceable elements. Engine coolant and oil drain extensions must be provided to outside of the mounting base for cleaner and more convenient engine servicing.

Yes No

D. The engine shall have a battery charging DC alternator with a transistorized voltage regulator.

Yes No

E. Engine speed shall be governed by mechanical governor to maintain alternator frequency within +/- 5% from no load to full load alternator output. Steady state regulation is to be 0.5%.

Yes No

Electronic Governor +/- .25%

F. Sensing elements to be located on the engine for low oil pressure shutdown, high coolant temperature shutdown, low coolant level shutdown, overspeed shutdown and overcrank shutdown. These sensors are to be connected to the control panel using a wiring harness with the following features: wire number labeling on each end of the wire run for easy identification, a molded rubber boot to cover the electrical connection on each sensor to prevent corrosion and all wiring to be run in flexible conduit for protection from the environment and any moving objects.

Yes No

G. The manufacturer shall supply its recommended stainless steel, flexible connector to couple the engine exhaust manifold to the exhaust system.

Yes No

H. The engine shall have a unit mounted, thermostatically controlled water jacket heater to aid in quick starting. It will be of adequate wattage as recommended by the engine manufacturer. The contractor shall provide proper branch circuit from normal utility power source.

Yes No

I. **FOR DIESEL UNITS ONLY** - The fuel system shall include a double walled (with tank rupture alarm), UL approved, stub up, base mounted fuel tank, sufficient for minimum of 24 hour full load operation. It shall have the structural integrity to support the engine-generator set. Minimum features shall include all welded construction, a lockable fuel filler cap, fuel gauge, low fuel level alarm, fuel line check valve and fittings for fuel supply, return, fill and vent. This tank must be supplied by the engine-generator set manufacturer and be installed before shipment.

Yes No

J. **FOR NATURAL GAS or LP VAPOR UNITS ONLY** - The manufacturer will supply its recommended flexible fuel line to connect the engine to the external fuel source.

Yes No

2. **ALTERNATOR**

A. Shall have 12 Lead Winding with capability of producing full kw at single or 3 phase operation.

Yes No

B. The alternator shall be a 4-pole revolving field type. The stator shall be direct connected to insure permanent alignment. The generator shall meet temperature rise standards for Class "H" insulation, operate at Class "F" standards, 130 degrees C at standby rating for extended life. All leads must be extended into an AC connection panel. The alternator shall be protected by internal thermal overload protection and an automatic reset field circuit breaker.

Yes No

C. One step load acceptance shall be 100% of engine-generator set nameplate rating and meet the requirements of NFPA 110 paragraph 5-13.2.6.

Yes No

D. A solid state voltage regulator designed and built by the engine-generator set manufacturer must be used to control output voltage by varying the exciter magnetic field to provide + or - 1% regulation during stable load conditions. Should an extremely heavy load drop the output frequency, the regulator shall have a voltage droop of 4 Volts/Hertz to maximize motor starting capability.

Yes No

E. The voltage regulator must contain a limiting circuit to prevent output voltage surges in excess of 125% of rated voltage during generator set operation. On loss or near loss of the voltage sensing signal, the voltage regulator must be capable of shutting down to prevent an overvoltage condition from occurring.

Yes No

F. A NEMA 1 panel that is an integral part of the generator set must be provided to allow the installer a convenient location in which to make electrical output connections. An isolated neutral lug must be included by the generator set manufacturer to insure proper sizing.

Yes No

G. The electric plant shall be mounted with vibration isolators on a welded steel base that shall permit suitable mounting to any level surface.

Yes No

H. A thermal magnetic UL listed main line circuit breaker must be mounted in the AC connection panel. The line side connections are to be made at the factory. A system utilizing a manual reset field circuit breaker and current transformers is unacceptable.

Yes No

3. CONTROLS

A. All engine alternator controls and instrumentation shall be designed, built, wired, tested and shock mounted in a NEMA 1 enclosure to the engine-generator set by the manufacturer. It shall contain panel lighting, a fused DC circuit to protect the controls and a +/-5% voltage adjusting control. This panel must be able to be rotated 90 degrees in either direction for correct installation.

Yes No

B. The engine-generator set shall contain a complete 2 wire automatic engine start-stop control which starts the engine on closing contacts and stop the engine on opening contacts. A cyclic cranking limiter shall be provided to open the starting circuit after eight attempts if the engine has not started within that time. Engine control modules must be solid state plug-in type for high reliability and easy service.

Yes No

C. The panel shall include; digital meters to monitor AC voltage, AC current and AC frequency with a phase selector switch, an emergency stop switch, an audible alarm, battery charger fuse, and a programmable engine control and monitoring module.

Yes No

D. The programmable module shall include: a manual, off, auto switch; digital display to indicate 1) Not In Auto, 2) Alarm Active, 3) Generator Running, 4) Generator Ready; a data entry keypad and a digital display panel.

Yes No

E. The module will display all pertinent unit parameters including:

1. Generator Status

a. Current unit status in real time.

Yes No

2. Instrumentation

Real time readouts of the following values:

- a. Oil pressure Yes No
- b. Coolant temperature Yes No
- c. Fuel level (where applicable) Yes No
- d. DC battery voltage Yes No
- e. Run time hours Yes No

3. Generator Commands

- a. Current engine start/stop status Yes No

4. Alarm Status

Current alarm(s) conditions:

- a. High or low AC voltage Yes No
- b. High or low battery voltage Yes No
- c. High or low frequency Yes No
- d. Low or pre-low oil pressure Yes No
- e. Low water level Yes No
- f. Low water temperature Yes No
- g. High and pre-high engine temperature Yes No
- h. High, low and critical low fuel levels (where applicable) Yes No
- i. Overcrank Yes No
- j. Overspeed Yes No
- k. Unit not in "Automatic Mode" Yes No
- l. Eight (8) user programmable digital channels Yes No
- m. Four (4) user programmable analog channels Yes No

5. Alarm Log

- a. Memory of last Twenty (20) alarm events. Yes No

6. Operating parameters

- a. Access to and manipulation of the current operating parameters and alarm limits. Yes No

Software Information

- a. Version information and module display test function. Yes No

F. The panel must be accessible by PC based software via either standard RS232, RS485 or modem. The software must display the module face, be updated in real time and allow for complete access to all module functions. Communication output and its software must be fully compatible and allow for incorporation into an existing control program.

Yes No

Section 3: AUTOMATIC TRANSFER SWITCH

1. GENERAL

A. The automatic transfer switch shall be listed by Underwriter's Laboratory, Standard 1008 with circuit breaker protection. Transfer switch shall be service rated with over-current protection (fusible). Representative production samples of the transfer switch supplied shall have demonstrated through tests the ability to withstand at least 10,000 mechanical operation cycles. One operation cycle is the electrically operated transfer from normal to emergency and back to normal. Wiring must comply with NEC table 373-6(b). The manufacturer shall furnish schematic and wiring diagrams for the particular automatic transfer switch and a typical wiring diagram for the entire system. Transfer switch to have LCD digital readout with 7-day programmable timer (Thompson Electronics TSC 800 Series or pre-approved equal).

Yes No

2. RATINGS & PERFORMANCE

A. The automatic transfer switch shall be rated for continuous operation in ambient temperatures of -20 Degrees Fahrenheit (-30 Degrees Celsius) to +140 Degrees Fahrenheit (+60 Degrees Celsius). Main power switch contacts shall be rated for 600 Volt AC minimum. The transfer switch supplied shall have a minimum withstand and closing rating when fuse protected of 200,000 amperes.

Yes No

3. CONSTRUCTION

A. The transfer switch shall be double throw construction, positively electrically and mechanically interlocked to prevent simultaneous closing and mechanically held in both normal and emergency positions. Independent break before make action shall be used to positively prevent dangerous source to source connections. The transfer switch shall be approved for manual operation.

Yes No

B. The transfer switch electrical actuator shall have an independent disconnect means to disable the electrical operation during manual switching. Maximum electrical transfer time in either direction shall be 160 milliseconds, exclusive of time delays. Main switch contacts shall be high pressure silver alloy contacts to resist burning and pitting for long life operation.

Yes No

C. There shall be two SPDT, 10 ampere, 250 volt auxiliary switches on both normal and emergency sides, operated by the transfer switch. Full rated neutral bar with lugs for normal, emergency and load conductors shall be provided inside the cabinet.

Yes No

D. Enclosure shall be a NEMA 3R rain proof enclosure.

Yes No

4. CONTROLS

A. All control equipment shall be mounted on the inside of the cabinet door in a metal lockable enclosure. The solid state voltage sensors and time delay modules shall be plug-in circuit boards with silver or gold contacts for ease of service.

Yes No

B. A solid state under voltage sensor shall monitor all phases of the normal source and provide adjustable ranges for field adjustments for specific application needs. Pick-up and drop-out settings shall be adjustable from a minimum of 70% to a maximum of 95% of nominal voltage. A utility sensing interface shall be used, stepping down line voltage to 24VAC, helping to protect the printed circuit board from voltage spikes and increasing personnel safety when troubleshooting.

Yes No

- C. Signal the engine-generator set to start in the event of a power interruption. A set of contacts shall close to start the engine and open for engine shutdown. A solid state adjustable time delay shall delay this signal to avoid nuisance start-ups on momentary voltage dips or power outages.
 Yes No
- D. Transfer the load to the engine-generator set after it reached proper voltage and frequency. A solid state time delay (adjustable, 5 seconds-3 minutes) shall delay this transfer to allow the engine-generator to warm-up before application of load. There shall be a switch to bypass this warm-up timer when immediate transfer is required.
 Yes No
- E. Retransfer the load to the line after normal power restoration. A return to utility timer (adjustable, 1-30 minutes) shall delay this transfer to avoid short term normal power restoration.
 Yes No
- F. The operating power for transfer and retransfer shall be obtained from the source to which the load is being transferred. Controls shall provide an automatic retransfer of the load from emergency to normal if the emergency source fails with the normal source available.
 Yes No
- G. Signal the engine-generator to stop after the load retransfers to normal. A solid state engine cool-down timer (adjustable, 1-30 minutes) shall permit the engine to run unloaded to cool-down before shutdown.
 Yes No
- H. Provide an engine minimum run timer (adjustable, 5-30 minutes) to ensure an adequate engine run period.
 Yes No
- I. Provide a solid state plant exercise clock to start the generator set exercise period. Clock shall have a one week cycle and be powered by the load side of the transfer switch. A battery must be supplied to maintain the circuit board clock operation when the load side of the transfer switch is de-energized. Include a switch to select if the load will transfer to the engine-generator set during the exercise period.
 Yes No
- J. Provide indicators to identify the transfer switch position in either UTILITY or EMERGENCY.
 Yes No
- K. Provide manual operating handle to allow for manual transfer. This handle must be mounted inside the lockable enclosure so accessible only by authorized personnel.
 Yes No
- L. Provide a safety disconnect switch to prevent load transfer and automatic engine start while performing maintenance.
 Yes No

Section 4: MANUAL TRANSFER SWITCH

1. General

- A. The transfer switch shall be listed by Underwriter's Laboratory, **Standard 1008 with circuit breaker protection**. Transfer switch shall be **service rated with over-current protection (fusible)**. Representative production samples of the transfer switch supplied shall have demonstrated through tests the ability to withstand at least 10,000 mechanical operation cycles. One operation cycle is the electrically operated transfer from normal to emergency and back to normal.

Furnish for use as transfer switch a double throw switch having the electrical characteristics, ratings and modifications as shown on the equipment schedule. The manual transfer switch shall be listed by Underwriter's Laboratory.

Yes No

2. Ratings

A. Safety switches shall be rated for 240VAC for 2-pole switches and 600V for 3-pole switches.

Yes No

B. Safety switches shall be load break rated.

Yes No

3. Construction

A. Safety switch design must have quick-make/quick-break operating mechanism with two points of contact.

Yes No

4. Wiring/Termination

A. Wiring configuration shall allow a single load to be supplied by a normal source or the generator.

Yes No

B. All wire connectors and terminals shall be suitable for copper or aluminum wire.

Yes No

C. All switches shall conform to the latest NEC wire bending space requirements.

Yes No

5. Enclosure

A. Shall have a NEMA 3R rain proof enclosure.

Yes No

B. The handle shall be easily recognizable and have padlocking capability.

Yes No

C. The enclosure top, bottom and sides shall have knockouts for conduit connections.

Yes No

Section 5: ADDITIONAL REQUIREMENTS

1. UNIT ACCESSORIES

The following equipment is to be installed at the engine-generator set manufacturer's facility:

A. Provide a 2 amp automatic float battery charger manufactured by the engine-generator set supplier. It is to be of a solid state design and self-regulating to prevent overcharging the system battery. The battery charger is to be factory installed on the generator set. A battery charger mounted in the transfer switch is unacceptable.

Yes No

B. A heavy duty, lead acid battery set shall be provided by the generator set manufacturer of adequate voltage and amperage capacity to start and operate the engine. Provide all inter-cell and connecting battery cables as required.

Yes No

C. The unit will provide means for attaching a flexible coupling between the engine radiator and the building cooling air discharge duct.

Yes No

D. Weather protective enclosure: The engine-generator set shall be factory enclosed in an aluminum enclosure constructed with corner posts, uprights and headers. The roof shall aid in the runoff of water and include a drip edge. The enclosure is to have large, hinged doors to allow access to the engine, alternator and control panel. The material shall be 080" thick, type 3003 aluminum. The doors must lift off without the use of tools. Each door will have lockable hardware with identical keys. The enclosure to be finished to manufacturers specifications.

Yes No

- E. Exhaust silencer shall be provided of the size as recommended by the manufacturer and shall be of **critical grade**. The silencer shall be mounted within the weather protective enclosure with solid brackets. It shall be connected to the engine with a flexible, seamless, stainless steel exhaust connection. A rain cap will terminate the exhaust pipe. All components must be properly sized to assure operation without excessive backpressure when installed.

Yes No

2. APPLIED STANDARDS

- A. The unit shall be UL2200 listed

Yes No

3. FACTORY TESTING

Before shipment of the equipment, the engine-generator set shall be tested under rated load for performance and proper functioning of control and interfacing circuits. Tests shall include:

- A. Verifying all safety shutdowns are functioning properly.

Yes No

- B. Single step load pick-up per NFPA 110-1996, Paragraph 5-13.2.6.

Yes No

- C. Transient and voltage dip responses and steady state voltage and speed (frequency) checks.

Yes No

4. STARTUP AND CHECKOUT

Vendor shall provide factory trained technicians to check out the completed installation and to perform an initial startup inspection to include:

- A. Ensuring the engine starts (both hot and cold) within the specified time.

Yes No

- B. Verification of engine parameters within specification.

Yes No

- C. Set no load frequency and voltage.

Yes No

- D. Test all automatic shutdowns of the engine-generator.

Yes No

- E. Perform a load test of the electric plant, ensuring full load frequency and voltage are within specification by using building load.

Yes No

6.0 DEVIATIONS

The nature of all deviations from the *Specifications/Requirements* listed herein must be clearly described by the Vendor. Otherwise, it will be considered that items offered by the Vendor are in strict compliance with the *Specifications/Requirements*, and the successful Vendor shall be held responsible to supply conforming goods. Deviations must be explained in detail below or on an attached sheet. However, no implication is made or intended by the State that any deviation will be acceptable.

ATTACHMENT A: PRICING FORM

FURNISH AND DELIVER: The successful bidder shall not make shipment of any units until an official purchase order has been received. Standby power systems in accordance with the attached specifications & questionnaire. Units shall be furnished with the published standard equipment whether specified or not.

FIRST ORDER

Item	Qty	UOM	DESCRIPTION	UNIT COST	TOTAL PRICE
1.	1	Each	Generator: 175 KW, 120/208 V, 3 Phase, Diesel Powered. With Aluminum 76dB Sound Attenuating Enclosure	\$38,610.00	\$38,610.00

- A. This bid is to establish a 3 year contract for the items below. No quantities are guaranteed. Once the contract has been awarded, DOT will determine quantities and issue purchase order(s) as needed throughout the contract period.
- B. The successful Vendor shall not make shipment of any units until an official purchase order has been received.

FUTURE PURCHASES: Price list for possible combinations and for possible future purchases. During the course of this contract DOT may elect to purchase any single unit or combination of units from the matrixes below. Bidder is requested to fill in these price matrixes:

VENDOR SHALL COMPLETE THE FOLLOWING PRICE MATRIXES:

DIESEL POWERED UNITS

kW Rating	120/240V, 1Phase	120/240V or 120/208V, 3Phase	277/480V, 3 phase	Aluminum 76dB Sound Attenuating Enclosure
35	\$18,964.00	\$18,964.00	\$18,564.00	\$1,520.00
50	\$20,333.00	\$20,033.00	\$19,519.00	\$1,667.00
80	\$21,641.00	\$22,429.00	\$22,108.00	\$2,560.00
100	\$24,880.00	\$25,339.00	\$25,034.00	\$3,682.00
130	\$30,272.00	\$29,323.00	\$28,973.00	\$3,682.00
150	\$32,205.00	\$32,205.00	\$31,212.00	\$4,217.00
175	\$36,333.00	\$35,534.00	\$34,543.00	\$3,067.00
200	\$39,302.00	\$38,119.00	\$37,660.00	\$4,077.00

NATURAL GAS POWERED UNITS:

kW Rating	120/240V, 1Phase	120/240V or 120/208V, 3Phase	277/480V, 3 phase	Aluminum 76dB Sound Attenuating Enclosure
35	\$14,432.00	\$15,277.00	\$14,883.00	\$1,909.00
50	\$18,020.00	\$18,020.00	\$17,110.00	\$1,920.00
80	\$20,020.00	\$21,009.00	\$20,704.00	\$2,026.00
100	\$21,758.00	\$22,789.00	\$22,484.00	\$2,225.00

AUTOMATIC TRANSFER SWITCHES:

	2 pole	3 pole
100A	\$ 2,911.00	\$ 2,911.00
150A	\$ 2,992.00	\$ 2,992.00
200A	\$ 3,218.00	\$ 3,218.00
250A	\$ 3,525.00	\$ 3,525.00
400A	\$ 4,348.00	\$ 4,348.00
600A	\$ 6,620.00	\$ 6,620.00
800A	\$ 7,735.00	\$ 7,735.00
1000A	\$ 12,538.00	\$ 12,538.00
1200A	\$ 13,260.00	\$ 13,260.00

ATTACHMENT B: LOCATION OF WORKERS UTILIZED BY VENDOR

In accordance with NC General Statute §143-59.4, the Vendor shall detail the location(s) at which performance will occur, as well as the manner in which it intends to utilize resources or workers outside of the United States in the performance of this Contract. The State will evaluate the additional risks, costs, and other factors associated with such utilization prior to making an award. Please complete items a, b, and c below.

a) Will any work under this Contract be performed outside the United States?

YES NO

If the Vendor answered "YES" above, Vendor must complete items 1 and 2 below:

- 1. List the location(s) outside the United States where work under this Contract will be performed by the Vendor, any sub-Contractors, employees, or other persons performing work under the Contract:

- 2. Describe the corporate structure and location of corporate employees and activities of the Vendor, its affiliates or any other sub-Contractors that will perform work outside the U.S.:

b) The Vendor agrees to provide notice, in writing to the State, of the relocation of the Vendor, employees of the Vendor, sub-Contractors of the Vendor, or other persons performing services under the Contract outside of the United States

YES NO

NOTE: All Vendor or sub-Contractor personnel providing call or contact center services to the State of North Carolina under the Contract shall disclose to inbound callers the location from which the call or contact center services are being provided.

c) Identify all U.S. locations at which performance will occur:

ATTACHMENT C: DESCRIPTION OF EXECUTIVE ORDER #50 AND CERTIFICATION**NORTH CAROLINA RESIDENT VENDORS TAKE NOTE:**

Pursuant to North Carolina General Statute §143-59 and Executive Order No. 50 (issued February 17, 2010, entitled "Enhanced Purchasing Opportunities for North Carolina Businesses"), a North Carolina resident Vendor may receive an opportunity to obtain an award by agreeing to match the final price(s) of the lowest Vendor on a Contract for the purchase of goods, if that lowest price is offered by a non-North Carolina resident Vendor. This opportunity arises when a North Carolina resident Vendor offers a price that is the lowest among all bids by qualified in-State resident Vendors and also is within five percent (5%) or \$10,000 (whichever is less) of the non-resident Vendor's overall lowest price. This price-match opportunity applies to a Contract awarded under this solicitation.

G.S. §143-59(c) (1) defines a "resident Vendor" as a "Vendor that has paid unemployment taxes or income taxes in this State and whose principal place of business is located in this State." All other Vendors are considered to be non-resident Vendors. G.S. §143-59(c)(3) defines a "principal place of business" as the "principal place from which the trade or business of the Vendor is directed or managed." This refers to overall operations for the entire business entity, not merely a division or office location.

In order to qualify for this preference, a resident Vendor shall: (1) request the price-match opportunity by marking the appropriate checkbox, below; (2) provide all information requested; and (3) complete and sign the "Resident Vendor's Certification for Price-Matching Preference under Executive Order #50" (hereinafter the "Certification") included at the end of this Section. The Certification may not be submitted after the public opening of the bids. By executing the Certification, the Vendor affirms that the information provided is accurate and agrees to provide any additional information or documentation requested by the State to confirm the above certifications and statements within five (5) business days of request (including but not limited to income tax or unemployment tax returns, reports and/or filings (annual and/or quarterly); banking statements or financial/accounting statements reflecting Vendor's payment of income taxes or unemployment taxes to the State of North Carolina and such other information regarding Vendor's management or directors of its business or trade of its principal place of business).

Requesting a price-match opportunity below does not require any resident Vendor to match the lowest price in the event a Vendor qualifies for receiving the opportunity.

The State will evaluate the bids in accordance with the award criteria stated in this IFB to determine the lowest Vendor meeting the requirements of the IFB without regard to any Vendor's residency. If the Vendor with the lowest price is a North Carolina resident Vendor, then no consideration of the price-matching procedure is necessary. If the lowest bid by a Vendor meeting all requirements was submitted by a non-resident Vendor and there are no North Carolina resident Vendors that submitted a price bid that was within 5% or \$10,000 of the non-resident Vendor's price, then none of the North Carolina resident Vendors qualify for the price-matching preference and no review of a resident Vendor's Certification is required.

If the lowest price bid by a Vendor meeting requirements was submitted by a non-resident Vendor and there are one or more North Carolina resident Vendors that submitted a price bid that was within 5% or \$10,000 of the non-resident Vendor's price, then the State will determine if the Vendor has requested a price-matching opportunity, review the Certification(s) of the resident Vendor(s) to determine whether the resident Vendors have properly executed the Certification and ensure that the information and documentation provided in or with the Certification or otherwise submitted to the State supports the resident Vendor(s) qualification to exercise the price-match opportunity. The State may seek clarification of the Certification and/or information in a resident Vendor's Certification and request additional information and documentation, if needed. If any resident Vendor's award is challenged in a bid protest, based on the accuracy of that Vendor's claim of qualification for the price-matching, the resident Vendor shall provide additional information and/or documents to the State within five (5) business days of receiving a request from the State for such information and/or documentation, or its award shall be subject to cancellation.

Pursuant to G.S. §132-1.1, §105-259(b) and Paragraph 12 of the Instructions to Vendors, the State is prohibited from making public disclosure of the Vendor's tax information and documents submitted (subject to those exceptions set out in G.S. §105-259(b)) and the State shall preserve the confidentiality of the tax information and/or documents received in response to a request for clarification or to resolve a bid protest challenging a resident Vendor's qualification for the price-matching preference in accordance with applicable law. In order to further preserve the confidentiality of any Vendor's tax information and

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documentation provided to the State, the Vendor shall comply with Paragraph 14 of the Instructions to Vendors and mark "CONFIDENTIAL" at the top and bottom of each page of such information and documentation. After review of all relevant material, the State shall include in its recommendation for award a finding that the North Carolina resident Vendor(s) is or is not qualified for the price-matching opportunity.

If more than one North Carolina resident Vendor qualifies for the price-matching opportunity, then the State will prioritize the qualified North Carolina resident Vendors according to the prices bid, from lowest to highest, so that the qualified North Carolina resident Vendor that submitted the lowest bid receives the first opportunity to match the bid price of the lowest non-resident Vendor that met all IFB requirements. If the lowest qualified North Carolina resident Vendor that met all IFB requirements declines to accept Contract award, then the Contract will be offered to the next lowest qualified North Carolina resident Vendor meeting all IFB requirements and continue in this manner until either a qualified North Carolina resident Vendor accepts the Contract award or the award is made to a non-resident Vendor if no qualified North Carolina resident Vendor agrees to match the lowest price bid.

If two resident Vendors qualify for the price-matching opportunity, and both score the same on price, then the State may: (1) consider the information provided in those Vendors' Certifications or publicly available information to determine with which Vendor the Contract award would have a greater impact of stimulating or sustaining the North Carolina economy and/or is most likely to create or save jobs (e.g., if the choice is between a resident broker and a resident manufacturer of the subject goods, then the Contract will be awarded to the resident manufacturer); (2) consider the unemployment rates in the municipality or county where each Vendor's principal place of business is located; (3) seek clarification from the Vendors to ascertain the impact on their respective businesses if offered the award of the Contract; or (4) utilize any other approved method of deciding between equal bids.

If a resident Vendor requests and qualifies for the price-matching preference, the resident Vendor will be notified of its opportunity to agree to match the lowest price and receive Contract award, and it will have two (2) business days from the date and time of such notification to indicate its response, either agreeing or declining to match the lowest responsible non-resident Vendor's price and receive the Contract award based on that price match. If the IFB requests bids on alternative configurations or components, then the price match shall apply to the actual alternative chosen by the State.

If at any time during or after the procurement process (including but not limited to clarifications and resolution of bid protests) the State determines that: any certifications or information in the Certification is false, substantially inaccurate, materially misleading or that the Vendor failed to provide, within the specified time period, any additional information requested, then the State may:

- (1) Cancel any award, Contract and/or purchase order that was awarded to such Vendor based on the price-matching preference, and the resident Vendor shall be liable for all costs incurred as a result of the cancellation, including any increased costs the State may incur as a result of awarding the Contract to another Vendor;
- (2) Bar the Vendor from all price-matching opportunities in future State procurements for a period of time not to exceed three (3) years, exclusive of any debarment period;
- (3) Take action against the Vendor under the False Claims Act, G.S. §1-605 through §1-617, inclusive, for submitting a false Certification for the price-matching preference under Executive Order #50 (including but not limited to treble damages and civil penalties); and/or
- (4) Debar Vendor from doing business with the State of North Carolina for a period of time not to exceed three years, as determined by the State. Any such debarment period shall not begin to run until all damages, costs and penalties as may be assessed against such Vendor have been fully paid.

ALL VENDORS (BOTH RESIDENT AND NONRESIDENT) SHOULD ANSWER QUESTION #1.

A RESIDENT VENDOR REQUESTING A PRICE-MATCHING OPPORTUNITY MUST ANSWER BOTH QUESTIONS:

1. Vendor is a resident of North Carolina as defined in G.S. §143-59? YES NO

2. Resident Vendor requests a price-matching opportunity? YES NO

The following Sections shall be completed if a resident Vendor is requesting a price-matching opportunity:

a) PART I – EO50

Please check the applicable boxes below, in order to be considered for the price-matching preference under Executive Order #50 and G.S. §143-59(c)(1).

- I hereby certify that the Vendor paid unemployment taxes to the State of North Carolina for the most recent quarter or annually, and has specifically done so for the last such payment period.
- I hereby certify that the Vendor paid income taxes to the State of North Carolina each calendar quarter, or otherwise annually, and has specifically done so for the last such payment period.

b) PART II – EO50

1. I hereby certify that the Vendor’s principal place of business is located in North Carolina.

A. **Business Type** (Please check the applicable box):

- Corporation (all types)
- Limited Liability Company
- General Partnership
- Limited Partnership
- Limited Liability Partnership
- Sole Proprietorship
- Individual
- Unincorporated Association
- Other: _____

B. Provide address of principal place of business:

4541 Preslyn Drive
 Street Address (no P.O. Box number)

Raleigh NC 27616
 City, State, Zip Code

Is the above address the location of Vendor’s headquarters? YES NO

If Vendor has a public website, provide the link/address: www.natpow.com

C. **ATTACH A COPY OF VENDOR’S MOST RECENT FILINGS WITH THE NORTH CAROLINA SECRETARY OF STATE** (such as Vendor’s Certificate of Authority, Annual Report or such other filing that discloses a North Carolina business address for the Vendor).

OR (check the box below)

Vendor certifies that its business is **not** required to make filings with the North Carolina Secretary of State.

RESIDENT VENDOR'S CERTIFICATION FOR PRICE-MATCHING OPPORTUNITY

UNDER EXECUTIVE ORDER #50

NOTICE: The Price-Matching Opportunity will only be given to Vendors that fully complete this affidavit (i.e. all information must be provided, all supporting documents must be attached, the affidavit must be signed by an authorized representative of the Vendor and the affidavit must be notarized) and demonstrate their qualifications for the Price-Matching Preference through the certification and information provided in this affidavit and any other required information.

Affidavit of National Power Corporation (name of resident Vendor, hereinafter the "Vendor")

The undersigned hereby certifies that he or she has read this certification, that all information provided in Part I and Part II, above, is true and accurate, and that he or she is an officer, member, partner, owner or such managing employee of the Vendor (the "Authorized Representative") that is authorized to execute this affidavit and to bind the Vendor to the certifications, statements and agreements herein.

Name of Authorized Representative: John S. Dixon
Signature: [Signature]
Title: Generator Division Mgr
Date: 10/29/15

NOTARY:
State of North Carolina County of Wake [State]
Subscribed and sworn to before me this 29th day of October 2015
Notary Public: [Signature] My commission expires May 23rd, 2017

JOANNA MEREDITH
Notary Public
Wake County, North Carolina
My Commission Expires 5/23/17

CD-479 (40)
10-22-13

Business Corporation Annual Report

SOSID: 0175941
Date Filed: 5/30/2014 2:10:00 PM
Elaine F. Marshall
North Carolina Secretary of State

2014 150 01210

Name of Business Corporation: NATIONAL POWER CORPORATION

Secretary of State ID: 0175941

State of Formation:

Fiscal Year Ending: 12 31 13

I hereby certify that an annual report completed in its entirety has been submitted and the information requested below (required by NCGS 55-16-22) has not changed and is therefore complete.

Section A: Registered Agent's Information

1. Name of Registered Agent: HAROLD E. YOUNGBLOOD

2. Signature of the New Registered Agent:

(Signature constitutes consent to the appointment)

3. Registered Office Street Address & County

4. Registered Office Mailing Address

4541 PRESLYN DRIVE
RALEIGH, NC 27616 WAKE

4541 PRESLYN DRIVE
RALEIGH, NC 27616 WAKE

Section B: Principal Office Information

1. Description of Nature of Business: SALE OF COMPUTER POWER EQUIPMENT

2. Principal Office Phone Number: 919-790-1672

3. Principal Office Email:

4. Principal Office Street Address & County

5. Principal Office Mailing Address

4541 PRESLYN DRIVE
RALEIGH, NC 27616 WAKE

4541 PRESLYN DRIVE
RALEIGH, NC 27616 WAKE

Section C: Officers (Enter additional Officers in Section E.)

Name: HAROLD YOUNGBLOOD

Name: JANE YOUNGBLOOD

Name: JOHN LOWE

Title: PRESIDENT

Title: SECRETARY

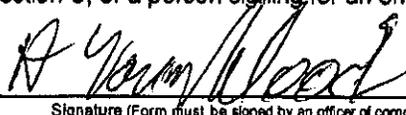
Title: VICE PRESIDENT

Address:
6905 NORTH RIDGE DRIVE
RALEIGH, NC 27615

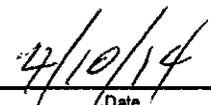
Address:
6905 NORTH RIDGE DRIVE
RALEIGH NC 27615

Address:
6808 WOODHAVEN COURT
RALEIGH, NC 27615

Section D: Certification of Annual Report Section D must be completed in its entirety and signed by a person listed under Section C, or a person signing for an entity listed under Section C.



Signature (Form must be signed by an officer of corporation)



Date

HAROLD E. YOUNGBLOOD

Print or Type Name of Officer

PRESIDENT

Title

ATTACHMENT D: INSTRUCTIONS TO VENDORS

1. **READ, REVIEW AND COMPLY:** It shall be the Vendor's responsibility to read this entire document, review all enclosures and attachments, and any addenda thereto, and comply with all requirements specified herein, regardless of whether appearing in these Instructions to Vendors or elsewhere in this IFB document.
2. **LATE BIDS:** Late bids, regardless of cause, will not be opened or considered, and will automatically be disqualified from further consideration. It shall be the Vendor's sole responsibility to ensure delivery at the designated office by the designated time.
3. **ACCEPTANCE AND REJECTION:** The State reserves the right to reject any and all bids, to waive any informality in bids and, unless otherwise specified by the Vendor, to accept any item in the bid. If either a unit price or an extended price is obviously in error and the other is obviously correct, the incorrect price will be disregarded.
4. **BASIS FOR REJECTION:** Pursuant to 01 NCAC 05B .0501, the State reserves the right to reject any and all offers, in whole or in part, by deeming the offer unsatisfactory as to quality or quantity, delivery, price or service offered, non-compliance with the requirements or intent of this solicitation, lack of competitiveness, error(s) in specifications or indications that revision would be advantageous to the State, cancellation or other changes in the intended project or any other determination that the proposed requirement is no longer needed, limitation or lack of available funds, circumstances that prevent determination of the best offer, or any other determination that rejection would be in the best interest of the State.
5. **EXECUTION:** Failure to sign the Execution page (page 3 of the IFB) in the indicated space will render bid non-responsive and it shall be rejected.
6. **ORDER OF PRECEDENCE:** In cases of conflict between specific provisions in this solicitation, the order of precedence shall be (high to low) (1) any special terms and conditions specific to this IFB, including any negotiated terms; (2) specifications in Sections 2, 4, and 5 of this IFB; (3) North Carolina General Contract Terms and Conditions in ATTACHMENT E: NORTH CAROLINA GENERAL CONTRACT TERMS AND CONDITIONS; (4) Instructions in ATTACHMENT D: INSTRUCTIONS TO VENDORS; and (5) Vendor's Bid.
7. **INFORMATION AND DESCRIPTIVE LITERATURE:** Vendor shall furnish all information requested and in the spaces provided in this document. Further, if required elsewhere in this bid, each Vendor must submit with their bid sketches, descriptive literature and/or complete specifications covering the products offered. Reference to literature submitted with a previous bid or available elsewhere will not satisfy this provision. Bids that do not comply with these requirements shall constitute sufficient grounds to reject the bid.
8. **RECYCLING AND SOURCE REDUCTION:** It is the policy of the State to encourage and promote the purchase of products with recycled content to the extent economically practicable, and to purchase items which are reusable, refillable, repairable, more durable and less toxic to the extent that the purchase or use is practicable and cost-effective. We also encourage and promote using minimal packaging and the use of recycled/recyclable products in the packaging of commodities purchased. However, no sacrifice in quality of packaging will be acceptable. The company remains responsible for providing packaging that will adequately protect the commodity and contain it for its intended use. Companies are strongly urged to bring to the attention of purchasers those products or packaging they offer which have recycled content and that are recyclable.
9. **SUSTAINABILITY:** To support the sustainability efforts of the State of North Carolina we solicit your cooperation in this effort. Pursuant to Executive Order 156 (1999), it is desirable that all responses meet the following:
 - All copies of the bid are printed double sided.
 - All submittals and copies are printed on recycled paper with a minimum post-consumer content of 30%.
 - Unless absolutely necessary, all bids and copies should minimize or eliminate use of non-recyclable or non-reusable materials such as plastic report covers, plastic dividers, vinyl sleeves, and GBC binding. Three-ringed binders, glued materials, paper clips, and staples are acceptable.
 - Materials should be submitted in a format which allows for easy removal, filing and/or recycling of paper and binder materials. Use of oversized paper is strongly discouraged unless necessary for clarity or legibility.
10. **HISTORICALLY UNDERUTILIZED BUSINESSES:** Pursuant to General Statute §143-48 and Executive Order 150 (1999), the State invites and encourages participation in this procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled.
11. **RECIPROCAL PREFERENCE:** G.S. §143-59 establishes a reciprocal preference requirement to discourage other states from favoring their own resident Vendors by applying percentage increases to any bid by a North Carolina resident Vendor. The

"Principal Place of Business" is defined as the principal place from which the trade or business of the Vendor is directed or managed.

12. **CONFIDENTIAL INFORMATION:** To the extent permitted by applicable statutes and rules, the State will maintain confidential trade secrets that the Vendor does not wish disclosed. As a condition to confidential treatment, each page containing trade secret information shall be identified in boldface at the top and bottom as "CONFIDENTIAL" by the Vendor, with specific trade secret information enclosed in boxes or similar indication. Cost information shall not be deemed confidential under any circumstances. Regardless of what a Vendor may label as a trade secret, the determination whether it is or is not entitled to protection will be determined in accordance with G.S. §132-1.2. Any material labeled as confidential constitutes a representation by the Vendor that it has made a reasonable effort in good faith to determine that such material is, in fact, a trade secret under G.S. §132-1.2. Vendors are urged and cautioned to limit the marking of information as a trade secret or as confidential so far as is possible.
13. **PROTEST PROCEDURES:** When a Vendor wishes to protest a Contract awarded by the Secretary of Administration or by an agency in an awarded amount of at least \$25,000 resulting from this solicitation, the Vendor shall submit a written request addressed to the State Purchasing Officer at Purchase and Contract, 1305 Mail Service Center, Raleigh, NC 27699 -1305. This request shall be received in the Division of Purchase and Contract within thirty (30) consecutive calendar days from the date of the Contract award. Protest letters shall contain specific grounds and reasons for the protest, how the protesting party was harmed by the award made and any documentation providing support for the protesting party's claims. **Note:** Contract award notices are sent only to the Vendor actually awarded the Contract, and not to every person or firm responding to a solicitation. Bid status and Award notices are posted on the Internet at <https://www.ips.state.nc.us/ips/>. All protests will be handled pursuant to the North Carolina Administrative Code, Title 1, Department of Administration, Chapter 5, Purchase and Contract, Section 5B. 1519 (01 NCAC 05B .1519).

If a ground of a protest is based on a challenge to the qualification of a North Carolina resident Vendor to be awarded a Contract pursuant to Executive Order #50 (price-matching opportunity), the State Purchasing Officer or procurement officer may request the North Carolina resident Vendor to produce documentation substantiating the North Carolina resident Vendor's qualification for the subject preference. These documents should be requested and received prior to any decision on whether to deny or grant a protest meeting. As provided herein, the North Carolina resident Vendor is required to produce to the State the requested documentation within five (5) business days of the State's request and failure to produce the documents within that time period may result in the cancellation of the Contract. Also note that any tax, financial, accounting or banking documents the North Carolina resident Vendor submits to the State in connection with the resolution of a protest shall not be disclosed to the protester pursuant to G.S. §132-1.1 and §105-259(b) and the State shall preserve the confidentiality of such documents
14. **MISCELLANEOUS:** Masculine pronouns shall be read to include feminine pronouns, and the singular of any word or phrase shall be read to include the plural and vice versa.
15. **COMMUNICATIONS BY VENDORS:** In submitting its bid, the Vendor agrees not to discuss or otherwise reveal the contents of its bid to any source, government or private, outside of the using or issuing agency until after the award of the Contract or cancellation of this IFB. All Vendors are forbidden from having any communications with the using or issuing agency, or any other representative of the State concerning the solicitation, during the evaluation of the bids (i.e., after the public opening of the bids and before the award of the Contract), unless the State directly contacts the Vendor(s) for purposes of seeking clarification or another reason permitted by the solicitation. A Vendor shall not: (a) transmit to the issuing and/or using agency any information commenting on the ability or qualifications of any other Vendor to provide the advertised good, equipment, commodity; (b) identify defects, errors and/or omissions in any other Vendor's bid and/or prices at any time during the procurement process; and/or (c) engage in or attempt any other communication or conduct that could influence the evaluation and/or award of the Contract that is the subject of this IFB. Vendors not in compliance with this provision may be disqualified, at the option of the State, from the Contract award. Only those communications with the using agency or issuing agency authorized by this IFB are permitted.
16. **INFORMAL COMMENTS:** The State shall not be bound by informal explanations, instructions or information given at any time by anyone on behalf of the State during the competitive process or after award. The State is bound only by information provided in this IFB and in formal Addenda issued through IPS.
17. **TABULATIONS:** Bid tabulations can be electronically retrieved at the Interactive Purchasing System (IPS), <https://www.ips.state.nc.us/ips/BidNumberSearch>. Click on the IPS BIDS icon, click on Search for Bid, enter the bid number, and then search. Tabulations will normally be available at this web site not later than one working day after the bid opening. Lengthy or complex tabulations may be summarized, with other details not made available on IPS, and requests for additional details or information concerning such tabulations cannot be honored.

18. **VENDOR REGISTRATION AND SOLICITATION NOTIFICATION SYSTEM:** Vendor Link NC allows Vendors to electronically register free with the State to receive electronic notification of current procurement opportunities for goods and services of potential interests to them available on the Interactive Purchasing System, as well as notifications of status changes to those solicitations. Online registration and other purchasing information is available at the following website <http://www.pandc.nc.gov/>.
19. **WITHDRAWAL OF BID:** a bid may be withdrawn only in writing and actually received by the office issuing the IFB prior to the time for the opening of bids identified on the cover page of this IFB (or such later date included in an Addendum to the IFB). A withdrawal request must be on Vendor's letterhead and signed by an official of the Vendor authorized to make such request. Any withdrawal request made after the opening of bids shall be allowed only for good cause shown and in the sole discretion of the Division of Purchase and Contract.
20. **COST FOR BID PREPARATION:** Any costs incurred by Vendor in preparing or submitting bids are the Vendor's sole responsibility; the State of North Carolina will not reimburse any Vendor for any costs incurred prior to award.
21. **VENDOR'S REPRESENTATIVE:** Each Vendor shall submit with its bid the name, address, and telephone number of the person(s) with authority to bind the firm and answer questions or provide clarification concerning the firm's bid.
22. **INSPECTION AT VENDOR'S SITE:** The State reserves the right to inspect, at a reasonable time, the equipment/item, plant or other facilities of a prospective Vendor prior to Contract award, and during the Contract term as necessary for the State determination that such equipment/item, plant or other facilities conform with the specifications/requirements and are adequate and suitable for the proper and effective performance of the Contract.

ATTACHMENT E: NORTH CAROLINA GENERAL CONTRACT TERMS AND CONDITIONS

1. **DEFAULT AND PERFORMANCE BOND:** If, through any cause, Vendor shall fail to fulfill in timely and proper manner the obligations under this agreement, the State shall have the right to terminate this contract by giving written notice to the Vendor and specifying the effective date thereof. In case of default by the Vendor for any reason, the State may procure substitute goods from other sources and hold the Vendor responsible for any excess cost occasioned thereby. The State reserves the right to require at any time a performance bond or other acceptable alternative guarantees from a successful Vendor without expense to the State.

The Vendor shall be in default, if its Certification submitted for a price-matching preference under Executive Order #50 and G.S. §143-59 was false and/or contained materially misleading or inaccurate information, and/or Vendor failed to provide information and documentation requested by the State to substantiate Vendor's Certification.

In addition, in the event of default by the Vendor under this Contract, the State may immediately cease doing business with the Vendor, immediately terminate for cause all existing Contracts the State has with the Vendor, and debar the Vendor from doing future business with the State. The State may take action against the Vendor under the False Claims Act, G.S. §1-605 through §1-617, inclusive, for submitting a false Certification for the price-matching preference under Executive Order #50 (including but not limited to treble damages and civil penalties).

Upon the Vendor filing a petition for bankruptcy or the entering of a judgment of bankruptcy by or against the Vendor, the State may immediately terminate, for cause, this Contract and all other existing Contracts the Vendor has with the State, and debar the Vendor from doing future business with the State.

2. **GOVERNMENTAL RESTRICTIONS:** In the event any Governmental restrictions are imposed which necessitate alteration of the material, quality, workmanship or performance of the items offered prior to their delivery, it shall be the responsibility of the Vendor to notify, in writing, the issuing purchasing office at once, indicating the specific regulation which required such alterations. The State reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel the Contract.

3. **AVAILABILITY OF FUNDS:** Any and all payments to the Vendor are dependent upon and subject to the availability of funds to the agency for the purpose set forth in this agreement.

4. **TAXES:** Any applicable taxes shall be invoiced as a separate item.

- a. G.S. §143-59.1 bars the Secretary of Administration from entering into Contracts with Vendors if the Vendor or its affiliates meet one of the conditions of G. S. §105-164.8(b) and refuses to collect use tax on sales of tangible personal property to purchasers in North Carolina. Conditions under G. S. §105-164.8(b) include: (1) Maintenance of a retail establishment or office, (2) Presence of representatives in the State that solicit sales or transact business on behalf of the Vendor and (3) Systematic exploitation of the market by media-assisted, media-facilitated, or media-solicited means. By execution of the bid document the Vendor certifies that it and all of its affiliates, (if it has affiliates), collect(s) the appropriate taxes.
- b. All agencies participating in this Contract are exempt from Federal Taxes, such as excise and transportation. Exemption forms submitted by the Vendor will be executed and returned by the using agency.
- c. Prices offered are not to include any personal property taxes, nor any sales or use tax (or fees) unless required by the North Carolina Department of Revenue.

5. **SITUS:** The place of this Contract, its situs and forum, shall be North Carolina, where all matters, whether sounding in Contract or tort, relating to its validity, construction, interpretation and enforcement shall be determined.

6. **GOVERNING LAWS:** This Contract is made under and shall be governed and construed in accordance with the laws of the State of North Carolina, without regard to its conflict of laws rules.

7. **PAYMENT TERMS:** Payment terms are Net not later than 30 days after receipt of correct invoice or acceptance of goods, whichever is later. The using agency is responsible for all payments to the Vendor under the Contract. Payment by some agencies may be made by procurement card, if the Vendor accepts that card (Visa, MasterCard, etc.) from other customers, and it shall be accepted by the Vendor for payment under the same terms and conditions as any other method of payment accepted by the Vendor. If payment is made by procurement card, then payment may be processed immediately by the Vendor.

8. **AFFIRMATIVE ACTION:** The Vendor will take affirmative action in complying with all Federal and State requirements

concerning fair employment and employment of people with disabilities, and concerning the treatment of all employees without regard to discrimination by reason of race, color, religion, sex, national origin or disability.

9. **CONDITION AND PACKAGING:** Unless otherwise provided by special terms and conditions or specifications, it is understood and agreed that any item offered or shipped has not been sold or used for any purpose and shall be in first class condition. All containers/packaging shall be suitable for handling, storage or shipment.
10. **STANDARDS:** All manufactured items and/or fabricated assemblies subject to operation under pressure, operation by connection to an electric source, or operation involving a connection to a manufactured, natural, or LP gas source shall be constructed and approved in a manner acceptable to the appropriate state inspector which customarily requires the label or re-examination listing or identification marking of the appropriate safety standard organization; such as the American Society of Mechanical Engineers for pressure vessels; the Underwriters Laboratories and /or National Electrical Manufacturers' Association for electrically operated assemblies; or the American Gas Association for gas operated assemblies, where such approvals of listings have been established for the type of device offered and furnished. Further, all items furnished shall meet all requirements of the Occupational Safety and Health Act (OSHA), and state and federal requirements relating to clean air and water pollution.

The complete product(s) offered herein, and NOT merely its component parts or subsystems, must comply with the above requirement for safety listing. Having the appropriate certification or safety label affixed to any device delivered pursuant to this solicitation, under the conditions described above, is a material condition of any contract awarded as a result of this solicitation. All costs for product and industry certifications and listings, and any other actions required to supply conforming products to the State as described in this IFB, are the sole responsibility of the Vendor. The certification or safety label shall be affixed and be visible on the OUTSIDE of the all products that require a certification or safety label in order to pass the State Quality Acceptance inspection.

11. **INTELLECTUAL PROPERTY INDEMNITY:** Vendor shall hold and save the State, its officers, agents and employees, harmless from liability of any kind, including costs and expenses, resulting from infringement of the rights of any third party in any copyrighted material, patented or unpatented invention, articles, device or appliance delivered in connection with this contract.
12. **ADVERTISING:** Vendor agrees not to use the existence of this Contract or the name of the State of North Carolina as part of any commercial advertising or marketing of products or services. A Vendor may inquire whether the State is willing to act as a reference by providing factual information directly to other prospective customers.
13. **ACCESS TO PERSONS AND RECORDS:** During and after the term hereof, the State Auditor and any using agency's internal auditors shall have access to persons and records related to this Contract to verify accounts and data affecting fees or performance under the Contract, as provided in G. S. §143-49(9).
14. **ASSIGNMENT:** No assignment of the Vendor's obligations or the Vendor's right to receive payment hereunder shall be permitted.

However, upon written request approved by the issuing purchasing authority and solely as a convenience to the Vendor, the State may:

- a. Forward the Vendor's payment check directly to any person or entity designated by the Vendor, and
- b. Include any person or entity designated by Vendor as a joint payee on the Vendor's payment check.

In no event shall such approval and action obligate the State to anyone other than the Vendor and the Vendor shall remain responsible for fulfillment of all Contract obligations. Upon advance written request, the State may, in its unfettered discretion, approve an assignment to the surviving entity of a merger, acquisition or corporate reorganization, if made as part of the transfer of all or substantially all of the Vendor's assets. Any purported assignment made in violation of this provision shall be void and a material breach of this Contract.

15. **INSURANCE:**

COVERAGE - During the term of the Contract, the Vendor at its sole cost and expense shall provide commercial insurance of such type and with such terms and limits as may be reasonably associated with the Contract. As a minimum, the Vendor shall provide and maintain the following coverage and limits:

- a. **Worker's Compensation** - The Vendor shall provide and maintain Worker's Compensation Insurance, as required by the laws of North Carolina, as well as employer's liability coverage with minimum limits of \$500,000.00, covering all of Vendor's employees who are engaged in any work under the Contract. If any work is sublet, the Vendor shall require

the sub-Contractor to provide the same coverage for any of his employees engaged in any work under the Contract.

- b. **Commercial General Liability** - General Liability Coverage on a Comprehensive Broad Form on an occurrence basis in the minimum amount of \$500,000.00 Combined Single Limit. (Defense cost shall be in excess of the limit of liability.)
- c. **Automobile** - Automobile Liability Insurance, to include liability coverage, covering all owned, hired and non-owned vehicles, used in connection with the Contract. The minimum combined single limit shall be \$150,000.00 bodily injury and property damage; \$150,000.00 uninsured/under insured motorist; and \$2,000.00 medical payment.

REQUIREMENTS - Providing and maintaining adequate insurance coverage is a material obligation of the Vendor and is of the essence of this Contract. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The Vendor shall at all times comply with the terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing North Carolina laws or this Contract. The limits of coverage under each insurance policy maintained by the Vendor shall not be interpreted as limiting the Vendor's liability and obligations under the Contract.

16. **GENERAL INDEMNITY:** The Vendor shall hold and save the State, its officers, agents, and employees, harmless from liability of any kind, including all claims and losses accruing or resulting to any other person, firm, or corporation furnishing or supplying work, services, materials, or supplies in connection with the performance of this Contract, and from any and all claims and losses accruing or resulting to any person, firm, or corporation that may be injured or damaged by the Vendor in the performance of this Contract and that are attributable to the negligence or intentionally tortious acts of the Vendor provided that the Vendor is notified in writing within 30 days that the State has knowledge of such claims. The Vendor represents and warrants that it shall make no claim of any kind or nature against the State's agents who are involved in the delivery or processing of Vendor goods to the State. The representation and warranty in the preceding sentence shall survive the termination or expiration of this Contract.
17. **TERMINATION FOR CONVENIENCE:** Following an initial ninety-day period from the date of award, either Party may terminate this Contract for any reason by providing 30 days' notice in writing to the other Party. If the contract is terminated by the State as provided in this section 17, the Vendor shall be paid for all performance completed and accepted by the State, less payment or compensation previously made. If terminated by the Vendor, Vendor shall complete delivery of any orders by the State received by the Vendor at the time notice is received.
18. **ELECTRONIC PROCUREMENT:** (a) Purchasing shall be conducted through the Statewide E-Procurement Service. The State's third party agent shall serve as the Supplier Manager for this E-Procurement Service. The Vendor shall register for the Statewide E-Procurement Service within two (2) business days of notification of award in order to receive an electronic purchase order resulting from award of this contract.
- (b) **THE SUCCESSFUL BIDDER(S) SHALL PAY A TRANSACTION FEE OF 1.75% (.0175) ON THE TOTAL DOLLAR AMOUNT (EXCLUDING SALES TAXES) OF GOODS INCLUDED ON EACH PURCHASE ORDER ISSUED THROUGH THE STATEWIDE E-PROCUREMENT SERVICE.** This applies to all purchase orders, regardless of the quantity or dollar amount of the purchase order. The transaction fees shall not be stated or included as a separate item on the invoice. There are no additional fees or charges to the Vendor for the services rendered by the Supplier Manager under this contract. Vendor will receive a credit for transaction fees they paid for the purchase of any item(s) if an item(s) is returned through no fault of the Vendor. Transaction fees are non-refundable when an item is rejected and returned, or declined, due to the Vendor's failure to perform or comply with specifications or requirements of the contract.
- (c) Vendor or its Authorized Reseller, as applicable, will be invoiced monthly for the State's transaction fee by the Supplier Manager. The transaction fee shall be based on a) purchase activity for the prior month, or b) purchases for which the supplier invoice has been paid. Unless Supplier Manager receives written notice from the Vendor identifying with specificity any errors in an invoice for the transaction fee within thirty (30) days of the receipt of invoice, such invoice shall be deemed to be correct and Vendor shall have waived its right to later dispute the accuracy and completeness of the invoice. Payment of the transaction fee by the Vendor is due to the account designated by the State within thirty (30) days after receipt of the invoice for the transaction fee. If payment of the transaction fee is not received by the State within this payment period, it shall be considered a material breach of contract. Pursuant to North Carolina General Statute §147-86.23, the Service will charge interest and late payment penalties on past due balances. Interest shall be charged at the rate set by the Secretary of Revenue pursuant to N.C.G.S. §105-241.21 as of the date the balances are past due. The late-payment penalty will be ten percent (10%) of the account receivable. Within thirty (30) days of the receipt of invoice, Vendor may dispute in writing the accuracy of an invoice. No interest shall be charged on disputed and overdue amounts to the extent the State agrees to

reduce or adjust the amount in dispute. The Supplier Manager shall provide, whenever reasonably requested by the Vendor in writing (including electronic documents), supporting documentation from the E-Procurement Service that accounts for the amount of the invoice.

(d) The Supplier Manager will capture the order from the State approved user, including the shipping and payment information, and submit the order in accordance with the E-Procurement Service. Subsequently, the Supplier Manager will send those orders to the appropriate Vendor on State Contract. The State or State-approved user, not the Supplier Manager, shall be responsible for the solicitation, bids received, evaluation of bids received, award of contract, and the payment for goods delivered.

(e) Vendor agrees at all times to maintain the confidentiality of its user name and password for the Statewide E-Procurement Services. If Vendor is a corporation, partnership or other legal entity, then the Vendor may authorize its employees to use its password. Vendor shall be responsible for all activity and all charges by such employees. Vendor agrees not to permit a third party to use the Statewide E-Procurement Services through its account. If there is a breach of security through the Vendor's account, Vendor shall immediately change its password and notify the Supplier Manager of the security breach by e-mail. Vendor shall cooperate with the State and the Supplier Manager to mitigate and correct any security breach.

VENDOR IS AND SHALL REMAIN RESPONSIBLE FOR PAYING THE TRANSACTION FEE ON BEHALF OF ANY SUB-CONTRACTOR OR DEALER INVOLVED IN PERFORMANCE UNDER THIS CONTRACT IN THE EVENT THAT SUCH SUB-CONTRACTOR OR DEALER DEFAULTS ON PAYMENT.

19. **COMPLIANCE WITH LAWS:** Vendor shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to the conduct of its business and performance in accordance with this contract, including those of federal, state, and local agencies having jurisdiction and/or authority.
20. **ENTIRE AGREEMENT:** This IFB and any documents incorporated specifically by reference represent the entire agreement between the parties and supersede all prior oral or written statements or agreements. This IFB, any Addenda hereto, and the Vendor's bid are incorporated herein by reference as though set forth verbatim.

All promises, requirements, terms, conditions, provisions, representations, guarantees, and warranties contained herein shall survive the contract expiration or termination date unless specifically provided otherwise herein, or unless superseded by applicable Federal or State statutes of limitation.
21. **AMENDMENTS:** This contract may be amended only by written amendments duly executed by the State and the Vendor. The NC Division of Purchase and Contract shall give prior approval to any amendment to a contract awarded through that office.
22. **WAIVER:** The failure to enforce or the waiver by the State of any right or of breach or default on one occasion or instance shall not constitute the waiver of such right, breach or default on any subsequent occasion or instance.
23. **FORCE MAJEURE:** Neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations as a result of events beyond its reasonable control, including without limitation, fire, power failures, any act of war, hostile foreign action, nuclear explosion, riot, strikes or failures or refusals to perform under subcontracts, civil insurrection, earthquake, hurricane, tornado, or other catastrophic natural event or act of God.

NPC

ATTACHMENT F: EQUIPMENT PREVENTIVE MAINTENANCE QUESTIONNAIRE FORM (EPMQ)

REVISED 09/10

The successful Vendor must complete and return this form within **10 days after receipt of purchase order** to the DOT Fleet Procurement Section. DOT will refuse delivery of any equipment until this form has been provided complete and accurate. This is a generic form therefore fill in only the items that apply to your product.

Please indicate OEM recommended parts and fluids when completing this form.

Successful Vendor: _____ Purchase Order No. _____

Description _____ Quantity Purchased _____

Equipment Make _____ Equipment Model _____

Engine: Make _____ Model _____

No. of Cylinders _____ Horsepower _____ Displacement: _____ Liters

Engine Oil Capacity _____ (Qts.) Oil Filter Make _____

Oil Filter Part No. Primary _____ Secondary _____

Engine Oil Type _____ Oil Weight, 1st Choice _____

2nd Choice _____ 3rd Choice _____

Air Filter Make _____ Part No. Primary _____ Secondary _____

Fuel Type: Gas _____ Diesel _____ LPG _____ CNG _____ BIO Diesel _____

Fuel Tank Capacity: _____ (Gals.) Fuel Filter Make _____

Fuel Filter Part No. Primary _____ Secondary: _____

Fuel/Water Separator Filter Part No. _____

Diesel Exhaust Fluid Capacity _____ (Gals.)

Coolant System: Antifreeze Type _____ (Extended, Long Life, Conventional, etc.)

Color _____ Mixture _____ Radiator Capacity _____ (Qts.)

Coolant Filter Make _____ Part No. _____

Transmission: Make _____ Model _____ Automatic _____ Manual _____

Fluid/Lube Type: _____ Fluid/Lube Capacity: _____ (Qts.)

Additive _____ Part No. _____

Additive Mixture _____ Capacity _____

Transmission Filter Make _____ Part No _____

Clutch Fluid Type _____

1st Rear Differential: Make _____ Model _____

Axle Size _____ (LBS.) Fluid/Lube Type _____

Fluid/Lube Capacity _____ (Qts.)

2nd Rear Differential: Make _____ Model _____
Axle Size _____ (Lbs.) Fluid/Lube Type _____
Fluid/Lube Capacity _____ (Qts.)

Front Differential: Make _____ Model _____
Axle Size _____ (Lbs.) Fluid/Lube Type _____
Fluid/Lube Capacity _____ (Qts.)

Wheel Hubs: Fluid/Lube Type _____ Fluid/Lube Capacity _____ (Qts.)

Transfer Case: Make _____ Model _____
Fluid/Lube Type _____ Fluid/Lube Capacity _____ (Qts.)
Additive _____ Part No. _____
Additive Mixture _____ Capacity _____

Tandem: Fluid/Lube Type _____ (Grader) Fluid/Lube Capacity _____ (Qts.)

Planetary: Fluid/Lube Type _____ Fluid/Lube Capacity _____ (Qts.)
Additive _____ Part No. _____
Recommended Additive Mixture _____ Capacity _____

Gear Box: Make _____ Model _____
Fluid/Lube Type _____ Fluid/Lube Capacity _____ (Qts.)

Steering: Fluid/Lube Type _____ Fluid/Lube Capacity _____ (Qts.)

Hydraulic: Pump Make _____ Model _____
Part No _____ / _____

Motor Make _____ Model _____
Part No _____ / _____

Fluid/Lube Type _____ Fluid/Lube Capacity _____ (Qts.)

Hydraulic Fluid Type: Conductive _____ Non-Conductive _____

Hydraulic Filter Make _____ Part No. for Suction _____

Part No. for Pressure _____ Part No. for Tank _____

Zerk Fittings: Lube _____ (NLGI # 2, MPEP-2, EP-2, etc.)

Wheel Bearing Lube: Lube _____

SD175 | 6.7L | 175 kW

INDUSTRIAL DIESEL GENERATOR SET

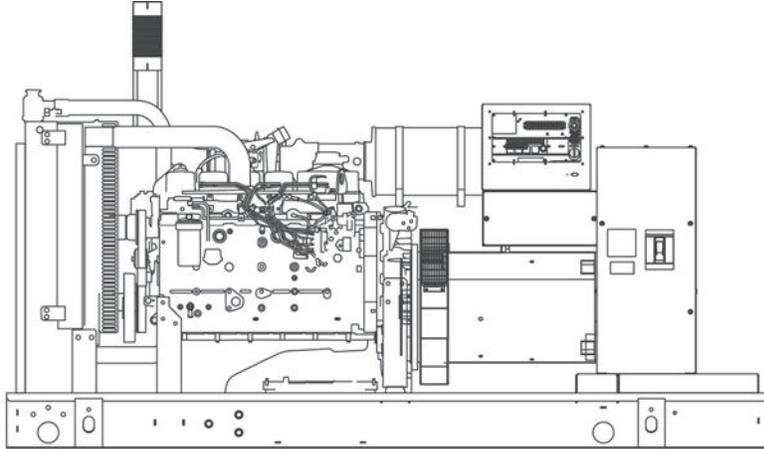
EPA Certified Stationary Emergency

STANDBY POWER RATING

175 kW, 219 kVA, 60 Hz

PRIME POWER RATING*

158 kW, 197 kVA, 60 Hz



*Built in the USA using domestic and foreign parts

*EPA Certified Prime ratings are not available in the U.S. or its Territories.

**Certain options or customization may not hold certification valid.

Image used for illustration purposes only

CODES AND STANDARDS

Generac products are designed to the following standards:

 UL2200, UL508, UL142, UL498

 NFPA70, 99, 110, 37

 NEC700, 701, 702, 708

 ISO9001, 8528, 3046, 7637, Pluses #2b, 4

 NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41

POWERING AHEAD

For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac's gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

STANDARD FEATURES

ENGINE SYSTEM

General

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Critical Exhaust Silencer (enclosed only)
- Factory Filled Oil
- Radiator Duct Adapter (open set only)

Fuel System

- Fuel lockoff solenoid
- Primary fuel filter

Cooling System

- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene glycol antifreeze
- 120 VAC Coolant Heater

Engine Electrical System

- Battery charging alternator
- Battery cables
- Battery tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 leads (3-phase, non 600 V)
- Class H insulation material
- Vented rotor
- 2/3 pitch
- Skewed stator
- Auxiliary voltage regulator power winding
- Amortisseur winding
- Brushless Excitation
- Sealed Bearings
- Automated manufacturing (winding, insertion, lacing, varnishing)
- Rotor dynamically spin balanced
- Full load capacity alternator
- Protective thermal switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Silencer Heat Shield
- Wrapped Exhaust Piping
- Silencer housed in discharge hood (enclosed only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Limited Warranty (Prime rated Units)
- Silencer mounted in the discharge hood (enclosed only)

ENCLOSURE (IF SELECTED)

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

TANKS (IF SELECTED)

- UL 142
- Double wall
- Vents
- Sloped top
- Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level
- Check valve in supply and return lines
- Rhino Coat™ - Textured polyester powder coat
- Stainless hardware

CONTROL SYSTEM



Control Panel

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)

- Power Factor
- kW Hours, Total & Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password parameter adjustment protection

- Single point ground
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

Alarms

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)

CONFIGURABLE OPTIONS

ENGINE SYSTEM

General

- Oil Heater
- Industrial Exhaust Silencer

Fuel System

- Flexible fuel lines
- Primary fuel filter

Engine Electrical System

- 10A UL battery charger
- 2.5A UL battery charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical coating
- Permanent Magnet Excitation

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breaker

GENERATOR SET

- Gen-Link Communications Software (English Only)
- IBC Seismic Certification
- 8 Position Load Center
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty

ENCLOSURE

- Weather Protected
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Steel Enclosure
- Aluminum Enclosure
- 150 MPH Wind Kit
- 12 VDC Enclosure Lighting Kit
- 120 VAC Enclosure Lighting Kit
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch

TANKS (Size on last page)

- Electrical Fuel Level
- Mechanical Fuel Level
- 8" Fill Extension
- 13" Fill Extension

CONTROL SYSTEM

- 21-Light Remote Annunciator
- Remote Relay Panel (8 or 16)
- Oil Temperature Sender with Indication Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- Remote Communication - Modem
- Remote Communication - Ethernet
- 10A Run Relay
- Ground Fault Indication and Protection Functions

ENGINEERED OPTIONS

ENGINE SYSTEM

- Coolant heater ball valves
- Block Heaters
- Fluid containment pans

ALTERNATOR SYSTEM

- 3rd Breaker Systems

CONTROL SYSTEM

- Spare inputs (x4) / outputs (x4) - H Panel Only
- Battery Disconnect Switch

GENERATOR SET

- Special Testing

ENCLOSURE

- Motorized Dampers
- Door switched for intrusion alert
- Enclosure ambient heaters

TANKS

- Overfill Protection Valve
- UL2085 Tank
- ULC S-601 Tank
- Stainless Steel Tank
- Special Fuel Tanks (MIDEQ and FL DEP/DERM, etc.)
- Vent Extensions

RATING DEFINITIONS

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications. Power ratings in accordance with ISO 8528-1, Second Edition

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	6
Type	In-Line
Displacement - L (cu In)	6.7 (406.86)
Bore - mm (in)	104 (4.09)
Stroke - mm (in)	128 (5.2)
Compression Ratio	16.5:1
Intake Air Method	Turbocharged/Aftercooled
Cylinder Head Type	4 Valve
Piston Type	Alloy Aluminum
Crankshaft Type	Forged Steel

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	+/- 0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow Cartridge
Crankcase Capacity - L (qts)	19.6 (20.7)

Cooling System

Cooling System Type	Closed Recovery
Water Pump	Belt Driven Centrifugal
Fan Type	Pusher
Fan Speed (rpm)	2538
Fan Diameter mm (in)	-
Coolant Heater Wattage	1500
Coolant Heater Standard Voltage	120 V /240 V

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Injection	Electronic
Fuel Pump Type	Engine Driven Gear
Injector Type	Electronic
Fuel Supply Line mm (in)	12.7 (0.5) NPT
Fuel Return Line mm (in)	12.7 (0.5) NPT

Engine Electrical System

System Voltage	12 VDC
Battery Charging Alternator	Std
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	520
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	Permanent Magnet
Bearings	Single Seated Cartridge
Coupling	Direct, Flexible Disc
Load Capacity - Standby	100%
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	3
Regulation Accuracy (Steady State)	± 0.25%

OPERATING DATA

POWER RATINGS

		Standby
Single-Phase 120/240 VAC @1.0pf	175 kW	Amps: 729
Three-Phase 120/208 VAC @0.8pf	175 kW	Amps: 607
Three-Phase 120/240 VAC @0.8pf	175 kW	Amps: 526
Three-Phase 277/480 VAC @0.8pf	175 kW	Amps: 263
Three-Phase 346/600 VAC @0.8pf	175 kW	Amps: 210

STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip

Alternator	kW	480 VAC						208/240 VAC					
		10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	200	187	280	373	467	560	653	140	210	280	350	420	490
Upsize 1	250	263	395	527	658	790	922	197	296	395	494	593	692
Upsize 2	300	303	454	605	757	908	1059	227	341	454	568	681	794

FUEL CONSUMPTION RATES*

Fuel Pump Lift - ft (m)		Diesel - gph (lph)	
		Percent Load	gph (lph)
3 (1)		25%	3.9 (14.8)
		50%	7.3 (27.6)
Total Fuel Pump Flow (Combustion + Return)		75%	10.5 (39.7)
29.0 gph		100%	13.5 (51.1)

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Coolant Flow per Minute	gpm (lpm)	44.6 (168.8)
Coolant System Capacity	gal (L)	7.5 (28.4)
Heat Rejection to Coolant	BTU/hr	497,718
Inlet Air	cfm (m3/hr)	7946 (13502)
Max. Operating Radiator Air Temp	F° (C°)	122 (50)
Max. Ambient Temperature (before derate)	F° (C°)	104 (40)
Maximum Radiator Backpressure	in H ₂ O	0.5

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power cfm (m3/min)	470 (13.31)

ENGINE

		Standby
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	279
Piston Speed	ft/min (m/min)	1559 (475)
BMEP	psi	257

EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m ³ /min)	1212 (34.3)
Max. Backpressure (Post Silencer)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	1040 (560)
Exhaust Outlet Size (Open Set)	mm (in)	101.6 (4)

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

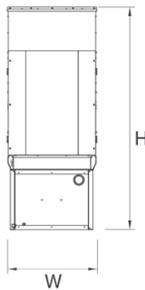
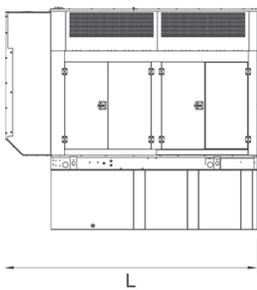
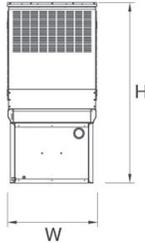
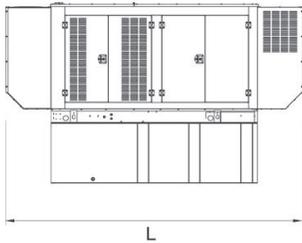
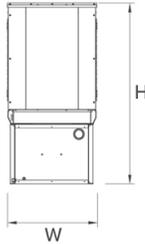
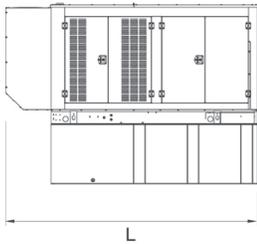
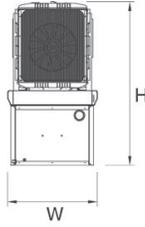
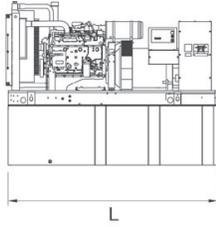
Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

SD175 | 6.7L | 175 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

DIMENSIONS AND WEIGHTS*



YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

OPEN SET

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Tank & Open Set	
			Steel	Aluminum
NO TANK	-	117 (2972) x 50 (1270) x 57 (1448)	3980 (1805)	
10	134 (507)	117 (2972) x 50 (1270) x 71 (1803)	4764 (2161)	
24	322 (1219)	117 (2972) x 50 (1270) x 82 (2083)	5052 (2292)	
38	510 (1930.6)	117 (2972) x 50 (1270) x 94 (2388)	5345 (2424)	
51	693 (2623.3)	136 (3454) x 53 (1346) x 98 (2489)	5575 (2530)	
70	946 (3581)	208 (5283) x 53 (1346) x 98 (2489)	7005 (3117)	
98	1325 (5015.7)	278 (7061) x 53 (1346) x 96 (2438)	8020 (3638)	

STANDARD ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	143 (3632) x 50 (1270) x 68 (1727)		
10	134 (507)	143 (3632) x 50 (1270) x 81 (2057)		
24	322 (1219)	143 (3632) x 50 (1270) x 93 (2362)		
38	510 (1930.6)	143 (3632) x 50 (1270) x 105 (2667)	850 (386)	280 (127)
51	693 (2623.3)	143 (3632) x 53 (1346) x 109 (2769)		
70	946 (3581)	208 (5283) x 53 (1346) x 109 (2769)		
98	1325 (5015.7)	278 (7061) x 53 (1346) x 107 (2718)		

LEVEL 1 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	168 (4267) x 50 (1270) x 68 (1727)		
10	134 (507)	168 (4267) x 50 (1270) x 81 (2057)		
24	322 (1219)	168 (4267) x 50 (1270) x 93 (2362)		
38	510 (1930.6)	168 (4267) x 50 (1270) x 105 (2667)	1050 (476)	347 (157)
51	693 (2623.3)	168 (4267) x 53 (1346) x 109 (2769)		
70	946 (3581)	234 (5944) x 53 (1346) x 109 (2769)		
98	1325 (5015.7)	304 (7722) x 53 (1346) x 107 (2718)		

LEVEL 2 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	143 (3632) x 50 (1270) x 92 (2337)		
10	134 (507)	143 (3632) x 50 (1270) x 105 (2667)		
24	322 (1219)	143 (3632) x 50 (1270) x 117 (2972)		
38	510 (1930.6)	143 (3632) x 50 (1270) x 129 (3278)	1250 (567)	413 (187)
51	693 (2623.3)	143 (3632) x 53 (1346) x 133 (3378)		
70	946 (3581)	208 (5283) x 53 (1346) x 133 (3378)		
98	1325 (5015.7)	278 (7061) x 53 (1346) x 131 (3327)		

*All measurements are approximate and for estimation purposes only. Sound dBA can be found on the sound data sheet. Enclosure Only weight is added to Tank & Open Set weight to determine total weight.

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.