# FLORIDA DEPARTMENT OF TRANSPORTATION



# **INVITATION TO BID**

**DOT-ITB-19-8012-RM** 

REPLACEMENT OF EMERGENCY STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH (ATS) AT VARIOUS LOCATIONS ALONG THE FLORIDA'S TURNPIKE SYSTEM – SOUTH REGION

FPID No. 190734-1-93-22

#### **ADVERTISEMENT**

# INVITATION TO BID STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION FLORIDA'S TURNPIKE ENTERPRISE

Sealed Bid Packages will be received by the Department of Transportation, Florida's Turnpike Enterprise (FTE), Contractual Services Office, Building 5315 on Florida's Turnpike, Milepost 263.0, Turkey Lake Service Plaza, Ocoee, Florida, 34761, until 2:30 P.M. (local time) on Tuesday, May 21, 2019, for the following project:

# DOT-ITB-19-8012-RM

**SCOPE OF SERVICES:** The work specified under this Contract shall consist of providing all labor, materials, equipment, and incidentals necessary to perform the replacement of existing emergency standby generators and automatic transfer switches (ATS), including providing a temporary portable emergency standby generator at each facility location.

# **Vendor's Qualifications**

The Vendor shall maintain and keep in force throughout the life of the Contract, renewals, and extensions, the requirements specified below. Failure of the Vendor to comply with these requirements will be sufficient grounds for the Department to declare the Vendor in default pursuant to the terms of Section 6; Termination and Default, of the Standard Written Agreement.

# 1. Certification and Registration

- The Vendor shall hold a valid and current license as a Registered or Certified Electrical Contractor in strict accordance with Chapter 489, Florida Statutes (F.S.). A copy of all required licenses and/or certifications for this Contract shall be submitted and included with the Vendor's bid package.
- The Vendor or sub-vendor shall have a Liquefied Petroleum (LP) Gas License issued by Florida Department of Agriculture and Consumer Services, authorizing the license's holder to perform servicing, testing, or installing of LP gas systems and/or equipment.
- All sub-vendors shall be properly licensed meeting the requirements under the respective trade category for the work to be performed under this Contract.

#### 2. Business Location

The Vendor shall have a current and valid Business Tax Receipt which states the name of the Vendor, street address of the business where all the work covered under the Contract will be handled, and the type of work that the Business Tax Receipt is issued for (which must be for the same type of services required in the Contract). If awarded the Contract, the Vendor shall be required to provide the Department verification of a Business Tax Receipt in the counties the services are being provided (Miami-Dade) at the Pre-work Conference.

# 3. Certification of Experience

The organized business enterprise (e.g. corporation, LLC or sole proprietorship) shall have been licensed and actively involved in the type of business requested in the scope of work for this Contract for a minimum of <a href="https://doi.org/10.1001/journal.org/">https://doi.org/10.1001/journal.org/<a href="https://doi.org/10.1001/journal.org/">https://doi.org/10.1001/journal.org/<a href="https://doi.org/">https://doi.org/<a href="https://doi.org/">h

# 4. Performance Bond

Prior to commencement of any services pursuant to this Contract and at all times during the term hereof, including renewals and extensions, the Vendor will supply to the Department and keep in force a bond provided by a surety company authorized to do business in the State of Florida, payable to the Department and conditioned for the prompt, faithful, and efficient performance of this Contract according to the terms and conditions hereof and within the time periods specified herein, and for the prompt payment of all persons furnishing labor, materials, equipment, and supplies therefore.

The bidder must submit, with its bid, a current letter from a surety company or bonding agent authorized to do business in the State of Florida and written on company letterhead, to document the bidder's present ability to obtain a Performance Bond in the full amount of the bid. Failure by the bidder to provide this letter with its bid will constitute a non-responsive determination for its bid.

The Department will review carefully to determine the Vendor is responsive, responsible, and qualified in the area of work contemplated by this Contract.

All Bidders, Proposers, and Respondents must be registered in the State of Florida's MyFloridaMarketPlace system. All prospective bidders, proposers, and respondents that are not registered, should go to <a href="https://vendor.myfloridamarketplace.com/">https://vendor.myfloridamarketplace.com/</a> to complete on-line registration, or call 1-866-352-3776 for assisted registration.

For services contracts, all out-of-State corporations, out-of-State limited liability companies, and out-of-State limited partnerships must be authorized to do business in the State of Florida.

For authorization, contact:

Florida Department of State Tallahassee, Florida 32399 (850) 245-6051

For services contracts, all Bidders, Proposers, and Respondents must be properly licensed if the business being provided requires that individuals be licensed by the FL Department of Business and Professional Regulation.

For licensing, contact:

Florida Department of Business and Professional Regulation Tallahassee, Florida 32399-0797 (850) 487-1395

**NOTE:** In accordance with Section 287.057(23), Florida Statutes, respondents to this solicitation or persons acting on their behalf may not contact, between the release of the solicitation and the end of the seventy-two (72) hour period following the agency posting the notice of intended award, excluding Saturdays, Sundays, and state holidays, any employee or officer of the executive or legislative branch concerning any aspect of this solicitation, except in writing to the procurement officer or as provided in the solicitation documents. Violation of this provision may be grounds for rejecting a response.

# **Public Meeting Notices and Meeting Agendas:**

Notice of the public meetings scheduled for this solicitation is provided in the timeline of the attached solicitation, with agendas for the public meetings.

# **MFMP Transaction Fee:**

All payment(s) to the vendor resulting from this competitive solicitation **WILL** be subject to the MFMP Transaction Fee in accordance with the referenced Form PUR 1000 General Contract Condition #14. The Transaction Fees imposed shall be based upon the date of issuance of the payment.

# **Scrutinized Companies Lists**

Section 287.135, Florida Statutes, prohibits a company from bidding on, submitting a proposal for, or entering into or renewing a contract for goods or services of any amount if, at the time of contracting or renewal, the company is on the Scrutinized Companies that Boycott Israel List, created pursuant to Section 215.4725, Florida Statutes, or is engaged in a boycott of Israel. Section 287.135, Florida Statutes, also prohibits a company from bidding on, submitting a proposal for, or entering into or renewing a contract for goods or services of \$1,000,000 or more, that are on either the Scrutinized Companies with Activities in Sudan List of the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector Lists which were created pursuant to s. 215.473, Florida Statutes.

# Title VI of the Civil Rights Act of 1964

COMPLIANCE WITH NONDISCRIMINATION STATUTES AND AUTHORITIES: Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21; The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects); Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex); Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27; The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age); Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex); The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federalaid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not); Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 - 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38; The Federal Aviation Administration's Nondiscrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex); Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations; Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100); Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

# **INSPECTOR GENERAL**

The Contractor/Consultant/Vendor agrees to comply with s.20.055(5), Florida Statutes, and to incorporate in all subcontracts the obligation to comply with s.20.055(5), Florida Statutes.

PRE-BID MEETING: The Department will convene a MANDATORY PRE-BID MEETING for this Invitation to Bid (ITB) on Wednesday, May 1, 2019 at 10:30 a.m. The meeting will be in Room 1176, Pompano Eleanor 4393, at the Florida's Turnpike MP 65, Turnpike Operations Center, Pompano Beach, FL 33069. FAILURE OF A BIDDER TO ATTEND THE MANDATORY PRE-BID MEETING WILL RESULT IN REJECTION OF THE BID PACKAGE.

A NON-MANADATORY SITE VISIT WILL IMMEDIATELY FOLLOW THE PRE-BID CONFERENCE.

**HOW TO APPLY:** Prospective bidders may obtain a complete Invitation to Bid (ITB), including specifications and general bid conditions for the above-referenced project by copying the link below into your browser:

http://www.myflorida.com/apps/vbs/!vbs www.search r2.matching ads

The Department reserves the right to reject any or all bids.

**NOTE:** All of the Department's **ITB/RFP/ITN ADVERTISEMENTS** appear on the Internet at website: <a href="http://myflorida.com/apps/vbs/vbs">http://myflorida.com/apps/vbs/vbs</a> www.main menu

Click on "Search Advertisements,"
Click on the drop-down menu for Agency and select "Department of Transportation"
Scroll down and Click on "Advertisement Search"

We encourage all vendors to regularly check this site.

State of Florida
Department of Transportation
Florida's Turnpike Enterprise
Contractual Services Office
P. O. Box 613069
Ocoee, Florida 34761-3069

# INVITATION TO BID REGISTRATION

ALL VENDORS MUST COMPLETE AND RETURN THIS FORM TO THE ABOVE ADDRESS ATTN: Robin Morgan or email to: robin.morgan@dot.state.fl.us
ITB Number: DOT-ITB-19-8012-RM
Title: REPLACEMENT OF EMERGENCY STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH (AT AT VARIOUS LOCATIONS ALONG THE FLORIDA'S TURNPIKE SYSTEM – SOUTH REGION
Bid Due Date & Time: Tuesday, May 21, 2019, 2:30 p.m.
Potential bidders should notify our office by returning this Bid Registration Form as soon as possible after downloading. Complete the information below and email to the address noted above.
THE INVITATION TO BID DOCUMENT YOU RECEIVED IS SUBJECT TO CHANGE. Notice of changes (addenda), will be posted on the Florida Vendor Bid System at <a href="https://www.myflorida.com/apps/vbs/vbs_www.main_menu">www.myflorida.com/apps/vbs/vbs_www.main_menu</a> under this bid number, click on "Search Advertisements," click on the drop-down menu for Agency and select "Department of Transportation," then scroll down and click on "Advertisement Search." It is the responsibility of all potential bidders to monitor this site for any changing information prior to submitting your bid.
Company Name:
Address:
City, State, Zip:
Telephone: ( ) Fax Number: ( )
Contact Person:
Internet E-Mail Address:
For further information on this process, you may e-mail or telephone: Robin Morgan at robin.morgan@dot.state.fl.us or 407-264-3697.



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FPID No. 190734-1-93-22

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# State of Florida Department of Transportation



# **INVITATION TO BID**

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FPID No. 190734-1-93-22

# **CONTACT FOR QUESTIONS:**

# MAIL BIDS, ADMINISTRATIVE AND TECHNICAL QUESTIONS TO:

Robin Morgan
Florida Department of Transportation
Florida's Turnpike Enterprise
P.O. Box 613069
Ocoee, FL 34761-3069

Phone: (407) 264-3697 Fax: (407) 264-3058

Email: robin.morgan@dot.state.fl.us

# SUBMIT SEALED BIDS VIA OVERNIGHT MAIL OR HAND DELIVERY TO:

Robin Morgan Florida's Turnpike Enterprise Florida's Turnpike, Milepost 263.0 Building No. 5315, Turkey Lake Service Plaza Ocoee, Florida 34761-3069

# INTRODUCTION SECTION

# 1) **INVITATION**

The State of Florida Department of Transportation (hereinafter referred to as the "Department") is soliciting written bids from qualified bidders to establish a Contract to provide all labor, materials, equipment, and incidentals necessary to perform the replacement of existing emergency standby generators and automatic transfer switches (ATS), including providing a temporary portable emergency standby generator at each facility location, in accordance with the plans and specifications herein. It is anticipated that the term of the Contract will begin within sixty (60) calendar days after execution of the Contract and be effective for ninety (90) calendar days thereafter.

For the purpose of this document, the term "bidder" means the bidder acting on their own behalf and those individuals, partnerships, firms, or corporations comprising the bidder team. The term "bid package" means the complete response of the bidder to the Invitation to Bid, including properly completed forms and supporting documentation. After the award, said bidder will be referred to as the "Vendor."

# 2) TIMELINE

Provided below is a list of critical dates and actions. These dates are subject to change. Notices of changes (Addenda) will be posted on the Florida Vendor Bid System at <a href="https://www.myflorida.com/apps/vbs/vbs\_www.main\_menu">www.myflorida.com/apps/vbs/vbs\_www.main\_menu</a> under this bid number, click on "Search Advertisements," click on the drop-down menu for Agency and select "Department of Transportation," then scroll down and click on "Advertisement Search." It is the responsibility of all potential bidders to monitor this site for any changing information prior to submitting your bid.

ACTION / LOCATION	DATE	LOCAL TIME
MANDATORY PRE-BID CONFERENCE -	5/1/2019	10:30 AM
Florida's Turnpike, Milepost 65 Room 1176 Eleanor Register Annex 4393 Pompano Beach, Florida 33069 (See Note 1)		Y OF THE PACKAGE BID CONFERENCE

# NON-MANDATORY SITE VISIT WILL IMMEDIATELY FOLLOW THE PRE-BID CONFERENCE

<b>DEADLINE FOR TECHNICAL QUESTIONS -</b> There is no deadline for administrative questions.	5/7/2019	05:00 PM
BIDS DUE (ON OR BEFORE) - Florida's Turnpike MP 263 Turkey Lake Service Plaza, Bldg. 5315 Ocoee, Florida 34761 *(See Note(s) 1 & 2)	5/21/2019	02:30 PM
PUBLIC OPENING - Florida's Turnpike MP 263 Turkey Lake Service Plaza, Bldg. 5315 Ocoee, Florida 34761 *(See Note 1)	5/21/2019	02:30 PM
POSTING OF INTENDED DECISION/AWARD -	5/28/2019 through 5/31/2019	05:00 PM

(\*Note 1: All meetings listed above are open to the public).

(\*Note 2: It is the bidder's responsibility to assure that the bid is delivered to the proper place on or before the bid due date and time. Bids which for any reason are not so delivered will not be considered).

# 3) BID OPENING AGENDA

The sealed bids will be opened by the Department's Procurement Office personnel at the date, time and location in the Timeline. All bid openings are open to the public and will be conducted according to the following agenda:

<u>Opening remarks</u> – Approximate time of two (2) minutes by Department Procurement Office personnel. <u>Public input period</u> – To allow a maximum of fifteen (15) minutes total for public input related to the bid solicitation.

<u>Bids opened</u> – At conclusion of public input or fifteen (15) minutes, whichever occurs first, bids received timely will be opened with bidder's name and prices to be read aloud.

Adjourn - After all bids received timely have been opened, the meeting will be adjourned.

# 4) SPECIAL ACCOMMODATIONS

Any person with a qualified disability requiring special accommodations at a pre-bid conference, public meeting, and/or opening shall contact the procurement officer at the phone number, e-mail address or fax number provided on the title page at least five (5) working days prior to the event. If you are hearing or speech impaired, please contact this office by using the Florida Relay Services which can be reached at 1 (800) 955-8771 (TDD).

# SPECIAL CONDITIONS

# 1) MyFloridaMarketPlace

BIDDERS MUST BE REGISTERED IN THE STATE OF FLORIDA'S MYFLORIDAMARKETPLACE SYSTEM BY THE TIME AND DATE OF THE BID OPENING OR THEY MAY BE CONSIDERED NON-RESPONSIVE (see Special Condition 21). All prospective bidders that are not registered should go to <a href="https://vendor.myfloridamarketplace.com/">https://vendor.myfloridamarketplace.com/</a> to complete on-line registration, or call 1-866-352-3776 for assisted registration.

All payment(s) to the Vendor resulting from this competitive solicitation **WILL** be subject to the MFMP Transaction Fee in accordance with the referenced Form PUR 1000 General Contract Condition #14. The Transaction Fees imposed shall be based upon the date of issuance of the payment.

# 2) Florida Department of Financial Services (DFS) W-9 REQUIREMENT

The Florida Department of Financial Services (DFS) requires all vendors that do business with the state to submit an electronic Substitute Form W-9. Vendors must submit their W-9 forms electronically at <a href="https://flvendor.myfloridacfo.com">https://flvendor.myfloridacfo.com</a> to receive payments from the state. Contact the DFS Customer Service Desk at (850) 413-5519 or FLW9@myfloridacfo.com with any questions.

# 3) QUESTIONS & ANSWERS

In accordance with Section 287.057(23), Florida Statutes, respondents to this solicitation or persons acting on their behalf may not contact, between the release of the solicitation and the end of the seventy-two (72) hour period following the agency posting the notice of intended award, excluding Saturdays, Sundays, and state holidays, any employee or officer of the executive or legislative branch concerning any aspect of this solicitation, except in writing to the procurement officer or as provided in the solicitation documents. Violation of this provision may be grounds for rejecting a response.

Any technical questions arising from this Invitation to Bid must be forwarded, in writing, to the Procurement Officer identified below. Questions must be received no later than the time and date reflected on the Timeline. The Department's written response to written inquiries submitted timely by bidders will be posted on the Florida Vendor Bid System at <a href="www.myflorida.com/apps/vbs/vbs\_www.main\_menu">www.myflorida.com/apps/vbs/vbs\_www.main\_menu</a> under this bid number, click on "Search Advertisements," click on the drop-down menu for Agency and select "Department of Transportation," then scroll down and click on "Advertisement Search." It is the responsibility of all potential bidders to monitor this site for any changing information prior to submitting your bid.

#### WRITTEN TECHNICAL QUESTIONS should be submitted to:

**Robin Morgan**, <u>robin.morgan@dot.state.fl.us</u>, Florida's Turnpike Headquarters, Florida's Turnpike, M.P. 263, Turkey Lake Service Plaza, Bldg. 5315, Ocoee, Florida 34761.

Questions regarding administrative aspects of the bid process should be directed to the Procurement Officer in writing at the address above or by phone: (407) 264-3697.

# 4) ORAL INSTRUCTIONS / CHANGES TO THE INVITATION TO BID (ADDENDA)

No negotiations, decisions, or actions will be initiated or executed by a bidder as a result of any oral discussions with a State employee. Only those communications which are in writing from the Department will be considered as a duly authorized expression on behalf of the Department.

Notices of changes (Addenda) will be posted on the Florida Vendor Bid System <a href="www.myflorida.com/apps/vbs/vbs">www.main</a> menu under this bid number, click on "Search Advertisements," click on the drop-down menu for Agency and select "Department of Transportation," then scroll down and click on "Advertisement Search." It is the responsibility of all potential bidders to monitor this site for any changing information prior to submitting your bid. All Addenda will be acknowledged by signature and subsequent submission of Addenda with bid when so stated in the Addenda.

# 5) <u>DIVERSITY ACHIEVEMENT</u>

# MINORITY BUSINESS ENTERPRISE (MBE) UTILIZATION

The Department, in accordance with *Title VI of the Civil Rights Act of 1964, 42 USC 2000d-2000d-4, Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in federally-assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that the Department will affirmatively ensure that in any contract/agreement entered into pursuant to this advertisement, minority and disadvantaged business enterprises will be afforded the full opportunity to submit bids in response to this invitation and will not be discriminated on the basis of race, color, national origin, or sex in consideration for an award.* 

The Department encourages small, minority, women, and service-disabled veteran businesses to compete for Department contracts, both as "Vendor" and as subcontractors. The Department, its vendors, suppliers, and consultants should take all necessary and reasonable steps to ensure that small, minority, women, and service-disabled veteran businesses have the opportunity to compete for and perform contract work for the Department in a nondiscriminatory environment. Bidders are requested to indicate their intention regarding MBE participation on the MBE Planned Utilization form and to submit the completed form with their Bid Sheet. The Contract Vendor will be asked to submit payment certification for MBE subcontractors used.

To request certification or to locate certified MBEs, call the Office of Supplier Diversity, Department of Management Services at (850) 487-0915, or access their MBE directory on the Internet at <a href="https://www.osd.dms.state.fl.us/">www.osd.dms.state.fl.us/</a>.

# 6) SCOPE OF SERVICES

Details of the services, information and items to be furnished by the Vendor are described in Exhibit "A," Scope of Services, attached hereto and made a part hereof.

#### 7) INTENDED AWARD

The Department intends to award this Contract to the responsive and responsible bidder that submits the lowest responsive bid. If the Department is confronted with identical pricing or scoring from multiple vendors, the Department shall determine the order of award using the following criteria, in the order of preference listed below (from highest priority to lowest priority):

- 1. Section 295.187(4), Florida Statutes; Veteran Business Enterprise
- 2. Section 287.087, Florida Statute; Drug Free Work Place
- 3. Section 287.057(11); Minority Business Enterprise

In the event that the application of the above referenced preferences does not resolve the identical replies, the Department shall determine the award by means of random drawing.

# 8) MANDATORY PRE-BID CONFERENCE

A MANDATORY pre-bid conference will be held at the date, time and location in the Timeline. The purpose of this meeting is to provide an open forum for the Department to review the Scope of Services and respond to questions from potential bidders regarding the scope of services, ITB requirements, contractual requirements, method of compensation, and other conditions or requirements that may, in any manner, effect the work to be performed. Any changes and/or resulting Addenda to the ITB will be the sole prerogative of the Department.

<u>Attendance at this pre-bid conference is MANDATORY</u>. Failure by a bidder to attend or be represented at this pre-bid conference will constitute a non-responsive determination of their bid package. Bids found to be non-responsive will not be considered.

#### A NON-MANDATORY SITE VISIT WILL IMMEDIATELY FOLLOW THE PRE-BID CONFERENCE.

# 9) QUALIFICATIONS

# 9.1 GENERAL

Vendor must meet the following minimum qualifications:

# 9.1.1 Certification and Registration

- The Vendor shall hold a valid and current license as a Registered or Certified Electrical Contractor in strict accordance with Chapter 489, Florida Statutes (F.S.). A copy of all required licenses and/or certifications for this Contract shall be submitted and included with the Vendor's bid package.
- The Vendor or sub-vendor shall have a Liquefied Petroleum (LP) Gas License issued by Florida Department of Agriculture and Consumer Services, authorizing the license's holder to perform servicing, testing, or installing of LP gas systems and/or equipment.
- All sub-vendors shall be properly licensed meeting the requirements under the respective trade category for the work to be performed under this Contract.

#### 9.1.2 Business Location

The Vendor shall have a current and valid Business Tax Receipt which states the name of the Vendor, street address of the business where all the work covered under the Contract will be handled, and the type of work that the Business Tax Receipt is issued for (which must be for the same type of services required in the Contract). If awarded the Contract, the Vendor shall be required to provide the Department verification of a Business Tax Receipt in the counties the services are being provided (Miami-Dade) prior to Contract execution.

# 9.1.3 Certification of Experience

The organized business enterprise (e.g. corporation, LLC or sole proprietorship) shall have been licensed and actively involved in the type of business requested in the scope of work for this Contract for a minimum of <a href="three">three</a> (3) years. The Vendor shall submit documentation of the work experience with its bid package.

#### 9.1.4 Performance Bond

Prior to commencement of any services pursuant to this Contract and at all times during the term hereof, including renewals and extensions, the Vendor will supply to the Department and keep in force a bond provided by a surety company authorized to do business in the State of Florida, payable to the Department and conditioned for the prompt, faithful, and efficient performance of this Contract according to the terms and conditions hereof and within the time periods specified herein, and for the prompt payment of all persons furnishing labor, materials, equipment, and supplies therefore.

The bidder must submit, with its bid, a current letter from a surety company or bonding agent authorized to do business in the State of Florida and written on company letterhead, to document the bidder's present ability to obtain a Performance Bond in the full amount of the bid. Failure by the bidder to provide this letter with its bid will constitute a non-responsive determination for its bid.

The Department will review carefully to determine if the Vendor is responsive, responsible, and qualified in the area of work contemplated by this Contract.

# 9.2 BIDDER QUALIFICATIONS

When submitting the bid, each bidder must submit a written statement ("Minimum Qualifications Statement" form), detailing their qualifications that demonstrate they meet the minimum qualifications contained in Special Condition 9.1, above. Failure by the bidder to provide the above item(s) will constitute a non-responsive determination. Bids found to be non-responsive will not be considered.

# 9.3 AUTHORIZED TO DO BUSINESS IN THE STATE OF FLORIDA

In accordance with Sections 607.1501, 605.0211(2)(b), and 620.9102, Florida Statutes, out of state corporations, out of state limited liability companies, and out of state limited partnerships must be authorized to do business in the State of Florida. Such authorization should be obtained by the bid due date and time, but in any case, must be obtained prior to posting of the intended award of the Contract. For authorization, contact:

Florida Department of State Tallahassee, Florida 32399 (850) 245-6051

# 9.4 LICENSE TO CONDUCT SERVICES IN THE STATE OF FLORIDA

If the services being provided requires that individuals be licensed by the Department of Business and Professional Regulation, such licenses should be obtained by the bid due date and time, but in any case, must be obtained prior to posting of the intended award of the Contract.

For licensing, contact:

Florida Department of Business and Professional Regulation Tallahassee, Florida 32399-0797 (850) 487-1395

#### 10) WARRANTY/SUBSTITUTIONS

When performance of the services requires the supply of commodities, a warranty is required on all items provided against defective materials, workmanship, and failure to perform in accordance with required industry performance criteria, for a period of not less than ninety (90) days from the date of acceptance by the purchaser. Any deviation from this criteria must be documented in the bid response or the above statement shall prevail. Delivery of substitute commodities requires prior written approval from the ordering location.

Replacement of all materials found defective within the warranty period shall be made without cost to the purchaser, including transportation if applicable. All fees associated with restocking cancelled orders shall be the responsibility of the Vendor.

All items provided during the performance of the Contract found to be poorly manufactured will not be accepted, but returned to the Vendor, at their expense, for replacement. Replacement of all items found defective shall be made without cost to the Department, including transportation, if applicable. As it may be impossible for each facility to inspect all items upon arrival, a reasonable opportunity must be given to these facilities for inspection of the items, and returning those that are defective.

# 11) LIABILITY INSURANCE

The Vendor shall not commence any work until they have obtained the following types of insurance, and certificates of such insurance have been received by the Department. Nor shall the Vendor allow any subcontractor to commence work on this project until all similar insurance required of the subcontractor has been so obtained. The Vendor shall submit the required Certificates of Insurance to the Florida Department of Transportation, Procurement Office, Robin Morgan, Florida's Turnpike Headquarters, Florida's Turnpike M.P. 263.0, Turkey Lake Service Plaza, Bldg. 5315, Ocoee, Florida 34761 within ten (10) days after the ending date of the period for posting the intended award decision.

(X) The Vendor must carry and keep in force during the period of this Contract a general liability insurance policy or policies with a company authorized to do business in the state of Florida, affording public liability insurance with combined bodily injury limits of at least \$200,000 minimum per person and \$300,000 minimum each occurrence, and property damage insurance of at least \$200,000 minimum each occurrence, for the services to be rendered in accordance with this Contract.

With respect to any general liability insurance policy required pursuant to this Contract, all such policies shall be issued by companies licensed to do business in the State of Florida. The Vendor shall provide to the Department certificates showing the required coverage to be in effect with endorsements showing the Department to be an additional insured prior to commencing any work under this Contract. The certificates and policies shall provide that in the event of any material change in or cancellation of the policies reflecting the required coverage, thirty (30) days advance notice shall be given to the Department or as provided in accordance with Florida law.

The Department shall be exempt from, and in no way liable for, any sums of money which may represent a deductible in any insurance policy. The payment of such deductible shall be the sole responsibility of the Vendor or subcontractor providing such insurance. Policies that include Self Insured Retention (SIR) will not be accepted.

# 12) PERFORMANCE BOND

(X) The awarded bidder shall provide the Department with a Performance Bond in the **full amount of the bid**. The Performance Bond shall be provided by a surety company authorized to do business in the State of Florida. The Performance Bond shall be executed and furnished to the Department prior to Contract execution and no later than ten (10) days after the ending date of the period for posting the intended award decision, unless the Department extends the time period in writing. **Failure to provide the required Performance Bond (Form 375-040-27) to the Department within the aforementioned timeframe will void the Intended Award's bid and the Department will proceed in contracting with the next lowest responsive bidder.** 

The bidder must submit, with its bid, a current letter from a surety company or bonding agent authorized to do business in the State of Florida and written on company letterhead, to document the bidder's present ability to obtain a Performance Bond in the full amount of the bid. Failure by the bidder to provide this letter with its bid will constitute a non-responsive determination for its bid. Bids found to be non-responsive will not be considered.

# 13) METHOD OF COMPENSATION

View Exhibit "B," Method of Compensation.

# 14) CONTRACT DOCUMENT

#### STANDARD WRITTEN AGREEMENT

The Department's "Standard Written Agreement" is attached hereto and made a part hereof. The terms and conditions contained therein will become an integral part of the Contract resulting from this solicitation. In submitting a bid, the bidder agrees to be legally bound by these terms and conditions.

#### 15) REVIEW OF BIDDER'S FACILITIES & QUALIFICATIONS

After the bid due date and prior to Contract execution, the Department reserves the right to perform or to have performed, an on-site review of the bidder's facilities and qualifications. This review will serve to verify data and representations submitted by the bidder and may be used to determine whether the bidder has adequate facilities, equipment, qualified and experienced staff, and overall management capabilities to provide the required services. The review may also serve to verify whether the bidder has financial capabilities adequate to meet the Contract requirements.

**Should** the Department determine that the bid package has material misrepresentations or that the size or nature of the bidder's facilities, equipment, management capabilities, or the number of experienced personnel (including technical staff) are not adequate to ensure satisfactory contract performance, the Department has the right to reject the bid.

# 16) PROTEST OF INVITATION TO BID SPECIFICATIONS

Any person who is adversely affected by the contents of this Invitation to Bid must file the following with the Department of Transportation, Clerk of Agency Proceedings, Office of the General Counsel, 605 Suwannee Street, Mail Station 58, Tallahassee, Florida 32399-0450:

- 1. A written notice of protest within seventy-two (72) hours after the posting of the solicitation, (the notice of protest may be Faxed to 850-414-5264), and
- 2. A formal written protest in compliance with Section 120.57(3), Florida Statutes, within ten (10) days of the date on which the written notice of protest is filed.

Failure to file a protest within the time prescribed in Section 120.57(3), Florida Statutes, or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under Chapter 120, Florida Statutes.

# 17) UNAUTHORIZED ALIENS

The employment of unauthorized aliens by any vendor is considered a violation of Section 274A(e) of the Immigration and Nationality Act. If the Vendor knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of the Contract.

# 18) SCRUTINIZED COMPANIES LISTS

ALL Responses, regardless of dollar value, must include a completed <u>Vendor Certification Regarding Scrutinized Companies Lists</u> to certify the Proposer is not on either of those lists. The Form should be submitted with the Price Proposal.

A Vendor is ineligible to enter into a contract with the Department for goods or services of any amount if, at the time of entering into such contract, the Vendor is on the Scrutinized Companies that Boycott Israel List, created pursuant to Section 215.4725, Florida Statutes, or is engaged in a boycott of Israel.

Section 287.135, Florida Statutes, also prohibits companies from entering into a contract for goods or services of \$1 million or more that are on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector Lists which were created pursuant to Section 215.473, Florida Statutes.

If the Department determines the Vendor submitted a false certification under Section 287.135 of the Florida Statutes, the Department shall either terminate the Contract after it has given the Vendor notice and an opportunity to demonstrate the Department's determination of false certification was in error pursuant to Section 287.135 of the Florida Statutes, or maintain the Contract if the conditions of Section 287.135 of the Florida Statutes are met.

# 19) RESERVATIONS

The Department reserves the right to accept or reject any or all bids received and reserves the right to make an award without further discussion of the bids submitted. Therefore, the bidder should make sure that the bid package submitted is complete and accurate and submitted to ensure delivery on or before the bid opening time and date specified in this solicitation. It is understood that the bid will become a part of the Department's official file, without obligation to the Department.

# 20) ADDITIONAL TERMS & CONDITIONS

No conditions may be applied to any aspect of the ITB by the bidder. Any conditions placed on any aspect of the bid documents by the bidder may result in the bid being rejected as a conditional bid (see "RESPONSIVENESS OF BIDS"). **DO NOT WRITE IN CHANGES ON ANY ITB SHEET.** The only recognized changes to the ITB prior to bid opening will be a written Addenda issued by the Department.

# 21) <u>RESPONSIVENESS OF BIDS</u>

Bids will not be considered if not received by the Department <u>on or before</u> the date and time specified as the due date for submission. All bids must be typed or printed in ink. A responsive bid is an offer to provide the services specified in this Invitation to Bid in accordance with all requirements of this Invitation to Bid. Bids found to be non-responsive will not be considered. Bids may be rejected if found to be irregular or not in conformance with the requirements and instructions herein contained. A bid may be found to be irregular or non-responsive by reasons that include, but are not limited to, failure to utilize or complete prescribed forms, modifying the bid requirements, submitting conditional bids or incomplete bids, submitting indefinite or ambiguous bids, or executing forms or the bid sheet with improper and/or undated signatures. Other conditions which may cause rejection of bids include, evidence of collusion among bidders, obvious lack of experience or expertise to provide the required services, and failure to perform or meet financial obligations on previous contracts. ALL determinations of responsiveness will be the responsibility of the FDOT Procurement Office.

# 22) BID SHEET

The bidder must use the attached Bid Sheet to submit its bid. The Bid Sheet must be signed and dated in ink by a representative who is authorized to contractually bind the bidder. All bid sheets and other documentation submitted in response to this solicitation must be executed and submitted in a sealed envelope. <u>Indicate the bid number</u>, with the time and date of the bid opening, on the envelope used to return the bid.

# 23) "DRUG-FREE WORK PLACE" PREFERENCE

Whenever two or more bids which are equal with respect to price, quality, and service are received, the Department shall determine the order of award in accordance with Florida Statutes, and Florida Administrative Code, which includes a preference for bid responses that certify the business has implemented a drug-free workplace program in accordance with Section 287.087, F.S. The "Drug-Free Workplace Program Certification" must be completed and submitted with the bid response to be eligible for this preference.

# 24) COPYRIGHTED MATERIAL

Copyrighted material will be accepted as part of a bid only if accompanied by a waiver that will allow the Department to make paper and electronic copies necessary for the use of Department staff and agents. It is noted that copyrighted material is not exempt from the Public Records Law, Chapter 119, Florida Statutes. Therefore, such material will be subject to viewing by the public, but copies of the material will not be provided to the public.

# 25) ATTACHMENT TO ITB SUBMITTAL - CONFIDENTIAL MATERIAL

The Bidder must include any materials it asserts to be exempted from public disclosure under Chapter 119, Florida Statutes, in a separate bound document labeled "Attachment to Invitation to Bid, Number DOT-ITB-19-8012-RM - Confidential Material". The Bidder must identify the specific Statute that authorizes exemption from the Public Records Law. Any claim of confidentiality on materials the Bidder asserts to be exempt from public disclosure and placed elsewhere in the bid will be considered waived by the Bidder upon submission, effective after opening.

# 26) MAIL OR DELIVER BIDS TO: (DO NOT FAX OR SEND BY E-MAIL)

Florida Department of Transportation Florida's Turnpike Headquarters Florida's Turnpike, M.P. 263.0 Turkey Lake Service Plaza, Bldg. 5315 Ocoee, Florida 34761 Attn: Robin Morgan

Phone # (407) 264-3697

It is the bidder's responsibility to assure that the bid is delivered to the proper place **on or before** the bid due date and time (See Introduction Section 2 Timeline). Bids which for any reason are not so delivered, will not be considered.

# 27) MODIFICATIONS, RESUBMITTAL AND WITHDRAWAL

Bidders may modify submitted bids at any time prior to the bid due date. Requests for modification of a submitted bid shall be in writing and must be signed by an authorized signatory of the bidder. Upon receipt and acceptance of such a request, the entire bid will be returned to the bidder and not considered unless resubmitted by the due date and time. Bidders may also send a change in a sealed envelope to be opened at the same time as the bid. The ITB number, opening date and time should appear on the envelope of the modified bid.

# 28) POSTING OF INTENDED DECISION/AWARD

#### 28.1 - General:

The Department's decision will be posted on the Florida Vendor Bid System, at <a href="https://www.myflorida.com/apps/vbs/vbs-www.main\_menu">www.myflorida.com/apps/vbs/vbs-www.main\_menu</a> under this bid number, (click on "Search Advertisements," click on the drop-down menu for Agency and select "Department of Transportation," then scroll down and click on "Advertisement Search") on date and time in the Timeline, and will remain posted for a period of seventy-two (72) hours. Any bidder who is adversely affected by the Department's recommended award or intended decision must file the following with the Department of Transportation, Clerk of Agency Proceedings, Office of the General Counsel, 605 Suwannee Street, Mail Station 58, Tallahassee, Florida 32399-0450:

- 1. A written notice of protest within seventy-two (72) hours after posting of the Intended Award, (the notice of protest may be Faxed to 850-414-5264), and
- 2. A formal written protest and protest bond in compliance with Section 120.57(3), Florida Statutes, within ten (10) days of the date on which the written notice of protest is filed. At the time of filing the formal written protest, a bond (a cashier's check or money order may be accepted) payable to the Department must also be submitted in an amount equal to one percent (1%) of the estimated contract amount based on the Contract price submitted by the protestor.

Failure to file a protest within the time prescribed in Section 120.57(3), Florida Statutes, or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under Chapter 120, Florida Statutes.

# 28.2 - Inability to Post:

If the Department is unable to post as defined above, the Department will notify all bidders by electronic notification on the Florida Vendor Bid System (see Special Condition 28.1, above) or by mail, fax, and/or telephone. The Department will provide notification of any future posting in a timely manner.

# 28.3 - Request to Withdraw Bid:

Requests for withdrawal will be considered if received by the Department, in writing, within seventy-two (72) hours after the bid opening time and date. Requests received in accordance with this provision will be granted by the Department upon proof of the impossibility to perform based upon obvious error on the part of the bidder. Bidders that do not withdraw as stated above will forfeit their bid bond, if applicable.

# 29) AWARD OF THE CONTRACT

Services will be authorized to begin when the Vendor receives the following document(s), as appropriate, indicating the encumbrance of funds and award of the Contract:

a) A Standard Written Agreement executed by both parties.

# 30) ATTACHED FORMS

Form 1 – Certification of Experience Documentation (two (2) pages)

Form 2 – Drug Free Workplace Program Certification

Form 3 – Contractor Notification – Asbestos-Containing Materials

Form 4 – Scrutinized Companies Lists

Form 5 – Corporate Resolution

Form 6 - Performance Bond

# 31) TERMS AND CONDITIONS

# 31.1 General Contract Conditions (PUR 1000)

The State of Florida's General Contract Conditions are outlined in form PUR 1000, which is a downloadable document incorporated into this Invitation to Bid (ITB) by reference. Any terms and conditions set forth in this ITB document take precedence over the PUR 1000 form where applicable. http://www.dms.myflorida.com/content/download/2933/11777/1000.pdf

The following paragraphs do not apply to this Invitation to Bid:

Paragraph 31, Dispute Resolution - PUR 1000

Paragraph 40, PRIDE – PUR 1000, when federal funds are utilized.

# 31.2 General Instructions to Respondents (PUR 1001)

The State of Florida's General Instructions to Respondents are outlined in form PUR 1001, which is a downloadable document incorporated into this Invitation to Bid (ITB) by reference. Any terms and conditions set forth in this ITB document take precedence over the PUR 1001 form where applicable. http://www.dms.myflorida.com/content/download/2934/11780/1001.pdf

The following paragraphs do not apply to this Invitation to Bid:

Paragraph 3, Electronic Submission - PUR 1001

Paragraph 4. Terms and Conditions - PUR 1001

Paragraph 5, Questions - PUR 1001

# 32) ORDER OF PRECEDENCE

All responses are subject to the terms and conditions of this solicitation, which, in case of conflict, shall have the following order of precedence listed:

Standard Written Agreement
Exhibit "A," Scope of Services
Attachments
Special Conditions
Exhibit "B," Method of Compensation
Exhibit "C," Bid Blank
General Contract Conditions (PUR 1000)
General Instructions to Respondents (PUR 1001)



# **FORMS**

# **DOT-ITB-19-8012-RM**

REPLACEMENT OF EMERGENCY STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH (ATS) AT VARIOUS LOCATIONS ALONG THE FLORIDA'S TURNPIKE SYSTEM – SOUTH REGION

FPID No. 190734-1-93-22

DOT-ITB-19-8012-RM FPID No. 190734-1-93-22

# CERTIFICATION OF EXPERIENCE DOCUMENTATION

				(Title)	, of
(Print/Type l	Name)				
(Name of Business)			, hereby certify the	nat this Company has been i	n business
for a minimum of 3 years and h	as the experience to p	erform the se	ervices requested b	y DOT-ITB-19-8012-RM.	
As I have indicated experience abound business relationships for the peon on performance.					
Signature:			Date: _		
Name of Business:					
Note: In addition to being in busicorporation, LLC or sole proprietor scope and volume of work to that solumnit documentation of the work of	ship) shall have been pecified in the scope	actively invo	olved in the type o	f business specifically relate	ed to the technic
The Department will review careficontemplated by this Contract.	ully to determine if	the Vendor(s	s) is responsive, re	esponsible and qualified in	the area of wor
Describe your work experience in openate block to describe each proj					
Date: (Mo. & Yr.): From	To		Dollar Value of	Project: \$	
Client Name:					
Address:				City:	
State: Zip:	Phone: (	)		_ Fax: ( )	
State: Zip:	Phone: (	)		_ Fax: ( )	
State:Zip:Project Description:	Phone: (	)		_ Fax: ( )	
State:         Zip:           Project Description:            Date:         (Mo. & Yr.):         From	Phone: (	)	Dollar Value of	_ Fax: ( ) `Project: \$	-
State: Zip:           Project Description:           Date: (Mo. & Yr.): From           Client Name:	Phone: (	) Client	 Dollar Value of	_ Fax: ( )  Project: \$  :	-
Project Description:  Date: (Mo. & Yr.): From  Client Name:	Phone: (	) Client	 Dollar Value of t's Project Manager	_ Fax: ( )  Project: \$  City:	
State:            Project Description:            Date:         (Mo. & Yr.):         From           Client Name:            Address:            State:          Zip:	Phone: (	) Client	 Dollar Value of t's Project Manager 	_ Fax: ( )  Project: \$  City:  Fax: ( )	
State:            Project Description:            Date:         (Mo. & Yr.):         From           Client Name:            Address:            State:          Zip:	Phone: (	)Client	 _ Dollar Value of t's Project Manager 	_ Fax: ( )  Project: \$  City: Fax: ( )	
State:            Project Description:            Date:         (Mo. & Yr.):         From           Client Name:            Address:            State:            Project Description:	Phone: (	) Client	 Dollar Value of t's Project Manager 	_ Fax: ( )  Project: \$  City:  Fax: ( )	
State:	Phone: ( To Phone: (	) Client	Dollar Value of Dollar Value of	Fax: ( ) Project: \$  City: Fax: ( )  Project: \$	
Date: (Mo. & Yr.): From	Phone: (	) Client		_ Fax: ( ) Project: \$  City: Fax: ( )  Project: \$  Project: \$  :	
State:         Zip:           Project Description:	Phone: (	) Client	Dollar Value of t's Project Manager Dollar Value of t's Project Manager	_ Fax: ( )  Project: \$  City:  Fax: ( )  Project: \$  City:	

Date: (Mo. & Yr.): From	To		Dollar Value of	Project: \$	
Client Name:		Client's	Project Manager:		
Address:				City:	
State: Zip:	Phone: (	)		Fax: (	)
Project Description:					
Date: (Mo. & Yr.): From	To		Dollar Value of	Project: \$	
Client Name:		Client's	Project Manager:		
Address:					
State: Zip:	Phone: (	)		Fax: (	)
Project Description:					
Date: (Mo. & Yr.): From	To		Dollar Value of	Project: \$	
Client Name:		Client's	Project Manager:		
Address:				City:	
State: Zip:	Phone: (	)		Fax: (	)
Project Description:					
Date: (Mo. & Yr.): From					
Client Name:		Client's	Project Manager:		
Address:				City:	
State: Zip:	Phone: (	)		Fax: (	)
Project Description:					
Name of Business:					

FORM MUST BE EXECUTED AND SUBMITTED WITH BID PACKAGE

DOT-ITB-19-8012-RM FPID No. 190734-1-93-22

# DRUG-FREE WORKPLACE PROGRAM, VEHICLE OPERATOR LICENSE & VEHICLE REGISTRATION, NOTICE OF INTENT TO SUBLET

I,	ame) Owner, President, Vice President or Designated Officer (Corp. Resolution*)	(Title)	_
of		(Title) reby certify that;	
Α.	Drug-Free Workplace Program Certification  This firm (has) (has not) implemented a Drug-provision of Section 287.087, F.S.	g-Free Workplace Program in accordance with th	he
В.	Vehicle Operator License & Vehicle Registration		
	All operators driving Bidder vehicles are properly licensed in operated, in accordance with Chapter 322 F.S., and further operated by said Bidder;	n the State of Florida, for the type of vehicle beir r states that all vehicles operated, or caused to be	ng be
	<ul> <li>Meet the financial responsibility requirements in according for the duration of the Contract.</li> </ul>	ordance with Chapter 324 F.S., and shall remain s	so
	<ul> <li>Registered in the State of Florida, in accordance with Florida to the limits required within the Contract and 627.733 F.S., and shall remain so for the duration of the</li> </ul>	d in accordance with Sections 320.02, 316.646, ar	of nd
C.	Notice of Intent to Sublet		
	We (do) (do not) intend to sublet a portion of the we	vork on this project.	
	If I have indicated above that a portion of the work will be sub- affirmative action to seek out and consider Minority Busine suppliers. The classes of work I intend to sublet and the fi follows:	less Enterprises as potential subcontractors and/	or
	Class of Work Potential Subcontractors	Percent MBE (Y) or (N)	
		%	
	<del></del>	%	
		%	
	Percentage must not be for more than 60% of Contract total	%	
Signat	ature:  Owner, President, Vice President or Designated Officer (Corp. Resolution*)	Date:	

FORM MUST BE EXECUTED AND SUBMITTED WITH THE BID PACKAGE

<sup>\*</sup>If person signing the form is someone other than the Owner, President or Vice President, a copy of the Corporate Resolution granting signature authorization must be furnished in the bid package.

DOT-ITB-19-8012-RM FPID No. 190734-1-93-22

#### **CONTRACTOR NOTIFICATION**

TO: All Contractors

FROM: Turnpike Asbestos Coordinator

(954) 975-4855

Pompano Beach, Florida

**SUBJECT:** ASBESTOS-CONTAINING MATERIALS IN TURNPIKE FACILITIES

It is possible that you may encounter Asbestos-containing materials (ACM) while working in State-owned buildings since ACM are present in many of these buildings. The presence of ACM does not necessarily mean that a hazard exists. However, a hazard may be created when ACM is disturbed and asbestos fibers become airborne. The best way to maintain a safe environment is to avoid disturbance of ACM.

Prominently posted in each building is an "Occupant Notification" which summarizes known locations of ACM in that building. An Operations and Maintenance (O & M) plan has been developed for these known locations of ACM. Since the known locations may or may not include all ACM, workers must exercise caution and be watchful for materials that might contain asbestos. You must avoid inadvertently disturbing ACM or suspected ACM as you carry out your work.

If you need additional information regarding ACM in a particular building or would like to see a copy of the O & M Plan, contact the Building Asbestos Contact Person (BACPer) responsible for that building or the Turnpike Asbestos Coordinator. The specific designated BACPer (name and telephone) is listed on the "Occupant Notification".

If your work necessitates the disturbance of ACM, you shall take all precautions necessary to protect human health and the environment from asbestos fibers. At a minimum, you must use the procedures found in the O & M Plan; comply with all federal, state and local laws governing work with asbestos; assure that your employees are medically certified, trained and equipped with the proper personal protective devices for safe handling of ACM; and ensure that all employees performing work with ACM related to State-owned buildings execute a "Certificate of Worker's Acknowledgment" prior to beginning work. Immediately upon inadvertently or before disturbing ACM in any State-owned building you must notify the designated BACPer.

#### **ACKNOWLEDGMENT OF ASBESTOS WARNING**

I,(Name) Owner, President, Vice President or Designated Officer (Co	orp. Resolution*)	(Title)
of(Name of Business)	, hereby acknowledge red	ceipt of the above memorandum about
Asbestos-Containing Materials (ACM) Information for Asbestos Contact Person (BACPer), for information relocated and how to avoid any contact with ACM.	Turnpike Facilities and info egarding how to find out w	ormation on how to contact the Building where asbestos-containing materials are
Signature: Owner, President, Vice President or Designated Officer (Corp. R	Date:	

#### FORM MUST BE EXECUTED AND SUBMITTED WITH THE BID PACKAGE

<sup>\*</sup> If person signing the form is someone other than the Owner, President or Vice President, a copy of the Corporate Resolution granting signature authorization must be furnished in the bid package.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

FPI No. 190734-1-93-22 375-030-60 PROCUREMENT OGC - 06/18

DOT-ITB-19-8012-RM

# VENDOR CERTIFICATION REGARDING SCRUTINIZED COMPANIES LISTS

Respondent Vendor Name:		,
Vendor FEIN:		
Address:		
City:	State:	Zip:
Phone Number:	_	
Email Address:		
into or renewing a contract for go company is on the Scrutinized C Florida Statutes, or is engaged company from bidding on, subm services of \$1,000,000 or more, the Scrutinized Companies with pursuant to s. 215.473, Florida State As the person authorized to sign of the section entitled "Respondent in Sudan List or the Scrutinized Scrutinized Companies that Boyce	coods or services of any ame Companies that Boycott Is in a boycott of Israel. Sentting a proposal for, or extend are on either the Scrut Activities in the Iran Petratutes.  In behalf of Respondent, I I Vendor Name" is not listed of Companies with Activities of Israel List. I further certification section 287.135, Florid	bidding on, submitting a proposal for, or entering nount if, at the time of contracting or renewal, the grael List, created pursuant to Section 215.4725, ection 287.135, Florida Statutes, also prohibits a intering into or renewing a contract for goods or tinized Companies with Activities in Sudan List or roleum Energy Sector Lists which were created thereby certify that the company identified above in on either the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the fy that the company is not engaged in a boycott of da Statutes, the submission of a false certification or costs.
Certified By:		
who is authorized to sign on beha		
Authorized Signature Print Name		•
Date:		

# CORPORATE RESOLUTION OF

(recite name of	Business)			
WHEREAS, it Florida,		of this corporation of	to enter into a contract with Transportation	the State of for
authorized and Florida, I	empowered on behalf Department of ained in the proposed	of the Business to Transportation	Manager) of this Business enter into a contract with a, in considerate), upon the which is attached hereto as	the State of ion of
		FICATE OF RESC		, ,
authorized by the hereby certify the Directors of the called and held	ne Secretary of State, State at the foregoing is a factorial Business, duly and rein all respects as requi	State of Florida, to outly true, and correct gularly passed and red by law, and by	in the State of	e of Florida, the Board of Board duly on the
Executed by me	as secretary of the con	poration on this	day of, 20	
		Signature of	Secretary	
		Name of Sec	retary printed or typed	

DOT-ITB-19-80ï2-RM FPI No. 190734-1-93-22

# STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**PERFORMANCE BOND** 

375-040-27 PROCUREMENT OGC – 10/04

KNOW ALL MEN BY THESE PRESENTS: That we,	(name)
(hereinafter called \	
	(address) and
	(hereinafter called Surety) of
(name)	· · · · · · · · · · · · · · · · · · ·
(address) duly authorized to do business in the State of Florida, are held just sum of	
lawful money of the United States of America, to be paid to the Department), to which payment will and truly to be made successors and assigns, jointly and severally and firmly by the	ne Florida Department of Transportation (hereinafter called we bind ourselves, our heirs, executors, administrators,
WHEREAS, the above Vendor has subscribed to an a, for contractual services agreement in conne	agreement with the Department to bear the date of ection with
in	County(ies),
particularly known as	is such that if the above Vendor in all respects will comply gations thereunder, including the Scope of Services, lank therein referred to and made a part thereof, and such ons, as therein provided for; and, further, if such Vendor will ial, equipment and supplies, used directly or indirectly by the work provided for in said Agreement, and promptly will pay insation taxes incurred in the performance of the said ney or property, the Department may lose or be overcharged in act of the Vendor, its agents, or employees, then this is and virtue in law.  Surre of the Surety by its
Surety BY:Signature TITLE:	Vendor BY: Authorized Signature(s) TITLE:
Attorney-in-Fact/Agent (Surety Seal)	ATTEST:Secretary/Notary
N. 77 1 1 1	
Name/Telephone #:	BY:
Address:	Signature

Note: Attach Power of Attorney showing authority of Surety's Agent or Attorney-in-Fact. This bond is not for public works contracts required by Section 25.05, Florida Statutes.



# STANDARD WRITTEN AGREEMENT

# **DOT-ITB-19-8012-RM**

REPLACEMENT OF EMERGENCY STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH (ATS) AT VARIOUS LOCATIONS ALONG THE FLORIDA'S TURNPIKE SYSTEM – SOUTH REGION

FPID No. 190734-1-93-22

#### STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

# STANDARD WRITTEN AGREEMENT

	Agreement No.:
	Financial Project I.D.: 190734-1-93-22
	F.E.I.D. No.:
	Appropriation Bill Number(s)/Line Item Number(s) for 1st year of contract, pursuant to s. 216.313, F.S. (required for contracts in excess of \$5 million)
	Procurement No.: DOT-ITB-19-8012-RM
	D.M.S. Catalog Class No.: 73152108
	day of , 2019, by and between the STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION, nerematier called	d the "Department" and, of, of, and duly authorized to conduct business in the State of Florida, hereinafte
called "Vendor," hereby agree as follows:	

#### SERVICES AND PERFORMANCE

- A. In connection with all labor, materials, equipment, and incidentals necessary to perform the replacement of existing emergency standby generators and automatic transfer switches (ATS), including providing a temporary portable emergency standby generator(s) at various locations along the Florida's Turnpike System-South Region, the Department does hereby retain the Vendor to furnish certain services, information, and items as described in Exhibit "A," attached hereto and made a part hereof.
- В. Before making any additions or deletions to the work described in this Agreement, and before undertaking any changes or revisions to such work, the parties shall negotiate any necessary cost changes and shall enter into an Amendment covering such work and compensation. Reference herein to this Agreement shall include any amendment(s).
- C. All tracings, plans, specifications, maps, computer files, and reports prepared or obtained under this Agreement, as well as all data collected, together with summaries and charts derived therefrom, shall be the exclusive property of the Department without restriction or limitation on their use and shall be made available, upon request, to the Department at any time during the performance of such services and/or upon completion or termination of this Agreement. Upon delivery to the Department of said document(s), the Department shall become the custodian thereof in accordance with Chapter 119, Florida Statutes. The Vendor shall not copyright any material and products or patent any invention developed under this Agreement. The Department shall have the right to visit the site for inspection of the work and the products of the Vendor at any time.
- D. All final plans, documents, reports, studies, and other data prepared by the Vendor shall bear the professional's seal/signature, in accordance with the applicable Florida Statutes, Administrative Rules promulgated by the Department of Business and Professional Regulation, and guidelines published by the Department, in effect at the time of execution of this Agreement. In the event that changes in the statutes or rules create a conflict with the requirements of published guidelines, requirements of the statutes and rules shall take precedence.
- The Vendor agrees to provide project schedule progress reports in a format acceptable to the Department and at intervals established E. by the Department. The Department shall be entitled at all times to be advised, at its request, as to the status of work being done by the Vendor and of the details thereof. Coordination shall be maintained by the Vendor with representatives of the Department, or of other agencies interested in the project on behalf of the Department. Either party to this Agreement may request and be granted a conference.
- F. All services shall be performed by the Vendor to the satisfaction of the Director who shall decide all questions, difficulties, and disputes of any nature whatsoever that may arise under or by reason of this Agreement, the prosecution and fulfillment of the services hereunder and the character, quality, amount of value thereof; and the decision upon all claims, questions, and disputes shall be final and binding upon the parties hereto. Adjustments of compensation and contract time because of any major changes in the work that may become necessary or desirable as the work progresses shall be subject to mutual agreement of the parties, and amendment(s) shall be entered into by the parties in accordance herewith.

Reference herein to the Director shall mean the

Executive Director and Chief Executive Officer, Florida's Turnpike Enterprise

#### 2. TERM

A. Initial Term. This Agreement shall begin on date of execution and shall remain in full force and effect through compared to the compared to				
	services required or as selected below, whichever occurs first. Subsequent to the execution of this Agreement by both parties, the			
	services to be rendered by the Vendor shall commence and be completed in accordance with the option selected below. (Select box			
	and indicate date(s) as appropriate):			

0	Services shall commence	and shall be complet	ted by or date o	of termination, whichever	occurs first.

- Services shall commence upon written notice from the Department's Contract Manager and shall be completed by <u>ninety (90)</u>
   <u>calendar days</u> or date of termination, whichever occurs first.
- Other: See Exhibit "A"
- B. RENEWALS (Select appropriate box):
  - This Agreement may not be renewed.
  - O This Agreement may be renewed for a period that may not exceed three (3) years or the term of the original contract, whichever is longer. Renewals are contingent upon satisfactory performance evaluations by the Department and subject to the availability of funds. Costs for renewal may not be charged. Any renewal or extension must be in writing and is subject to the same terms and conditions set forth in this Agreement and any written amendments signed by the parties.
- C. EXTENSIONS. In the event that circumstances arise which make performance by the Vendor impracticable or impossible within the time allowed or which prevent a new contract from being executed, the Department, in its discretion, may grant an extension of this Agreement. Extension of this Agreement must be in writing for a period not to exceed six (6) months and is subject to the same terms and conditions set forth in this Agreement and any written amendments signed by the parties; provided the Department may, in its discretion, grant a proportional increase in the total dollar amount based on the method and rate established herein. There may be only one extension of this Agreement unless the failure to meet the criteria set forth in this Agreement for completion of this Agreement is due to events beyond the control of the Vendor.

It shall be the responsibility of the Vendor to ensure at all times that sufficient time remains in the Project Schedule within which to complete services on the project. In the event there have been delays which would affect the project completion date, the Vendor shall submit a written request to the Department which identifies the reason(s) for the delay and the amount of time related to each reason. The Department shall review the request and make a determination as to granting all or part of the requested extension.

#### 3. COMPENSATION AND PAYMENT

- A. Payment shall be made only after receipt and approval of goods and services unless advance payments are authorized by the Chief Financial Officer of the State of Florida under Chapters 215 and 216, Florida Statutes. Deliverable(s) must be received and accepted in writing by the Contract Manager on the Department's invoice transmittal forms prior to payment. If the Department determines that the performance of the Vendor is unsatisfactory, the Department shall notify the Vendor of the deficiency to be corrected, which correction shall be made within a time-frame to be specified by the Department. The Vendor shall, within five days after notice from the Department, provide the Department with a corrective action plan describing how the Vendor will address all issues of contract non-performance, unacceptable performance, failure to meet the minimum performance levels, deliverable deficiencies, or contract noncompliance. If the corrective action plan is unacceptable to the Department, the Vendor shall be assessed a non-performance retainage equivalent to 10% of the total invoice amount. The retainage shall be applied to the invoice for the then-current billing period. The retainage shall be withheld until the vendor resolves the deficiency. If the deficiency is subsequently resolved, the Vendor may bill the Department for the retained amount during the next billing period. If the Vendor is unable to resolve the deficiency, the funds retained may be forfeited at the end of the agreement period.
- B. If this Agreement involves units of deliverables, then such units must be received and accepted in writing by the Contract Manager prior to payments.
- C. Bills for fees or other compensation for services or expenses shall be submitted in detail sufficient for a proper preaudit and postaudit thereof.
- D. The bills for any travel expenses, when authorized by terms of this Agreement and by the Department's Project Manager, shall be submitted in accordance with Section 112.061, Florida Statutes. In addition, if compensation for travel is authorized under this Agreement and by the Department's Project Manager, then the Department shall not compensate the Vendor for lodging/hotel expenses in excess of \$150.00 per day (excluding taxes and fees). The Vendor may expend their own funds to the extent the lodging/hotel expense exceeds \$150.00 per day. The Department, in its sole discretion and pursuant to its internal policies and procedures, may approve compensation to the Vendor for lodging/hotel expenses in excess of \$150.00 per day.
- E. Vendors providing goods and services to the Department should be aware of the following time frames. Upon receipt, the Department has five (5) working days to inspect and approve the goods and services, unless otherwise specified herein. The Department has twenty (20) days to deliver a request for payment (voucher) to the Department of Financial Services. The twenty (20) days are measured from the latter of the date the invoice is received or the goods or services are received, inspected and approved.

- F. If a payment is not available within forty (40) days, a separate interest penalty as established pursuant to Section 215.422, Florida Statutes, shall be due and payable, in addition to the invoice amount, to the Vendor. Interest penalties of less than one (1) dollar shall not be enforced unless the Vendor requests payment. Invoices which have to be returned to a Vendor because of Vendor preparation errors shall result in a delay in the payment. The invoice payment requirements do not start until a properly completed invoice is provided to the Department.
- G. The State of Florida, through the Department of Management Services, has instituted MyFloridaMarketPlace, a statewide eProcurement system. Pursuant to Section 287.057(22), Florida Statutes, all payments shall be assessed a transaction fee of one percent (1%), which the Vendor shall pay to the State. For payments within the State accounting system (FLAIR or its successor), the transaction fee shall, when possible, be automatically deducted from payments to the Vendor. If automatic deduction is not possible, the Vendor shall pay the transaction fee pursuant to Rule 60A-1.031(2), Florida Administrative Code. By submission of these reports and corresponding payments, Vendor certifies their correctness. All such reports and payments shall be subject to audit by the State or its designee. The Vendor shall receive a credit for any transaction fee paid by the Vendor for the purchase of any item(s) if such item(s) are returned to the Vendor through no fault, act, or omission of the Vendor. Notwithstanding the foregoing, a transaction fee is non-refundable when an item is rejected or returned, or declined, due to the Vendor's failure to perform or comply with specifications or requirements of the Agreement. Failure to comply with these requirements shall constitute grounds for declaring the Vendor in default and recovering reprocurement costs from the Vendor in addition to all outstanding fees. VENDORS DELINQUENT IN PAYING TRANSACTION FEES MAY BE EXCLUDED FROM CONDUCTING FUTURE BUSINESS WITH THE STATE.
- H. A vendor ombudsman has been established within the Department of Financial Services. The duties of this individual include acting as an advocate for vendors who may be experiencing problems in obtaining timely payment(s) from a state agency. The Vendor Ombudsman may be contacted at (850) 413-5516.
- I. Records of costs incurred under terms of this Agreement shall be maintained and made available upon request to the Department at all times during the period of this Agreement and for three (3) years after final payment for the work pursuant to this Agreement is made. Copies of these documents and records shall be furnished to the Department upon request. Records of costs incurred shall include the Vendor's general accounting records and the project records, together with supporting documents and records of the Vendor and all subcontractors performing work on the project, and all other records of the Vendor and subcontractors considered necessary by the Department for a proper audit of project costs.
- J. The Department, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The Department shall require a statement from the comptroller of the Department that funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding one (1) year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years. Accordingly, the Department's performance and obligation to pay under this Agreement is contingent upon an annual appropriation by the Legislature.

#### 4. INDEMNITY AND PAYMENT FOR CLAIMS

A. INDEMNITY: To the extent permitted by Florida Law, the Vendor shall indemnify and hold harmless the Department, its officers and employees from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by negligence, recklessness, or intentional wrongful misconduct of the Vendor and person employed or utilized by the Vendor in the performance of this Agreement.

It is specifically agreed between the parties executing this Agreement that it is not intended by any of the provisions of any part of the Agreement to create in the public or any member thereof, a third party beneficiary hereunder, or to authorize anyone not a party to this Agreement to maintain a suit for personal injuries or property damage pursuant to the terms or provision of this Agreement.

PAYMENT FOR CLAIMS: The Vendor guaranties the payment of all just claims for materials, supplies, tools, or labor and other just claims against the Vendor or any subcontractor, in connection with the Agreement. The Department's final acceptance and payment does not release the Vendor's bond until all such claims are paid or released.

- B. LIABILITY INSURANCE. (Select and complete as appropriate):
  - 0 No general liability insurance is required.
  - The Vendor shall carry and keep in force during the term of this Agreement, a general liability insurance policy or policies with a company or companies authorized to do business in Florida, affording public liability insurance with a combined bodily injury limits of at least \$200,000.00 per person and \$300,000.00 each occurrence, and property damage insurance of at least \$200,000.00 each occurrence, for the services to be rendered in accordance with this Agreement.

0	The Vendor shall have and maintain during the term of this Agreement, a professional liability insurance policy or policies or an
	irrevocable letter of credit established pursuant to Chapter 675 Section 337.106, Florida Statutes, with a company or companies
	authorized to do business in the State of Florida, affording liability coverage for the professional services to be rendered in with
	this Agreement in the amount of \$ .

C. WORKERS' COMPENSATION. The Vendor shall also carry and keep in force Workers' Compensation insurance as required for the State of Florida under the Workers' Compensation Law.

- D. PERFORMANCE AND PAYMENT BOND. (Select as appropriate):
  - o No Bond is required.
  - Prior to commencement of any services pursuant to this Agreement and at all times during the term hereof, including renewals and extensions, the Vendor will supply to the Department and keep in force a bond provided by a surety authorized to do business in the State of Florida, payable to the Department and conditioned for the prompt, faithful, and efficient performance of this Agreement according to the terms and conditions hereof and within the time periods specified herein, and for the prompt payment of all persons furnishing labor, materials, equipment, and supplies therefore.
- E. CERTIFICATION. With respect to any general liability insurance policy required pursuant to this Agreement, all such policies shall be issued by companies licensed to do business in the State of Florida. The Vendor shall provide to the Department certificates showing the required coverage to be in effect with endorsements showing the Department to be an additional insured prior to commencing any work under this Contract. Policies that include Self Insured Retention (SIR) will not be accepted. The certificates and policies shall provide that in the event of any material change in or cancellation of the policies reflecting the required coverage, thirty days advance notice shall be given to the Department or as provided in accordance with Florida law.

# 5. <u>COMPLIANCE WITH LAWS</u>

- A. The Vendor shall comply with Chapter 119, Florida Statutes. Specifically, the Vendor shall:
  - (1) Keep and maintain public records required by the Department to perform the service.
  - (2) Upon request from the Department's custodian of public records, provide the Department with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
  - (3) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the Agreement term and following completion of the Agreement if the Vendor does not transfer the records to the Department.
  - (4) Upon completion of the Agreement, transfer, at no cost, to the Department, all public records in possession of the Vendor or keep and maintain public records required by the Department to perform the service. If the Vendor transfers all public records to the Department upon completion of the Agreement, the Vendor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Vendor keeps and maintains public records upon completion of the Agreement, the Vendor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the Department, upon request from the Department's custodian of public records, in a format that is compatible with the information technology systems of the Department.

Failure by the Vendor to comply with Chapter 119, Florida Statutes, shall be grounds for immediate unilateral cancellation of this Agreement by the Department.

# IF THE VENDOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE VENDOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

Turnpike Enterprise Chief Counsel, Florida Turnpike - Office of General Counsel, Turnpike Mile Post 263, Bldg. 5315, Ocoee, FL 34761, (407) 264-3170, TPprcustodian@dot.state.fl.us

- B. The Vendor agrees that it shall make no statements, press releases or publicity releases concerning this Agreement or its subject matter or otherwise discuss or permit to be disclosed or discussed any of the data or other information obtained or furnished in compliance with this Agreement, or any particulars thereof, during the period of the Agreement, without first notifying the Department's Contract Manager and securing prior written consent. The Vendor also agrees that it shall not publish, copyright, or patent any of the data developed under this Agreement, it being understood that such data or information are works made for hire and the property of the Department.
- C. The Vendor shall comply with all federal, state, and local laws and ordinances applicable to the work or payment for work thereof, and will not discriminate on the grounds of race, color, religion, sex, national origin, age, or disability in the performance of work under this Agreement.
- D. If the Vendor is licensed by the Department of Business and Professional Regulation to perform the services herein contracted, then Section 337.162, Florida Statutes, applies as follows:
  - (1) If the Department has knowledge or reason to believe that any person has violated the provisions of the state professional licensing laws or rules, it shall submit a complaint regarding the violations to the Department of Business and Professional Regulation. The complaint shall be confidential.

- (2) Any person who is employed by the Department and who is licensed by the Department of Business and Professional Regulation and who, through the course of the person's employment, has knowledge to believe that any person has violated the provisions of state professional licensing laws or rules shall submit a complaint regarding the violations to the Department of Business and Professional Regulation. Failure to submit a complaint about the violations may be grounds for disciplinary action pursuant to Chapter 455, Florida Statutes, and the state licensing law applicable to that licensee. The complaint shall be confidential.
- (3) Any complaints submitted to the Department of Business and Professional Regulation are confidential and exempt from Section 119.07(1), Florida Statutes, pursuant to Chapter 455, Florida Statutes, and applicable state law.
- E. The Vendor covenants and agrees that it and its employees and agents shall be bound by the standards of conduct provided in applicable law and applicable rules of the Board of Business and Professional Regulation as they relate to work performed under this Agreement. The Vendor further covenants and agrees that when a former state employee is employed by the Vendor, the Vendor shall require that strict adherence by the former state employee to Sections 112.313 and 112.3185, Florida Statutes, is a condition of employment for said former state employee. These statutes will by reference be made a part of this Agreement as though set forth in full. The Vendor agrees to incorporate the provisions of this paragraph in any subcontract into which it might enter with reference to the work performed pursuant to this Agreement.
- F. A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity, may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work, may not submit a bids, proposals, or replies on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes, for CATEGORY TWO for a period of thirty-six (36) months following the date of being placed on the convicted vendor list.
- G. An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity, may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids, proposals, or replies on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with a public entity, and may not transact business with any public entity.
- H. The Department shall consider the employment by any vendor of unauthorized aliens a violation of Section 274A(e) of the Immigration and Nationality Act. If the Vendor knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of this agreement.
- I. The Vendor agrees to comply with the Title VI Nondiscrimination Contract Provisions Appendices A and E, available at <a href="http://www.dot.state.fl.us/procurement/index.shmt">http://www.dot.state.fl.us/procurement/index.shmt</a>, incorporated herein by reference and made a part of this Agreement.
- J. Pursuant to Section 216.347, Florida Statutes, the vendor may not expend any State funds for the purpose of lobbying the Legislature, the judicial branch, or a state agency.
- K. Any intellectual property developed as a result of this Agreement will belong to and be the sole property of the State. This provision will survive the termination or expiration of the Agreement.
- L. The Vendor agrees to comply with s.20.055(5), Florida Statutes, and to incorporate in all subcontracts the obligation to comply with s.20.055(5), Florida Statutes.

#### 6. TERMINATION AND DEFAULT

- A. This Agreement may be canceled by the Department in whole or in part at any time the interest of the Department requires such termination. The Department reserves the right to terminate or cancel this Agreement in the event an assignment be made for the benefit of creditors.
- B. If the Department determines that the performance of the Vendor is not satisfactory, the Department shall have the option of (a) immediately terminating the Agreement, or (b) notifying the Vendor of the deficiency with a requirement that the deficiency be corrected within a specified time, otherwise the Agreement will be terminated at the end of such time, or (c) taking whatever action is deemed appropriate by the Department.
- C. If the Department requires termination of the Agreement for reasons other than unsatisfactory performance of the Vendor, the Department shall notify the Vendor of such termination, with instructions as to the effective date of termination or specify the stage of work at which the Agreement is to be terminated.
- D. If the Agreement is terminated before performance is completed, the Vendor shall be paid only for that work satisfactorily performed for which costs can be substantiated. Such payment, however, may not exceed an amount which is the same percentage of the agreement price as the amount of work satisfactorily completed is a percentage of the total work called for by this Agreement. All work in progress shall become the property of the Department and shall be turned over promptly by the Vendor.

E. A Vendor is ineligible to enter into a contract with the Department for goods or services of any amount if, at the time of entering into such contract, the Vendor is on the Scrutinized Companies that Boycott Israel List, created pursuant to Section 215.4725, Florida Statutes, or is engaged in a boycott of Israel, Section 287.135, Florida Statutes, also prohibits companies from entering into a contract for goods or services of \$1 million or more that are on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector Lists which were created pursuant to s. 215.473, Florida Statutes. If the Department determines the Vendor submitted a false certification under Section 287.135 of the Florida Statutes, the Department shall either terminate the Contract after it has given the Vendor notice and an opportunity to demonstrate the Department's determination of false certification was in error pursuant to Section 287.135 of the Florida Statutes, or maintain the Contract if the conditions of Section 287.135 of the Florida Statutes are met.

#### 7. ASSIGNMENT AND SUBCONTRACTS

- A. The Vendor shall maintain an adequate and competent staff so as to enable the Vendor to timely perform under this Agreement and may associate with it such subcontractors, for the purpose of its services hereunder, without additional cost to the Department, other than those cost within the limits and terms of this Agreement. The Vendor is fully responsible for satisfactory completion of all subcontracted work. The Vendor, however, shall not sublet, assign, or transfer any work under this Agreement to other than subcontractors specified in the proposal, bid, and/or Agreement without the written consent of the Department.
- B. Select the Appropriate box:
  - The following provision is not applicable to this Agreement:
  - o The following provision is hereby incorporated in and made a part of this Agreement:

It is expressly understood and agreed that any articles that are the subject of, or required to carry out this Agreement shall be purchased from a nonprofit agency for the blind or for the severely handicapped that is qualified pursuant to Chapter 413, Florida Statutes, in the same manner and under the same procedures set forth in Section 413.036(1) and (2), Florida Statutes; and for purposes of this Agreement the person, firm, or other business entity (Vendor) carrying out the provisions of this Agreement shall be deemed to be substituted for the state agency (Department) insofar as dealings with such qualified nonprofit agency are concerned. RESPECT of Florida provides governmental agencies within the State of Florida with quality products and services produced by persons with disabilities. Available pricing, products, and delivery schedules may be obtained by contacting:

RESPECT 2475 Apalachee Pkwy Tallahassee, Florida 32301-4946 Phone: (850) 487-1471

O The following provision is hereby incorporated in and made a part of this Agreement:

It is expressly understood and agreed that any articles which are the subject of, or required to carry out this Agreement shall be purchased from the corporation identified under Chapter 946, Florida Statutes, in the same manner and under the procedures set forth in Section 946.515(2) and (4), Florida Statutes; and for purposes of this Agreement the person, firm, or other business entity (Vendor) carrying out the provisions of this Agreement shall be deemed to be substituted for this agency (Department) insofar as dealings with such corporation are concerned. The "corporation identified" is Prison Rehabilitative Industries and Diversified Enterprises, Inc. (PRIDE). Available pricing, products, and delivery schedules may be obtained by contacting:

PRIDE Enterprises 12425 – 28<sup>th</sup> Street, North St. Petersburg, FL 33716-1826 (800) 643-8459

o This Agreement involves the expenditure of federal funds and Section 946.515, Florida Statutes, as noted above, does not apply. However, Appendix I is applicable to all parties and is hereof made a part of this Agreement.

#### 8. MISCELLANEOUS

- A. The Vendor and its employees, agents, representatives, or subcontractors are not employees of the Department and are not entitled to the benefits of State of Florida employees. Except to the extent expressly authorized herein, Vendor and its employees, agents, representative, or subcontractors are not agents of the Department or the State for any purpose or authority such as to bind or represent the interests thereof, and shall not represent that it is an agent or that it is acting on the behalf of the Department or the State. The Department shall not be bound by any unauthorized acts or conduct of the Vendor or its employees, agents, representatives, or subcontractors. Vendor agrees to include this provision in all its subcontract under this Agreement.
- B. All words used herein in the singular form shall extend to and include the plural. All words used in the plural form shall extend to and include the singular. All words used in any gender shall extend to and include all genders.
- C. This Agreement embodies the whole agreement of the parties. There are no promises, terms, conditions, or obligations other than those contained herein, and this Agreement shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties hereto. The State of Florida terms and conditions, whether general or specific, shall take precedence over and supersede any inconsistent or conflicting provision in any attached terms and conditions of the Vendor.

- D. It is understood and agreed by the parties hereto that if any part, term or provision of this Agreement is by the courts held to be illegal or in conflict with any law of the State of Florida, the validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term, or provision held to be invalid.
- E. This Agreement shall be governed by and construed in accordance with the laws of the State of Florida.
- F. In any legal action related to this Agreement, instituted by either party, the Vendor hereby waives any and all privileges and rights it may have under Chapter 47 and Section 337.19, Florida Statutes, relating to venue, as it now exists or may hereafter be amended, and any and all such privileges and rights it may have under any other statute, rule, or case law, including, but not limited to those grounded on convenience. Any such legal actions may be brought in the appropriate Court in the county chosen by the Department and in the event that any such legal action is filed by the Vendor, the Vendor hereby consents to the transfer of venue to the county chosen by the Department upon the Department filing a motion requesting the same.
- G. If this Agreement involves the purchase or maintenance of information technology as defined in Section 282.0041, Florida Statutes, the selected provisions of the attached Appendix II are made a part of this Agreement.
- H. If this Agreement is the result of a formal solicitation (Invitation to Bid, Request for Proposal or Invitation to Negotiate), the Department of Management Services Form PUR1000 and PUR1001, included in the solicitation, are incorporated herein by reference and made a part of this Agreement.
- I The Department may grant the Vendor's employees or subconsultants access to the Department's secure networks as part of the project. In the event such employees' or subconsultants' participation in the project is terminated or will be terminated, the Vendor shall notify the Department's project manager no later than the employees' or subconsultants' separation date from participation in the project or immediately upon the Vendor acquiring knowledge of such termination of employees' or subconsultants' participation in the project, whichever occurs later.
- J. Vendors/Contractor:
  - 1. shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Vendor/Contractor during the term of the Contract; and
  - 2. shall expressly require any subcontractors performing work or providing services pursuant to the state contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the Contract term.
- K. Time is of the essence as to each and every obligation under this Agreement.
- L. The following attachments are incorporated and made a part of this Agreement: Exhibit "A," Scope of Services, Attachments A-D, Exhibit "B," Method of Compensation and Exhibit "C," Bid Blank.
- M. Other Provisions:

Procurement Office

IN WITNESS WHEREOF, the parties have executed this Agreement by their duly authorized officer on the day, month and year set forth above.

Name of Vendor	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			
BY:Authorized Signature	BY:Authorized Signature			
(Print/Type)	Paul Wai, P.E. (Print/Type)			
Title:	Title: Executive Director and Chief Executive Officer			
FOR DEPARTMENT USE ONLY				
APPROVED:	LEGAL REVIEW:			

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### **EXHIBIT "A"**

### **SCOPE OF SERVICES**

**DOT-ITB-19-8012-RM** 

REPLACEMENT OF EMERGENCY STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH (ATS) AT VARIOUS LOCATIONS ALONG THE FLORIDA'S TURNPIKE SYSTEM – SOUTH REGION

FPID No. 190734-1-93-22

# EXHIBIT "A" SCOPE OF SERVICES

# REPLACEMENT OF EMERGENCY STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH (ATS) AT VARIOUS LOCATIONS ALONG THE FLORIDA'S TURNPIKE SYSTEM – SOUTH REGION

### 1.0 Introduction

### 1.1 Description of Services

The work specified under this Contract shall consist of providing all labor, materials, equipment, and incidentals necessary to perform the replacement of existing emergency standby generators and automatic transfer switches (ATS), including providing a temporary portable emergency standby generator(s) at various locations along the Florida's Turnpike System – South Region, as described in Attachment "B," Existing Equipment Information.

### 1.2 Definition of Terms

For the purpose of this Contract, whenever the following terms appear, their intent and meaning shall, unless specifically stated otherwise, be interpreted as shown hereunder:

Contract: The term "Contract" means the entire and integrated Agreement between the Department and the Vendor (hereinafter collectively referred to as the "Parties"), which supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract documents (Standard Written Agreement, Exhibit "A," Scope of Services, Exhibit "B," Method of Compensation, Exhibit "C," Bid Blank, Attachments, and any amendments and supplements thereto) form the Contract between, and otherwise set forth the obligations of the Parties, including the performance of the work and the basis of payment.

**Department:** State of Florida Department of Transportation, Florida's Turnpike Enterprise.

**Vendor**: The firm selected through the competitive bid process to provide the services requested herein.

**Department's Project/Contract Manager**: The individual employee(s) of the Department responsible for the management of the Contract, scheduling and monitoring of work being performed, inspection and acceptance of services provided and approval for payment of services requested herein.

**Vendor's Project Manager**: The individual employee of the Vendor responsible for the management of the Contract, scheduling and monitoring of work being performed, inspection of services provided and the submission of payment documents for all services requested herein. The Vendor's Project Manager is responsible for all communication with the Department and the Department's Project/Contract Manager.

**Supplemental Agreement:** A written agreement between the Vendor and the Department modifying the Contract within the limitations set forth in the Contract, and as provided by law.

**Work Document/Authorization**: A work request issued periodically to the Vendor for work required at the Contract locations, describing work and pay item quantities authorized to the Vendor to proceed with the work.

**Turnpike Facilities:** Turnpike facilities may include administrative offices, communications buildings, law enforcement offices, maintenance facilities, storage buildings, pump houses, service plazas, office buildings, hub buildings, and toll plazas which include toll buildings, tollbooths, canopies, tech shop buildings, generator buildings, concrete walls, barriers, curbs, walkways and other related buildings and structures within the Department's Right of Way.

### 2.0 Locations and Site Descriptions

Existing equipment information and locations are listed in the Attachment "B," Existing Equipment Information, attached hereto and hereby made a part of this Contract.

### 3.0 Vendor's Qualifications

The Vendor shall maintain and keep in force throughout the life of the Contract, renewals, and extensions, the requirements specified below. Failure of the Vendor to comply with these requirements will be sufficient grounds for the Department to declare the Vendor in default pursuant to the terms of Section 6, Termination and Default, of the Standard Written Agreement.

### 3.1 Certification and Registration

- A. The Vendor shall hold a valid and current license as a Registered or Certified Electrical Contractor in strict accordance with Chapter 489, Florida Statutes (F.S.). A copy of all required licenses and/or certifications for this Contract shall be submitted and included with the Vendor's bid package.
- B. The Vendor or sub-vendor shall have a Liquefied Petroleum (LP) Gas License issued by Florida Department of Agriculture and Consumer Services, authorizing the license holder to perform servicing, testing, or installing of LP gas systems and/or equipment.
- C. All sub-vendors shall be properly licensed meeting the requirements under the respective trade category for the work to be performed under this Contract.

#### 3.2 Business Location

The Vendor shall have a current and valid Business Tax Receipt which states the name of the Vendor, street address of the business where all the work covered under the Contract will be handled, and the type of work that the Business Tax Receipt is issued for (which must be for the same type of services required in the Contract). If awarded the Contract, the Vendor shall be required to provide the Department verification of a Business Tax Receipt in the counties the services are being provided (Miami-Dade) at the Pre-work conference.

### 3.3 Certification of Experience

The organized business enterprise (e.g. corporation, LLC or sole proprietorship) shall have been licensed and actively involved in the type of business requested in the scope of work for this Contract for a minimum of <a href="three">three</a> (3) years. The Vendor shall submit documentation of the work experience with its bid package.

#### 3.4 Performance Bond

Prior to commencement of any services pursuant to this Contract and at all times during the term hereof, including renewals and extensions, the Vendor will supply to the Department and keep in force a bond provided by a surety company authorized to do business in the State of Florida, payable to the Department and conditioned for the prompt, faithful, and efficient performance of this Contract according to the terms and conditions hereof and within the time periods specified herein, and for the prompt payment of all persons furnishing labor, materials, equipment, and supplies therefore.

The bidder must submit, with its bid, a current letter from a surety company or bonding agent authorized to do business in the State of Florida and written on company letterhead, to document the bidder's present ability to obtain a Performance Bond in the full amount of the bid. Failure by the bidder to provide this letter with its bid will constitute a non-responsive determination for its bid.

### 4.0 Scope of Services

4.1 Replacement Requirements for Generator and ATS:

The work specified under this Contract shall consists of providing all labor, materials, equipment and incidentals necessary to perform replacement in kind of existing emergency standby generators and automatic transfer switches (ATS) as specified below.

### A. Detailed Scope of Services at Each Location:

- 1. See Attachment "A," Scope of Services and General Requirements.
- 2. Existing generator and ATS information is provided in Attachment "B," Existing Equipment Information.

#### B. Generator:

- The Vendor shall provide all labor, materials, equipment, transportation, and other related incidentals necessary for the pick-up, delivery and installation of new generator and ATS units outlined in this Contract.
- 2. The Vendor shall completely de-energize and disconnect all fuel lines and electrical wiring of the existing generator system.
- 3. Each installation shall be completed within twelve (12) hours of initial automatic standby generator and ATS disconnection.
- 4. The Vendor shall remove and install emergency standby generators in accordance with the manufacturer's specifications. All four (4) emergency standby generator replacements shall be the same kilowatt (KW) and phase as the existing units.
- The Vendor shall fasten the new generators to the existing concrete slabs using epoxy set bolts or stainless steel wedge anchor bolts. The units shall have a cadwelded ground to chassis and housing.
- 6. The generator frames or generator with tanks shall not make direct contact with the slab to prevent corrosion. Rubber pads, synthetic blocks, pads or similar non decaying product shall be installed and used under the generator or saddle tanks.
- 7. The Vendor shall reconnect, modify, or reroute all fuel lines, electrical conduits/wiring, control circuits, exhaust system, and ATS, whenever necessary for a turn-key project.
- 8. If a generator is scratched during installation, the generator shall be repainted or epoxy primed and coated, at the Vendor's expense, before acceptance of the equipment by the Department.
- The Vendor shall provide a factory start-up of each standby generator unit by each respective generator manufacturer's distributor or individual dealer to ensure proper start-up and provide the Department with a start-up checklist from said manufacturer's representative.
- 10. The Vendor shall perform emergency generator start-up and testing. The generators shall run for no less than four (4) consecutive hours, two (2) hours with live load and two (2) hours with load bank tests. All testing results, including voltage on each unit (as applicable), temperature, hertz, and oil pressure, shall be logged into the Logbook by the Vendor.

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- 11. The exhaust system must not darken or permit soot build-up on the generator housing, or permit exhaust to enter into manned facilities via doors, air intake, or vents.
- 12. The Vendor shall furnish and install a battery charger and block heater specific to the unit, each of which shall be tested by the Vendor for proper operation per the manufacturer's specifications.

### C. Automatic Transfer Switch (ATS):

- 1. The ATS shall be Underwriters Laboratories (UL) rated and must display the UL rating on or within the cabinet.
- 2. If the ATS is installed outside in an area that is exposed to elements, the cabinet must be aluminum or stainless steel (NEMA 3R minimum rating) designed for outside usage and must be waterproof.
- 3. Any outside electrical lines must be waterproof.
- 4. The ATS shall have a twenty-eight (28) day timer for exercising and live load of the generator units.
- 5. The ATS replacement shall meet or exceed the present AMP/KW/KVA rating of the existing ATS.
- 6. The new ATS shall be equipped with Mpak 1500 controller or a approved equivalent to meet the Supervisory Control and Data Acquisition (SCADA) requirements.
- 7. The Vendor shall provide to Department personnel, a two (2) hour, on-site (one (1) or more location(s)), operation and training. Vendor shall provide a two (2) week notice for the training.
- 8. The Vendor shall adjust and align contacts before installation of ATS to assure proper contact during operation.

### D. Portable Emergency Standby Generator(s):

- 1. The Vendor shall supply a portable emergency standby generator at each site for use beginning when the existing generator system is disconnected until the installation of the new generator is complete. A maximum of one (1) hour is allowed when making the final connections for the new generator and disconnecting the portable emergency standby generator. The Vendor shall make all efforts to minimize the time that a site is without backup emergency power. Under no circumstances shall a site be without a working generator and ATS. Power outages shall be scheduled with the Department's Project/Contract Manager and the site Supervisor. Power outages shall not be performed during peak hours of traffic, as determined by the Department.
- 2. The Vendor-supplied portable standby emergency generator shall be connected, tested and fully operational at the time the existing generator system is disconnected, and shall remain fully operational until installation of the new generator is complete. The Vendor shall ensure that portable emergency standby generators are properly maintained and fueled while in use and that facility has continuous backup emergency power. It shall be the Vendor's responsibility to disconnect all portable emergency standby generators prior to making the final connection to the new generators.

#### E. Warranty:

1. The Vendor shall provide a two (2) year warranty for ATS purchased under this Contract. Coverage shall begin upon final acceptance of the project by the Department and shall include, but not be limited to, equipment, associated components, parts, labor, and travel.

2. The Vendor shall guarantee all installation work, defective materials, and workmanship for one (1) year from the date of final acceptance by the Department. In the event that the equipment fails or any deficiencies found within the guarantee period, the Vendor shall correct all deficiencies/defects at no additional cost to the Department.

### 4.2 General Notes and Other Requirements

- A. The Vendor shall examine the Contract documents and each Site of the proposed work carefully before submitting a proposal for the work to be completed under this Contract. The Vendor shall investigate the conditions to be encountered, the character, quality, and quantities of work to be performed, and the materials to be furnished to complete the work in accordance with the requirements of all contract documents.
- B. The Vendor shall have a responsible person available on a twenty-four (24) hour basis, seven (7) days a week, in case of emergencies, or other problems that might arise. The Vendor shall provide phone numbers and names of personnel designated to be contacted at any time. This contact listing information shall be provided to the Department at the Pre-work Conference.
- C. At the Pre-work Conference and prior to the Department issuing a Notice to Proceed (NTP), the Vendor shall submit to the Department for approval, a copy of the Vendor's proposed plan and methods for performing the work, including a listing of equipment and personnel anticipated for use.
- D. The Vendor shall maintain an adequate number of qualified personnel for the Vendor to complete all assigned work within the time period required under this Contract.
- E. The Vendor shall complete the work in an orderly and efficient manner. The Vendor shall proceed with the work with all due diligence and use all reasonable efforts to complete the same without delay; failure to do so may constitute unsatisfactory performance, and after written warning, the Vendor may be declared in default.
- F. The Vendor and sub-vendor(s) shall ensure that all motor vehicles used on this project are registered and insured. All drivers shall be licensed in the State of Florida.
- G. The Department shall have the right to suspend the work wholly or in part, for such period(s) as the Department deems necessary. The Department will order such suspension in writing, detailing the reasons for the suspension and the Vendor shall not resume operations until it receives written authorization from the Department to do so.
- H. All work shall be completed in strict compliance with all local, state, and federal requirements, laws, and regulations and in accordance with all equipment manufacturer specifications.

### 4.3 Parts or Materials Requirements

- A. All parts or materials provided or used by the Vendor for this project shall be new.
- B. The Vendor shall ensure that all parts, materials, equipment and incidentals incorporated into the work are completely free of any type of asbestos materials.

### 4.4 Tools and/or Equipment

The Vendor shall be responsible for providing all tools and/or equipment (owned, leased or rented) that may be needed for this project.

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### 4.5 Reports and Documentation

A. Refer to Attachment "A," Scope of Services and General Requirements.

#### 4.6 Submittals

At the Pre-work Conference, the Vendor shall submit a copy of the following documents to the Department's Project/Contract Manager for the Department's review and records:

- A. A list of all personnel anticipated for employment under this Contract.
- B. List of Vehicles.
- C. Vendor's Traffic Control Plan (if applicable).
- D. Emergency Phone List.
- E. The Vendor shall complete and return all required documents provided by the Department with the pre-work package prior to the issuance of the NTP.
- F. Vendor's Business Tax Receipt

### 4.7 Work Schedule

The Vendor shall perform all work, unless otherwise approved by the Department's Project/Contract Manager, strictly between the hours of 7:00 a.m. and 5:00 p.m. (EST), Monday through Friday.

### 4.8 Sign-in and Sign-out

Upon arrival to a Site, the Vendor, sub-vendor(s) and their employees shall immediately notify the Department's Project/Contract Manager and immediately report to the Department's Toll Plaza Supervisor on duty and sign-in, completing all information in the Visitor's Log, where applicable. The Vendor, sub-vendor(s) and their employees shall sign-out after completion of the daily work activities. The Vendor, sub-vendor(s) and their employees shall sign-in and sign-out when leaving and returning to the Site (including when leaving/returning for breaks).

### 4.9 Work Status

The Vendor shall keep the Department's Project/Contract Manager informed of the status of all work being performed throughout the duration of this Contract.

### 4.10 Lighting, Water Source and Power at the Site

- A. If the existing lighting at the Site is not adequate, the Vendor shall be responsible for providing, at its sole expense, additional lighting necessary to perform the work required under this Contract. The Department will not be responsible for providing additional lighting that may be required to perform or inspect the work required under this Contract.
- B. If water is not available at the Site or is not of sufficient volume or pressure, the Vendor shall be responsible for providing, at its sole expense, additional water necessary to perform the work required under this Contract.
- C. The Vendor and sub-vendor(s) may use the Department's electrical power outlets to power the tools utilized by the Vendor's personnel or sub-vendors' personnel to perform the work under this Contract. The amperage of the Vendor's and sub-vendor's tools shall not exceed the allotted circuit amperage in the area work is being performed. The Vendor and sub-vendor(s) shall verify the amperage at the time work is to begin and shall ensure the electrical demand for tool power supply will not overload the circuits.

### 4.11 Notification of Damages and Damage Repair

The Vendor shall notify the Department's Project/Contract Manager verbally and/or by email of any damage to Turnpike Facilities or property of the traveling public as a result of the Vendor's operations. The notification shall be completed no later than the next business day and include, at a minimum, the type of damage, location, nature of the incident, time and date of occurrence, photos and any related injuries. The Vendor shall, at its sole expense, repair all damages within twenty-four (24) hours of occurrence or at such other time approved by the Department's Project/Contract Manager.

### 4.12 Clean-up and Disposal

The Vendor shall maintain all Site and setup areas in a clean, neat and presentable condition. Upon completion of the Vendor's daily work activities, the Vendor shall collect and remove from the Site all surplus, discarded materials and any other trash resulting from the work, and properly dispose of the same at a dumpsite approved for the disposal of each different type of material. Daily clean-up and disposal of materials shall be performed to the satisfaction of the Department's Project/Contract Manager. All costs associated with clean-ups and disposals are incidental to this Contract and shall be included in the Vendor's unit prices shown on the Exhibit "C," Bid Blank.

### 4.13 Uniforms

The Vendor, sub-vendor(s) and their employees, at all times, while at a Site, shall wear uniforms clearly identifying the company logo and employee's name.

#### 4.14 Performance Measures

The Vendor will be expected to complete the work within the timeframe established in the Contract. Failure by Vendor to complete the work within the allowed timeframe may result in a deduction based on the following performance criteria:

PERFORMANCE CRITERIA						
Deficiency Identification	Time Allowed/Criteria	Deduction				
a. Work not completed within allowed timeframe.	Work must be completed within timeframe established in this Contract.	1% of Contract amount per day late.				
b. Work not completed correctly or according to requirements.	Re-perform the work until correct. Work must be completed according to requirements established in this Contract, procedures, specifications, and other Contract documents.	1% of Contract amount per day late due to exceeding allowed timeframe in re- performing the work.				

All deductions withheld from the Vendor will occur through adjustments to the final invoice amount.

### 4.15 Subletting or Assigning of Work

The Vendor shall not sublet, assign or transfer any work under this Contract without prior written consent by the Department. Upon written consent by the Department, the Vendor will be permitted to sublet a portion of the work but shall perform with its own organization work amounting to not less than forty percent (40%) of the total Contract amount. All sub-vendors are required to be qualified and certified for the work they intend to perform in accordance with the requirements herein, all federal, state and local regulations, and approved by the

Department. Subletting of work shall not relieve the Vendor of its respective liabilities. The Department recognizes a sub-vendor only in the capacity of an employee or agent of the Vendor. The Vendor, sub-vendor(s), or any of their employees shall not perform any work that is beyond their technical capabilities or for which they are not licensed or certified.

#### 4.16 Notice of Claim

Where the Vendor deems that additional compensation or a time extension is due for work or materials not expressly provided for in the Contract or which is by written directive expressly ordered by the Department, the Vendor shall notify the Department in writing of the intention to make a claim for additional compensation or a time extension before beginning the work on which the claim is based. Such notice by the Vendor shall not in any way be construed as establishing the validity of the claim. If such notice is not submitted to the Department within ten (10) calendar days after the Vendor first recognizes the condition giving rise to the claim, the Vendor hereby waives all right to any claim for additional compensation for such claim.

Rejection of the claim(s) by the Department does not absolve the Vendor of its obligations to meet the requirements in this Contract.

### 5.0 Safety and Worker Protection

- 5.1 Safety and Worker Protection Requirements
  - A. The Vendor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. The Vendor shall provide the necessary protection for the safety of its employees, sub-vendor(s), sub-vendor's employees and the public to prevent damage, injury, or loss to:
    - All employees at the Site and other persons who may be affected thereby.
    - All the work and materials, and/or equipment to be incorporated therein, whether in storage on or offsite.
    - Other property at a Site or adjacent thereto, including trees, lawns, walkways, pavements, roadways, structures, and utilities.
  - B. The Vendor shall assume full liability for compliance with all federal, state and local regulations pertaining to the protection of workers and persons occupying adjacent Turnpike Facilities.
  - C. Any damages to the property of the traveling public and/or the Department as a result of the Vendor's work shall be the sole responsibility of the Vendor.
  - D. The Vendor shall properly use and dispose of all chemicals and other hazardous materials in strict accordance with applicable local, state, and federal laws and regulations and shall indemnify the Department of any liabilities arising out of the Vendor's handling, use of, and disposal of said chemicals and hazardous materials.
  - E. The Vendor's employees and sub-vendor's employees shall always wear safety vests (current Department approved) when working within the Department's Right of Way. Hard hats or safety helmet caps are to be used in areas of overhead hazards.
  - F. The Vendor's vehicles/equipment shall have the company name and/or logo with amber strobe lights mounted on top of all vehicles/equipment. These lights shall be used only when required in the course of the work and shall not be used when traveling to and from each Site.

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### 5.2 Delay of Work Due to Weather or Other Causes

- A. When the work is delayed or precluded from being done on schedule, by inclement weather, natural disaster, emergency condition, other work performed by Department personnel, or another Department Vendor, the Vendor shall reschedule the work and advise the Department's Project/Contract Manager of the change in schedule caused by the weather or any other cause for the delay, such as the example contained herein.
- B. In case of extreme traffic or weather conditions, the Vendor shall be required to remove their operation from the roadway and/or right of way at the discretion of the Department's Project/Contract Manager, the Florida Highway Patrol, or other law enforcement agency having jurisdiction over these roadways.

### 5.3 Lock-out/Tag-out

The Vendor shall comply with the requirements outlined in OSHA Rule 29 CFR 1910.147. The strict compliance with the requirements of "lock-out/tag-out" is to prevent possible employee injury that may result from unexpected energizing or start-up of equipment while conducting maintenance or repair work. These requirements shall be implemented by the Vendor with no exceptions. The Department's Project/Contract Manager shall stop all work if lock-out/tag-out is not implemented. The Vendor shall be responsible for loss of time resulting from not following lock-out/tag-out procedures on the Site, and shall not reflect or change the time estimated by the Department's Project/Contract Manager on the work document. Additional hours of work will not be amended/revised for failure to comply with these procedures.

### 5.4 U-Turns

No U-turns are permitted at median openings, maintenance gates, or such other openings that are intended for the use of emergency vehicles. U-turns shall only be permitted at service plazas or at the next available exit.

### 6.0 The Department's Responsibilities

#### 6.1 Administration of Contract

All work under this Contract will be under the administration of the Department.

The Department will assign the Department's Project/Contract Manager to administer the terms and conditions of the Contract at the Pre-work Conference.

### 6.2 Pre-work Conference

The Department will contact the Vendor and schedule a Pre-work Conference prior to the start date of the Contract to review the work involved and the requirements of the Contract.

### 6.3 Periodic Inspection

The Department shall have the right to conduct periodic inspections of work performed and materials used to determine compliance with the requirements of this Contract. The Department's Project/Contract Manager shall have the right to inspect and reject any and all work and materials that does not meet with the requirements of the Contract. Any work or materials rejected by the Department shall be corrected at the Vendor's expense. Failure to reject defective work or materials, whether from lack of discovery or for any other reason, shall not relieve the Vendor from responsibility to complete the work in full compliance with all Contract requirements, and shall in no way prevent later rejection of such defective work or materials by the Department.

### 6.4 Performance Evaluation

The Department shall conduct an evaluation of the Vendor's performance at the end of this Contract. The "Contractor Field Performance Report" shall be used for this purpose. The Vendor shall have an opportunity to review the report and make comments. The Vendor shall be required to sign the report acknowledging receipt of the performance evaluation.

### 7.0 Duration of Contract

The Department will issue the NTP within <u>sixty (60)</u> calendar days after the Department's execution of the Contract. Work shall commence upon the start date identified in the Notice to Proceed issued by the Department and shall be completed within <u>ninety (90)</u> calendar days thereafter.



### **ATTACHMENTS**

**DOT-ITB-19-8012-RM** 

REPLACEMENT OF EMERGENCY STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH (ATS) AT VARIOUS LOCATIONS ALONG THE FLORIDA'S TURNPIKE SYSTEM – SOUTH REGION

FPID No. 190734-1-93-22

### Generator/ATS Replacement at two (2) Sites - South Region

### PART 1.00 - GENERAL

#### 1.01 WORK INCLUDED

Sites; General Scope of work

### 1) Coral Reef Northbound, Building 6390, SR 821 MP 15.5

- The Vendor shall remove and dispose of the existing standby generator.
- The Vendor shall furnish and install new outdoor Liquid Propane (LP), 60 KW 120/240 volts single phase standby generator.
- The Vendor shall use existing 400 AMP single phase Automatic Transfer Switch (ATS) unit.
- The Vendor shall install new propane regulators in accordance with the generator's factory specifications.
- Use existing LP tank for fuel.

### 2) NW 41ST Street Toll Plaza Southbound, Building 6088, SR 821 MP 29.0

- The Vendor shall remove and dispose of the existing standby generator and ATS.
- The Vendor shall furnish and install new outdoor LP, 60 KW 120/240 volts single phase standby generator.
- The Vendor shall furnish and install new 400 AMP single phase ATS unit.
- The Vendor shall install new propane regulators in accordance with the generator's factory specifications.
- Use existing LP tank for fuel.

### Additional scope requirements for all sites

- 1. The Vendor shall provide battery charger and block heater to all new generators.
- 2. The Vendor shall provide existing equipment characteristics including fuel piping and controls requirements to the Department for evaluation prior to submitting shop drawings and cut sheets of all proposed equipment.
- 3. This project will require very strict coordination, scheduling and equipment shut down approvals by the Department's Project/Contract Manager. Vendor shall provide a minimum of a seven (7) day notice of any scheduled equipment shut down and related work that may impact site operations.
- 4. Vendor shall provide portable standby generator during the replacement of the existing generator. No site may be left without power during construction. Refer to Exhibit "A," Scope of Services, Section 4.1 D.
- 5. The Vendor shall provide the Department with a proposed installation schedule for approval prior to commencing any work.
- 6. The Vendor is responsible for assuring that all areas are air and water tight at all times during construction.
- 7. Work shall include all related demolition, removal of equipment/debris, and patchup of existing areas to match existing materials and finish.

- 8. The Vendor shall be responsible for removal and disposal of existing equipment noted for replacement and all debris related to the construction.
- 9. In kind performance replacement of existing standby generator. The Vendor shall provide new equipment to meet or exceed specified equipment on Section 4.00 Product Specifications for Equipment Type.
- 10. The Vendor shall provide all electrical modifications required for new installations.
- 11. The Vendor shall pull new wires through existing conduits where size is inadequate. In the event that the existing conduit size is not adequate, the Vendor shall run/install new conduits.
- 12. The weather proof enclosure shall meet the latest wind load requirements.
- 13. The Vendor shall remove existing gas regulator at fuel tank, and provide new gas regulator to match operating requirements of new generator.
- 14. The Vendor shall perform all piping modifications required for proper generator operations.
- 15. The Vendor shall provide new standby generator by Kohler, Cummins Power or Caterpillar manufacturers.
- 16. The ATS manufacturers shall be ASCO, Kohler, Cummins-Onan or Russel Electric. It is the Vendor's responsibility to ensure that the selection of ATS manufacturer is compatible with the generator being installed.
- 17. The Vendor shall provide shop drawings for review and approval by the Department prior to ordering any equipment.
- 18. The Vendor shall provide all equipment start—up services including testing all installations and providing a report to the Department demonstrating equipment performance and operational characteristics.
- 19. The Vendor shall provide and install galvanized wire mesh all around exterior of new generator to prevent rodent intrusion.
- 20. The Vendor shall utilize the existing concrete pads provided they are in good condition to accept the new generator. If required due to generator size and maintenance access requirements, the Vendor shall, at no additional cost to the Department, extend the concrete pad and relocate the existing bollards or install new bollards, at each corner and two (2) bollards at middle section of the existing pad, or install new pad. Care shall be used in setting bollards; holes shall be hand dug. Any damages that occur from hitting and/or breaking underground lines, electrical or irrigation, shall be repaired at the Vendor's sole expense.

#### 1.02 RELATED WORK

Electrical and Mechanical

#### 1.03 CODES AND STANDARDS

#### MECHANICAL CODES AND STANDARDS

- A. The codes and standards covering mechanical work include, but are not limited to:
  - 1. American National Standards Institute (ANSI).
  - 2. American Society for Testing and Materials (ASTM).
  - 3. American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE).
  - 4. American Society of Mechanical Engineers (ASME).
  - 5. American Welding Society (AWS).
  - 6. Florida Building Code, latest edition including revisions.
  - 7. Florida Department of Environmental Protection (DEP) Regulations.
  - 8. National Electrical Manufacturers Associations (NEMA).
  - 9. National Fire Protection Association (NFPA).
  - 10. National Sanitation Foundation (NSF).
  - 11. Codes, Regulations, Ordinances, and similar regulatory requirements, of all governing authorities having jurisdiction over this work.
- B. These codes, society and association recommendations constitute minimum requirements and no reductions from design requirements will be permitted, even if allowed by the applicable codes, without expressed written permission of the Department's Engineer of Record (EOR).

#### ELECTRICAL CODES AND STANDARDS

- A. Reference within these Specifications to standards, codes, or reference specifications implies that any item, product, or material so identified must comply with all minimum requirements as stated therein, unless indicated otherwise. Only the latest revised editions are applicable.
- B. Codes and Standards: The following codes and standards shall be used:
  - 1. National Electrical Code (NEC)
  - 2. National Fire Protection Association (NFPA)
  - 3. Underwriters Laboratories (UL)
  - 4. National Electrical Manufacturers Association (NEMA)
  - 5. American National Standards Institute (ANSI)
  - 6. Federal Specification (Fed. Spec.)
  - 7. Insulated Cable Engineers Association (ICEA)
  - 8. Institute of Electrical and Electronic Engineers (IEEE)
  - 9. American Society for Testing and Materials (ASTM)
  - 10. Additionally, designs, work practices and conditions must conform with the Occupational Safety and Health Act of 1970 (OSHA)
  - 11. Rules of American Disability Act Accessibility Guidelines (ADAAG) (1993) with Latest Amendments
  - 12. Florida Administration Requirement Manual (FARM)

C. Where materials and equipment are available under the continuing inspection and labeling of UL, provide such material and equipment. Listing by Underwriters Laboratories shall be evidenced by the label.

#### 1.04 SUBMITTALS

The Vendor is required to submit and process all Shop Drawing, Submittals and Request For Information (RFI's) through the FDOT Turnpike Enterprise Electronic Shop Drawing Review Process.

Prior to the submission of any shop drawings, prepare and submit a schedule of submittals that identify the work for which shop drawings apply, as depicted in the FDOT standard specifications for road and bridge construction.

Shop drawings shall be submitted to the Department and shall bear the Vendor's approval stamp with date and initials and when applicable, the signature and embossed seal of the specialty engineer. Stamping requirements shall be in blue or black as depicted in the Turnpike Plans Preparation and Practices Handbook and the FDOT Plans Preparation Manual. The Department's EOR shall review the shop drawing(s) to evaluate compliance with the project requirements and provide any findings to the Vendor. The Department's procedural review of the shop drawing is to assure that the Vendor and the Department's EOR have both accepted and signed the drawings. The drawing has been independently reviewed and is in general conformance with the plans.

The Vendor shall submit shop drawings electronically through the Florida Turnpike Enterprise construction management's website "ProjectSolve" accessed through the internet. At the Pre-work Conference, the Department will provide a URL address. Electronic submittals shall meet the following minimum requirements: files shall be in portable data format (.PDF), 300 dpi resolution and in 8-bit up to 24 bit color. Electronic shop drawing submittals shall include all the necessary details to demonstrate the complete structure is in compliance with the design shown on the plans. Prepare all shop drawings using the same unit of measure as those used in the Department's plans. Use sheets no larger than 11 by 17 inches. For plotting requirements, refer to FDOT CADD production criteria handbook, website can be found at: <a href="https://www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandbook/">www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandbook/</a>

The Vendor shall submit electronically and when applicable, include one (1) original set of calculations and drawings signed and sealed with the signature and embossed seal of the specialty electrical engineer.

If the shop drawing consists of samples, the Vendor shall submit three (3) originals for proper review and processing, in addition to the number of samples needed by the Vendor. The Vendor is still required to the sample, include FPID and their shop drawing submittal number. Vendor shall initiate the shop drawing review through "Projectsolve," by uploading their transmittal indicating that they have forwarded the samples to the Department's EOR, via overnight courier service. If samples include manufacturer, product name and product number, it is acceptable for the Vendor to scan data and upload to "Projectsolve". It will be the discretion of the Department, if submission of original samples are required.

Other Documents: The Vendor shall submit shop drawings electronically, through the Florida's Turnpike Enterprise construction management's website, "Projectsolve", accessed through the internet. Vendor shall prepare all documents using the same units of measures as those used in the Department's plans. All documents must include a table of contents cover sheet, list on the cover sheet the financial project identification number, title referencing the submittal item(s) the name of the firm and person(s) responsible for the preparation of document and the Vendor's approval stamp with date and initials. In addition, the Vendor shall consecutively number each sheet of the submittal. Vendor shall submit electronically and when applicable, include one (1) original set of calculations and drawings, signed and sealed with the signature and embossed seal of the specialty electrical engineer.

The Vendor shall submit appropriately prepared and checked calculations and manuals that clearly outline the design criteria, include on the internal sheets the complete financial project identification number and the initials of the person(s) responsible for preparing and checking the document.

The Vendor shall clearly label trade literature and catalogue information on the front cover with the title, financial, project identifications number, date and name of the firm and person(s) responsible for the document.

Shop drawings are not required for prequalified items. For non-prequalified items, the Vendor shall follow the shop drawing routing chart, which is distributed at the Pre-work Conference, depicting the submittal path to be followed based upon the identity of the Department's EOR as shown adjacent to the title block on the structural plan sheets, and on the key sheets of the mechanical plans and electrical plans. At the Pre-work Conference, the Department will notify the Vendor of any changes in the submittal path.

The Vendor shall provide copies of material certifications and material test to the Department's Project/Contract Manager.

For shop drawing coordination, please contact Robin Hathaway, Shop Drawing Coordinator for Florida's Turnpike Enterprise, Headquarters, Ocoee, FL 407-264-3426.

### 1.05 SHOP AND ERECTION DRAWINGS

- A. The Vendor shall submit required and requested shop and erection drawings for review by the Department before ordering or installing any equipment or material. Equipment or material ordered or installed before the Department's review may not be accepted by the Department, and any such equipment or material not accepted by the Department shall be removed by the Vendor at Vendor's sole expense.
- B. Shop drawings shall consist of manufacturer's scale drawings, cuts or catalogs, including descriptive literature which shall clearly indicate the construction, material, physical dimensions, wiring diagrams and complete operating data clearly marked for each item. Data of general nature will not be accepted.
- C. Prior to making any changes in the scope of work, the Vendor shall prepare and submit to the Department's EOR a drawing with a minimum of 1/4" scale showing proposed change. The Vendor shall not proceed with the change without written approval by the Department's EOR. All such approved drawings shall be included into final set of record drawings.
- D. The Department's EOR approval of shop drawings does not relieve the Vendor of the responsibility to comply with all requirements of this Specification.

### 1.06 FEES, PERMITS, AND INSPECTIONS

- A. The Department shall pay for all permits and application fees for work under this Contract, if required. This will include completing all permit applications for the purpose of submitting documents for approval to the authorities having jurisdiction.
- B. The Vendor shall complete all additional applications needed to pull/obtain permit for work under this Contract as required by the authorities having jurisdiction. Vendor shall procure and deliver to the Department all certificates issued by the authorities having jurisdiction.
- C. The Vendor shall pay for all permit inspections and associated reviews for work under this Contract.

D. The work will be observed by the Department during the course of construction. The Vendor shall also allow for inspection by others having jurisdiction.

### 1.07 DELIVERY, STORAGE AND HANDLING

- A. The Vendor shall deliver materials to the project Sites at such intervals to ensure uninterrupted progress of work.
- B. The Vendor shall deliver anchor bolts, anchorage devices, and sleeves which are to be embedded in cast-in-place concrete or masonry, in ample time not to delay work.
- C. The Vendor shall store materials to permit easy access for inspection and identification. Keep steel members off ground, using pallets, platforms, or other supports. Protect steel members and packaged materials from corrosion and deterioration.
- D. The Vendor shall not store materials on structure in a manner that might cause distortion or damage to members or support structures. The Vendor shall repair or replace damaged materials or structures as directed at no additional cost to the Department.

### PART 2.00 - PRODUCTS

#### 2.01 GENERAL

- A. Materials or products specified herein and/or indicated on Drawings by trade name, manufacturer's name and/or catalog number shall be provided as specified.
- B. Since manufacturers reserve the right to change their products at any time, Vendor shall verify all dimensions, performance data, and similar criteria for each piece of equipment submitted to ensure compliance with the intent of the Drawings and Specifications.
- C. All materials shall be new of the quality specified.

### 2.02 SPACE AND ACCESS TO EQUIPMENT

All equipment shall fit the allotted space and shall leave reasonable access room for servicing and repairs. Greater space and room required by substituted equipment shall be provided by the Vendor at no additional cost to the Department.

### 2.03 CUTTING AND PATCHING

Unless otherwise indicated, the Vendor shall perform all cutting and patching necessary for the work. Where interferences occur and departures from indicated arrangements are required, the Vendor shall coordinate the mechanical/electrical/structural work with the other trades involved, make a determination as to changes, and obtain approval from the Department of the proposed changes.

### 2.04 SAFETY REQUIREMENTS

In addition to the components specified and shown on the details/drawings and necessary for the specified performance, Vendor shall incorporate in the design and show on the shop drawings all the safety features required by the current codes and regulations, including, but not limited to, those of OSHA of 1970, and Amendments thereto.

### 2.05 CLEANING AND PROTECTING

- A. During construction, the Vendor shall protect all conduit, piping and equipment from damage and dirt. Cap the open ends of all conduit, piping and equipment.
- B. After completion of Project, the Vendor shall clean the exterior surface of equipment included in this section, remove all residues and as directed touch up paint or completely repaint all damaged surfaces.
- C. All equipment shall have factory standard finish.

### 2.06 WATERPROOFING

- A. Where any work pierces waterproofing, including waterproof concrete, the method of installation shall be as approved by the Department's EOR before work is performed.
- B. The Vendor shall provide all necessary sleeves, caulking and flashing required to make openings absolutely watertight. Waterproof flashing materials shall be compatible with base materials.

#### **PART 3.00 - EXECUTION**

#### 3.01 PREVENTION OF ELECTROLYSIS

Where the contact of dissimilar metals may cause electrolysis and where copper will contact concrete, mortar or plaster, separate metal contact surfaces with not less than one coat of zinc chromate primer and one (1) heavy coat of aluminum pigmented asphalt paint on each surface; or where deemed necessary by the Department's EOR, not less than open course of asphalt saturated cotton fabric cemented to both metals with flashing cement, shall be used. Completed work shall be cleaned and excess cement removed.

#### 3.02 TESTS AND INSPECTIONS

- A. The Vendor shall provide equipment start-up procedures in accordance with manufacturer's recommended guidelines and installation checklist. The Vendor shall provide factory certifications where required for warranty purposes.
- B. The Vendor shall include all tests and inspections specified and/or required under laws, rules and regulations of all departments having jurisdiction. Tests shall be performed as indicated herein and other Sections of Specifications.
- C. The Vendor shall notify the Department's EOR at least seventy-two (72) hours in advance of all tests. Furnish all necessary instruments, gauges and other equipment required for tests. Make preliminary tests prior to giving notice of final tests.
- D. All parts of the work and associated equipment shall be tested and adjusted to work properly and be left in perfect operating condition.
- E. The Vendor shall correct defects disclosed by these tests without any additional cost to the Department. Repeat tests on repaired or replaced work.
- F. The Vendor shall maintain separate log of all tests being conducted and have it available for review by Department's EOR. Log to indicate date, type of tests, duration and defects noted and when corrected.
- G. The Vendor shall obtain final acceptance of mechanical and electrical systems from the Department's Project/Contract Manager.

#### 3.03 ACCEPTANCE INSPECTION

- A. Representatives of installers responsible for work under this Contract shall be present at time of acceptance inspections and shall furnish required mechanics, tools, and ladders to assist in the inspection.
- B. Prior to requesting a final inspection, the following steps shall be met:

The Vendor shall complete all work under this Section of the Specifications.

- 1. The Vendor shall furnish the Department's EOR with a letter from an authorized representative of the equipment manufacturer certifying that all work has been checked for operation and calibration and that the system is operating as intended.
- 2. The Vendor shall clean all dirty equipment that may have accumulated dirt during construction.

- C. A list of items to be corrected as a result of acceptance inspection will be furnished to the installer. The Vendor shall notify the Department's EOR in writing of any items appearing on list of correction that are disputed by installer. When ready, request in writing a re-inspection of work.
- D. The Vendor shall provide certification that all work is in conformance with all codes and standards by the governing agencies having jurisdiction of the work.

### 3.04 OPERATING AND MAINTENANCE INSTRUCTIONS

- A. Bound Instructions: Before final payment is made, the Vendor shall furnish 1 set of bound operation and maintenance manuals to the Department. The manuals shall consist of catalog cuts, bulletins, shop drawings, wiring diagrams, schedules, parts lists, procedures and other data showing the equipment installed and shall include the following:
  - 1. Approved wiring and control diagrams, with data to explain the detailed operation and control of each component.
  - 2. A control sequence describing startup, operation and shutdown.
  - 3. Operating and maintenance instructions for each piece of equipment, including lubrication instructions.
  - 4. Parts lists and recommended spare parts. Other data and instructions as specified under the various sections.
  - 5. Provide manufacturer's warranty for parts and labor as noted on Exhibit "A," Scope of Services, Section 4.1 E.
- B. All data furnished shall conform to the installation as constructed. Cuts showing other equipment and data not applicable to the installation shall be crossed out and where practical shall be omitted from the manual. The assembly of the manual shall be in a logical manner and each section shall be indexed in the table of contents.
- C. After each manufacturer has outlined a maintenance procedure for that manufacturer's equipment installed, compile these procedures in a logical manner to provide a procedure for the operating personnel of the Department to follow in their day-to-day operation of the facility.
- D. The materials shall be permanently bound into each booklet between rigid plastic or cloth binding covers. The instruction booklets shall be approximately 9-inches by 12-inches and the diagram booklet large enough to contain the drawing without excessive folding so that they may be easily opened.
- E. The booklets shall be neatly entitled with a descriptive title, the name of the job, the location, year of installation, Department, Manufacturer, Vendor and the Department's EOR. Copies of drawings shall be in black and white background and shall be easily legible. The arrangements of the booklets, the method of binding, materials to be included and the composite text shall all be reviewed and approved by the Department's Engineer.

#### 3.05 OPERATIONS INSTRUCTION TO DEPARTMENT

- A. The Vendor shall provide a minimum of four (4) hours of instruction to representatives of the Department in operation and maintenance of all installed mechanical systems and equipment.
- B. The Vendor shall provide maintenance manual and acquaint the Department's Project/Contract Manager with its contents during instruction.
- C. The Vendor shall furnish a letter naming the Department's personnel receiving instruction and dates when instruction was given.
- D. The Vendor shall provide name, address, and telephone number of the manufacturer's representative or authorized dealer, for each piece of equipment so that service or spare parts can be readily obtained.

### PART 4.00 - EQUIPMENT SPECIFICATIONS

### 4.01 ENGINE GENERATOR

PART 1 - GENERAL

### 1.1 SUMMARY

This section includes packaged engine-generator set for standby power supply with the following features:

- 1. Gas/Diesel engine.
- 2. Unit-mounted cooling system.
- 3. Unit-mounted control and monitoring.
- 4. Performance requirements for sensitive loads.
- 5. Fuel system.
- 6. Outdoor enclosure.

### 1.2 SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties, and accessories.
  - 2. Include thermal damage curve for generator.
  - 3. Include time-current characteristic curves for generator protective device.

- 4. Include fuel consumption in cubic feet per hour at 0.8 power factor at 0.5, 0.75 and 1.0 times generator capacity.
- 5. Include generator efficiency at 0.8 power factor at 0.5, 0.75 and 1.0 times generator capacity.
- 6. Include air flow requirements for cooling and combustion air in cfm at 0.8 power factor, with air supply temperature of 95, 80, 70, and 50 deg F. Provide drawings showing requirements and limitations for location of air intake and exhausts.
- 7. Include generator characteristics, including, but not limited to, kw rating, efficiency, reactances, and short-circuit current capability.

### B. Shop Drawings:

- 1. Include plans and elevations for engine-generator set and other components specified.
- 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, location and size of each field connection.
- 3. Identify fluid drain ports and clearance requirements for proper fluid drain.
- 4. Design calculations for selecting vibration isolators.
- 5. Vibration Isolation Base Details: Detail fabrication including anchorages and attachments to structure and to supported equipment. Include base weights.
- 6. Include diagrams for power, signal, and control wiring. Complete schematic, wiring, and interconnection diagrams showing terminal markings for EPS equipment and functional relationship between all electrical components.

### 1.3 INFORMATIONAL SUBMITTALS

- A. Source quality-control reports, including, but not limited to the following:
  - 1. Certified summary of prototype-unit test report.
  - 2. Certified Test Reports: For components and accessories that are equivalent, but not identical, to those tested on prototype unit.
  - 3. Certified Summary of Performance Tests: Certify compliance with specified requirement to meet performance criteria for sensitive loads.
  - 4. Report of factory test on units to be shipped for this Project, showing evidence of compliance with specified requirements.
  - 5. Report of sound generation.
  - 6. Report of exhaust emissions showing compliance with applicable regulations.
  - 7. Certified Torsional Vibration Compatibility: Comply with NFPA 110.

- B. Field quality-control reports.
- C. Warranty: See Exhibit "A," Scope of Services, Section 4.1-E.

### 1.4 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For packaged engine generators to include in emergency, operation, and maintenance manuals.
  - 1. List of tools and replacement items recommended to be stored at Project for ready access. Include part and drawing numbers, current unit prices, and source of supply.
  - 2. Operating instructions laminated and mounted adjacent to generator location.
  - 3. Training plan.

### 1.5 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Fuses: One (1) for every ten (10) of each type and rating but no fewer than one (1) of each.
  - 2. Indicator Lamps: Two (2) for every six (6) of each type used, but no fewer than two (2) of each.
  - 3. Filters: One (1) set each of lubricating oil, fuel, and combustion-air filters.
  - 4. Tools: Each tool listed by part number in operations and maintenance manual.

### PART 2 - PRODUCTS

### 2.1 ACCEPTABLE MANUFACTURERS

- A. Approved manufacturers shall be Kohler, Cummins Power and Caterpillar.
- B. ASME Compliance: Comply with ASME B15.1.
- C. NFPA Compliance:
  - 1. Comply with NFPA 37.
  - 2. Comply with NFPA 70.
  - 3. Comply with NFPA 99.

- 4. Comply with NFPA 110 requirements for Level 2 emergency power supply system (EPSS).
- D. UL Compliance: Comply with UL 2200.
- E. Engine Exhaust Emissions: Comply with EPA Tier requirements and applicable state and local government requirements.
- F. Noise Emission: Comply with applicable state and local government requirements for maximum noise level at adjacent property boundaries due to sound emitted by generator set including engine, engine exhaust, engine cooling-air intake and discharge, and other components of installation.
- G. Environmental Conditions: Engine-generator system shall withstand the following environmental conditions without mechanical or electrical damage or degradation of performance capability:
  - 1. Ambient Temperature: 41 to 104 deg F.
  - 2. Relative Humidity: Zero to 95 percent.
  - 3. Altitude: Sea level to 500.

#### 2.2 ASSEMBLY DESCRIPTION

- A. Factory-assembled and -tested, water-cooled engine, with brushless generator and accessories.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
- C. EPSS Class: Engine-generator set shall be classified as a Class 2 in accordance with NFPA 110.
- D. Induction Method: Naturally aspirated.
- E. Governor: Adjustable isochronous, with speed sensing.
- F. Emissions: Comply with EPA Tier 2 requirements.
- G. Mounting Frame: Structural steel framework to maintain alignment of mounted components without depending on concrete foundation. Provide lifting attachments sized and spaced to prevent deflection of base during lifting and moving.

1. Rigging Diagram: Inscribed on metal plate permanently attached to mounting frame to indicate location and lifting capacity of each lifting attachment and generator-set center of gravity.

### H. Capacities and Characteristics:

- 1. Power Output Ratings: Nominal ratings as indicated at 0.8 power factor excluding power required for the continued and repeated operation of the unit and auxiliaries, with capacity as required to operate as a unit as evidenced by records of prototype testing.
- 2. Output Connections: Three-phase, four wire.
- 3. Nameplates: For each major system component to identify manufacturer's name and address, model and serial number of component.

### I. Generator-Set Performance:

- 1. Steady-State Voltage Operational Bandwidth: three percent (3%) of rated output voltage from no load to full load.
- 2. Transient Voltage Performance: Not more than twenty percent (20%) variation for fifty percent (50%) step-load increase or decrease. Voltage shall recover and remain within the steady-state operating band within three (3) seconds.
- 3. Output Waveform: At no load, harmonic content measured line to line or line to neutral shall not exceed five percent (5%) total and three percent (3%) for single harmonics. Telephone influence factor, determined according to NEMA MG 1, shall not exceed fifty percent (50%).
- 4. Sustained Short-Circuit Current: For a three-phase, bolted short circuit at system output terminals, system shall supply a minimum of two hundred fifty percent (250%) of rated full-load current for not less than ten (10) seconds and then clear the fault automatically, without damage to generator system components.
- 5. Start Time: Comply with NFPA 110, Type 10, system requirements.

#### 2.3 ENGINE

- A. Fuel: LP-gas/Diesel standby.
- B. Rated Engine Speed: 1800 rpm.
- C. Maximum Piston Speed for Four-Cycle Engines: 2250 fpm (11.4 m/s).
- D. Lubrication System: The following items are mounted on engine or skid:

- 1. Filter and Strainer: Rated to remove ninety percent (90%) of particles five (5) micrometers and smaller while passing full flow.
- 2. Thermostatic Control Valve: Control flow in system to maintain optimum oil temperature. Unit shall be capable of full flow and is designed to be fail-safe.
- 3. Crankcase Drain: Arranged for complete gravity drainage to an easily removable container with no disassembly and without use of pumps, siphons, special tools, or appliances.
- E. Jacket Coolant Heater: Electric-immersion type, factory installed in coolant jacket system. Comply with NFPA 110 requirements for Level 1 equipment for heater capacity.
- F. Cooling System: Closed loop, liquid cooled, with radiator factory mounted on engine-generator-set mounting frame and integral engine-driven coolant pump.
  - 1. Coolant: Solution of fifty percent (50%) ethylene-glycol-based antifreeze and fifty percent (50%) water, with anticorrosion additives as recommended by engine manufacturer.
  - 2. Size of Radiator: Adequate to contain expansion of total system coolant from cold start to one hundred ten percent (110%) load condition.
  - 3. Expansion Tank: Constructed of welded steel plate and rated to withstand maximum closed-loop coolant system pressure for engine used. Equip with gage glass and petcock.
  - 4. Temperature Control: Self-contained, thermostatic-control valve modulates coolant flow automatically to maintain optimum constant coolant temperature as recommended by engine manufacturer.
  - 5. Coolant Hose: Flexible assembly with inside surface of nonporous rubber and outer covering of aging-, ultraviolet-, and abrasion-resistant fabric.
    - a. Rating: 50-psig (345-kPa) maximum working pressure with coolant at 180 deg F (82 deg C), and noncollapsible under vacuum.
    - b. End Fittings: Flanges or steel pipe nipples with clamps to suit piping and equipment connections.
- G. Muffler/Silencer: Commercial type, sized as recommended by engine manufacturer and selected with exhaust piping system to not exceed engine manufacturer's engine backpressure requirements.
  - 1. Minimum sound attenuation of 12 dB at 500 Hz.
  - 2. Sound level measured at a distance of 25 feet (8 m) from exhaust discharge after installation is complete shall be 90 dBA or less.

- H. Air-Intake Filter: Standard-duty, engine-mounted air cleaner with replaceable dry-filter element and "blocked filter" indicator.
- I. Starting System: 12-V electric, with negative ground.
  - 1. Components: Sized so they are not damaged during a full enginecranking cycle with ambient temperature at maximum specified in section 3.10 - Performance Requirements, of this attachment.
  - 2. Cranking Motor: Heavy-duty unit that automatically engages and releases from engine flywheel without binding.
  - 3. Cranking Cycle: As required by NFPA 110 for system level specified.
  - 4. Battery: Lead acid, with capacity within ambient temperature range specified in "Performance Requirements" section to provide specified cranking cycle at least three times without recharging.
  - 5. Battery Cable: Size as recommended by engine manufacturer for cable length indicated. Include required interconnecting conductors and connection accessories.
  - 6. Battery Compartment: Factory fabricated of metal with acidresistant finish and thermal insulation. Thermostatically controlled heater shall be arranged to maintain battery above 10 deg C regardless of external ambient temperature within range specified in "Performance Requirements" section. Include accessories required to support and fasten batteries in place. Provide ventilation to exhaust battery gases.
  - 7. Battery Stand: Factory-fabricated, two-tier metal with acidresistant finish designed to hold the quantity of battery cells required and to maintain the arrangement to minimize lengths of battery interconnections.
  - 8. Battery-Charging Alternator: Factory mounted on engine with solid-state voltage regulation and 35 A minimum continuous rating.
  - 9. Battery Charger: Current-limiting, automatic-equalizing and float-charging type designed for lead-acid batteries. Unit shall comply with UL 1236 and include the following features:
    - a. Operation: Equalizing-charging rate of 10 A shall be initiated automatically after battery has lost charge until an adjustable equalizing voltage is achieved at battery terminals. Unit shall then be automatically switched to a lower float-charging mode and shall continue to operate in that mode until battery is discharged again.
    - b. Automatic Temperature Compensation: Adjust float and equalize voltages for variations in ambient temperature from minus 40 deg F (minus 40 deg C) to 140 deg F (plus 60

- deg C) to prevent overcharging at high temperatures and undercharging at low temperatures.
- c. Automatic Voltage Regulation: Maintain constant output voltage regardless of input voltage variations up to plus or minus ten percent (10%).
- d. Ammeter and Voltmeter: Flush mounted in door. Meters shall indicate charging rates.
- e. Safety Functions: Sense abnormally low battery voltage and close contacts providing low battery voltage indication on control and monitoring panel. Sense high battery voltage and loss of ac input or dc output of battery charger. Either condition shall close contacts that provide a battery-charger malfunction indication at system control and monitoring panel.
- f. Enclosure and Mounting: NEMA 250, Type 1, wall-mounted cabinet.

### 2.4 GASEOUS FUEL SYSTEM

- A. LP-Gas Piping: Comply with applicable LP-Gas Piping requirements.
- B. Gas Train: Comply with NFPA 37.
- C. Engine Fuel System:
  - 1. LP-Gas, Vapor-Withdrawal System:
    - a. Carburetor.
    - b. Secondary Gas Regulators: One (1) for each fuel type, with atmospheric vents piped to building exterior.
    - c. Fuel-Shutoff Solenoid Valves: NRTL-listed, normally closed, safety shutoff valves; one for each fuel source.
    - d. Fuel Filters: One (1) for each fuel type.
    - e. Manual Fuel Shutoff Valves: One for each fuel type.
    - f. Flexible Fuel Connectors: Minimum one (1) for each fuel connection.
    - g. LP-gas flow adjusting valve.
    - h. Fuel change gas pressure switch.

### 2.5 CONTROL AND MONITORING

A. Automatic Starting System Sequence of Operation: When mode-selector switch on the control and monitoring panel is in the automatic position, remote-control contacts in one or more separate automatic transfer switches initiate starting and stopping of generator set. When mode-selector switch

is switched to the on position, generator set starts. The off position of same switch initiates generator-set shutdown. When generator set is running, specified system or equipment failures or derangements automatically shut down generator set and initiate alarms.

- B. Manual Starting System Sequence of Operation: Switching on-off switch on the generator control panel to the on position starts generator set. The off position of same switch initiates generator-set shutdown. When generator set is running, specified system or equipment failures or derangements automatically shut down generator set and initiate alarms.
- C. Provide minimum run time control set for thirty (30) minutes with override only by operation of a remote emergency-stop switch.
- D. Comply with UL 508A.
- E. Configuration: Operating and safety indications, protective devices, basic system controls, and engine gages shall be grouped in a common control and monitoring panel mounted on the generator set. Mounting method shall isolate the control panel from generator-set vibration. Panel shall be powered from the engine-generator set battery.
- F. Configuration: Operating and safety indications, protective devices, basic system controls, and engine gages shall be grouped in a common wall-mounted control and monitoring panel. Panel shall be powered from the engine-generator set battery.
- G. Indicating Devices: As required by NFPA 110 for Level 2 system, including the following:
  - 1. AC voltmeter.
  - 2. AC ammeter.
  - 3. AC frequency meter.
  - 4. EPS supplying load indicator.
  - 5. Ammeter and voltmeter phase-selector switches.
  - 6. DC voltmeter (alternator battery charging).
  - 7. Engine-coolant temperature gage.
  - 8. Engine lubricating-oil pressure gage.
  - 9. Running-time meter.
  - 10. Current and Potential Transformers: Instrument accuracy class.
- H. Protective Devices and Controls in Local Control Panel: Shutdown devices and common visual alarm indication as required by NFPA 110 for Level 2 system, including the following:
  - 1. Start-stop switch.
  - 2. Overcrank shutdown device.

- 3. Overspeed shutdown device.
- 4. Coolant high-temperature shutdown device.
- 5. Coolant low-level shutdown device.
- 6. Low lube oil pressure shutdown device.
- 7. Air shutdown damper shutdown device when used.
- 8. Overcrank alarm.
- 9. Overspeed alarm.
- 10. Coolant high-temperature alarm.
- 11. Coolant low-temperature alarm.
- 12. Coolant low-level alarm.
- 13. Low lube oil pressure alarm.
- 14. Air shutdown damper alarm when used.
- 15. Lamp test.
- 16. Contacts for local and remote common alarm.
- 17. Coolant high-temperature prealarm.
- 18. Generator-voltage adjusting rheostat.
- 19. Main fuel tank low-level alarm.
- 20. Run-Off-Auto switch.
- 21. Control switch not in automatic position alarm.
- 22. Low-starting air pressure alarm.
- 23. Low-starting hydraulic pressure alarm.
- 24. Low cranking voltage alarm.
- 25. Battery-charger malfunction alarm.
- 26. Battery low-voltage alarm.
- 27. Battery high-voltage alarm.
- 28. Generator overcurrent protective device not closed alarm.
- I. Supporting Items: Include sensors, transducers, terminals, relays, and other devices and include wiring required to support specified items. Locate sensors and other supporting items on engine or generator, unless otherwise indicated.
- J. Remote Alarm Annunciator: Comply with NFPA 99. An LED labeled with proper alarm conditions shall identify each alarm event, and a common audible signal shall sound for each alarm condition. Silencing switch in face of panel shall silence signal without altering visual indication. Connect so that after an alarm is silenced, clearing of initiating condition will reactivate alarm until silencing switch is reset. Cabinet and faceplate are surface- or flush-mounting type to suit mounting conditions indicated.
  - 1. Overcrank alarm.
  - 2. Coolant low-temperature alarm.
  - 3. High engine temperature prealarm.
  - 4. High engine temperature alarm.
  - 5. Low lube oil pressure alarm.
  - 6. Overspeed alarm.

- 7. Low fuel main tank alarm.
- 8. Low coolant level alarm.
- 9. Low cranking voltage alarm.
- 10. Contacts for local and remote common alarm.
- 11. Audible-alarm silencing switch.
- 12. Air shutdown damper when used.
- 13. Run-Off-Auto switch.
- 14. Control switch not in automatic position alarm.
- 15. Lamp test.
- 16. Low cranking voltage alarm.
- 17. Generator overcurrent protective device not closed.
- K. Supporting Items: Include sensors, transducers, terminals, relays, and other devices and include wiring required to support specified items. Locate sensors and other supporting items on engine or generator, unless otherwise indicated.

#### 2.6 GENERATOR OVERCURRENT AND FAULT PROTECTION

- A. Generator Circuit Breaker: Molded-case, thermal-magnetic type; one hundred percent (100%) rated; complying with UL 489.
  - 1. Tripping Characteristic: Designed specifically for generator protection.
  - 2. Trip Rating: Matched to generator output rating.
  - 3. Shunt Trip: Connected to trip breaker when generator set is shut down by other protective devices.
  - 4. Mounting: Adjacent to or integrated with control and monitoring panel.

### 2.7 GENERATOR, EXCITER, AND VOLTAGE REGULATOR

- A. Comply with NEMA MG 1.
- B. Drive: Generator shaft shall be directly connected to engine shaft. Exciter shall be rotated integrally with generator rotor.
- C. Electrical Insulation: Class H or Class F.
- D. Stator-Winding Leads: Brought out to terminal box to permit future reconnection for other voltages if required. Provide six lead alternator.
- E. Range: Provide extended range of output voltage by adjusting the excitation level.

- F. Construction shall prevent mechanical, electrical, and thermal damage due to vibration, overspeed up to one hundred twenty-five percent (125%) of rating, and heat during operation at one hundred ten percent (110%) of rated capacity.
- G. Enclosure: Dripproof.
- H. Instrument Transformers: Mounted within generator enclosure.
- I. Voltage Regulator: Solid-state type, separate from exciter, providing performance as specified and as required by NFPA 110.
  - 1. Adjusting Rheostat on Control and Monitoring Panel: Provide plus or minus five percent (-5%) adjustment of output-voltage operating band.
  - 2. Maintain voltage within twenty percent (20%) on one step, full load.
  - 3. Provide anti-hunt provision to stabilize voltage.
  - 4. Maintain frequency within fifteen percent (15%) and stabilize at rated frequency within five (5) seconds.
- J. Strip Heater: Thermostatically controlled unit arranged to maintain stator windings above dew point.
- K. Windings: Two-thirds (2/3) pitch stator winding and fully linked amortisseur winding.
- L. Subtransient Reactance: twelve percent (12%), maximum.

### 2.8 OUTDOOR GENERATOR-SET ENCLOSURE

- A. Description: Vandal-resistant, sound-attenuating, weatherproof steel housing, wind resistant up to 150 mph. Multiple panels shall be lockable and provide adequate access to components requiring maintenance. Panels shall be removable by one person without tools. Instruments and control shall be mounted within enclosure.
- B. Description: Prefabricated or pre-engineered galvanized-steel-clad, integral structural-steel-framed, walk-in enclosure, erected on concrete foundation.
  - 1. Structural Design and Anchorage: Comply with ASCE 7 for wind loads up to 150 mph.
  - 2. Hinged Doors: With padlocking provisions.
  - 3. Space Heater: Thermostatically controlled and sized to prevent condensation.

- 4. Thermal Insulation: Manufacturer's standard materials and thickness selected in coordination with space heater to maintain winter interior temperature within operating limits required by engine-generator-set components.
- 5. Muffler Location: External to enclosure.
- C. Engine Cooling Airflow through Enclosure: Maintain temperature rise of system components within required limits when unit operates at one hundred ten percent (110%) of rated load for two (2) hours with ambient temperature at top of range specified in system service conditions.
  - 1. Louvers: Fixed-engine, cooling-air inlet and discharge. Storm-proof and drainable louvers prevent entry of rain and snow.
  - 2. Automatic Dampers: At engine cooling-air inlet and discharge. Dampers shall be closed to reduce enclosure heat loss in cold weather when unit is not operating.
  - 3. Ventilation: Provide temperature-controlled exhaust fan interlocked to prevent operation when engine is running.

#### 2.9 MOTORS

- A. Description: NEMA MG 1, Design B, medium induction random-wound, squirrel cage motor.
- B. Efficiency: Energy efficient, as defined in NEMA MG 1.
- C. Service Factor: 1.15.
- D. Bearings: Regreasable, shielded, antifriction ball bearings suitable for radial and thrust loading.
- E. Motor Sizes: Minimum size as indicated. If not indicated, large enough so driven load will not require motor to operate in service factor range above 1.0.
- F. Temperature Rise: Match insulation rating.
- G. Code Letter Designation:
  - 1. Motors 15 HP and Larger: NEMA starting Code F or Code G.
  - 2. Motors Smaller than 15 HP: Manufacturer's standard starting characteristic.
- H. Enclosure Material: Cast iron for motor frame sizes 324T and larger; rolled steel for motor frame sizes smaller than 324T.

I. Controllers, Electrical Devices, and Wiring: Electrical devices and connections are specified in electrical Sections.

#### 2.10 VIBRATION ISOLATION DEVICES

- A. Elastomeric Isolator Pads: Oil- and water-resistant elastomer or natural rubber, arranged in single or multiple layers, molded with a nonslip pattern and galvanized-steel baseplates of sufficient stiffness for uniform loading over pad area, and factory cut to sizes that match requirements of supported equipment.
  - 1. Material: Standard neoprene separated by steel shims.
  - 2. Shore "A" Scale Durometer Rating: 40.
  - 3. Number of Layers: Two.
  - 4. Minimum Deflection: 1 inch.
- B. Vibration isolation devices shall not be used to accommodate misalignments or to make bends.

#### 2.11 FINISHES

A. Indoor and Outdoor Enclosures and Components: Manufacturer's standard finish over corrosion-resistant pretreatment and compatible primer.

### 2.12 SOURCE QUALITY CONTROL

- A. Prototype Testing: Factory test engine-generator set using same engine model, constructed of identical or equivalent components and equipped with identical or equivalent accessories.
  - 1. Tests: Comply with NFPA 110, Level 1 Energy Converters and with IEEE 115.
- B. Project-Specific Equipment Tests: Before shipment, factory test engine-generator set and other system components and accessories manufactured specifically for this Project. Perform tests at rated load and power factor. Include the following tests:
  - 1. Test components and accessories furnished with installed unit that are not identical to those on tested prototype to demonstrate compatibility and reliability.
  - 2. Test generator, exciter, and voltage regulator as a unit.
  - 3. Full load run.
  - 4. Maximum power.

- 5. Voltage regulation.
- 6. Transient and steady-state governing.
- 7. Single-step load pickup.
- 8. Safety shutdown.
- 9. Provide fourteen (14) days' advance notice of tests and opportunity for observation of tests by Owner's representative.
- 10. Report factory test results within ten (10) days of completion of test.

### **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

- A. Examine areas, equipment bases, and conditions, with Installer present, for compliance with requirements for installation and other conditions affecting packaged engine-generator performance.
- B. Examine roughing-in for piping systems and electrical connections. Verify actual locations of connections before packaged enginegenerator installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 INSTALLATION

A. Comply with packaged engine-generator manufacturers' written installation and alignment instructions and with NFPA 110.

#### 3.3 CONNECTIONS

- A. Piping installation requirements are specified in other Sections. Drawings indicate general arrangement of piping and specialties.
- B. Connect fuel, cooling-system, and exhaust-system piping adjacent to packaged engine-generator to allow service and maintenance.
- C. Connect engine exhaust pipe to engine with flexible connector.
- D. Connect fuel piping to engines with a gate valve and union and flexible connector.
  - 1. Install manual shutoff valve in a remote location to isolate LP-gas supply to the generator room.
  - 2. Vent gas pressure regulators outside building a minimum of 60 inches (1500 mm) from building openings.

#### 3.4 IDENTIFICATION

A. Install a sign indicating the generator neutral is bonded to the main service neutral at the main service location.

### 3.5 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.
- C. Perform tests and inspections.
  - 1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections.

#### D. Tests and Inspections:

- 1. Perform tests recommended by manufacturer and each visual and mechanical inspection and electrical and mechanical test listed in the first two subparagraphs as specified in NETA Acceptance Testing Specification. Certify compliance with test parameters.
  - a. Visual and Mechanical Inspection
    - 1) Compare equipment nameplate data with drawings and specifications.
    - 2) Inspect physical and mechanical condition.
    - 3) Inspect anchorage, alignment, and grounding.
    - 4) Verify the unit is clean.

#### b. Electrical and Mechanical Tests

- 1) Perform insulation-resistance tests in accordance with IEEE 43.
  - a) Machines larger than two hundred (200) horsepower (150 kilowatts). Test duration shall be ten (10) minutes. Calculate polarization index.
  - b) Machines two hundred (200) horsepower (150 kilowatts) or less. Test duration shall

be one (1) minute. Calculate the dielectric-absorption ratio.

- 2) Test protective relay devices.
- 3) Verify phase rotation, phasing, and synchronized operation as required by the application.
- 4) Functionally test engine shutdown for low oil pressure, overtemperature, overspeed, and other protection features as applicable.
- 5) Conduct performance test in accordance with NFPA 110.
- 6) Verify correct functioning of the governor and regulator.
- 2. NFPA 110 Acceptance Tests: Perform tests required by NFPA 110 that are additional to those specified here including, but not limited to, single-step full-load pickup test.
- 3. Battery Tests: Equalize charging of battery cells according to manufacturer's written instructions. Record individual cell voltages.
  - a. Measure charging voltage and voltages between available battery terminals for full-charging and float-charging conditions. Check electrolyte level and specific gravity under both conditions.
  - b. Test for contact integrity of all connectors. Perform an integrity load test and a capacity load test for the battery.
  - c. Verify acceptance of charge for each element of the battery after discharge.
  - d. Verify that measurements are within manufacturer's specifications.
- 4. Battery-Charger Tests: Verify specified rates of charge for both equalizing and float-charging conditions.
- 5. System Integrity Tests: Methodically verify proper installation, connection, and integrity of each element of engine-generator system before and during system operation. Check for air, exhaust, and fluid leaks.
- 6. Exhaust-System Back-Pressure Test: Use a manometer with a scale exceeding 40-inch wg (120 kPa). Connect to exhaust line close to engine exhaust manifold. Verify that back pressure at full-rated load is within manufacturer's written allowable limits for the engine.
- 7. Exhaust Emissions Test: Comply with applicable government test criteria.

- 8. Voltage and Frequency Transient Stability Tests: Use recording oscilloscope to measure voltage and frequency transients for fifty (50) and one hundred percent (100%) step-load increases and decreases, and verify that performance is as specified.
- 9. Harmonic-Content Tests: Measure harmonic content of output voltage at twenty-five percent (25) and one hundred percent (100%) of rated linear load. Verify that harmonic content is within specified limits.
- 10. Noise Level Tests: Measure A-weighted level of noise emanating from generator-set installation, including engine exhaust and cooling-air intake and discharge, at four locations twenty-five feet (25') on the property line, and compare measured levels with required values.
- E. Coordinate tests with tests for transfer switches and run them concurrently.
- F. Test instruments shall have been calibrated within the last twelve (12) months, traceable to NIST Calibration Services, and adequate for making positive observation of test results. Make calibration records available for examination on request.
- G. Leak Test: After installation, charge exhaust, coolant, and fuel systems and test for leaks. Repair leaks and retest until no leaks exist.
- H. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation for generator and associated equipment.
- I. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- J. Remove and replace malfunctioning units and retest as specified above.
- K. Retest: Correct deficiencies identified by tests and observations and retest until specified requirements are met.
- L. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation resistances, time delays, and other values and observations. Attach a label or tag to each tested component indicating satisfactory completion of tests.
- M. Infrared Scanning: After substantial completion, but not more than sixty (60) days after final acceptance, perform an infrared scan of each power wiring termination and each bus connection while running with maximum load. Remove all access panels so terminations and connections are accessible to portable scanner.

- 1. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan eleven (11) months after date of Substantial Completion.
- 2. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
- 3. Record of Infrared Scanning: Prepare a certified report that identifies terminations and connections checked and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

#### 3.6 DEMONSTRATION

A. Engage a factory-authorized service representative to train Turnpike maintenance personnel to adjust, operate, and maintain packaged engine generators.

### **AUTOMATIC TRANSFER SWITCHES (ATS)**

#### 3.7 SUMMARY

A. Section includes automatic transfer switches rated 600 V and less, including the following:

#### 3.8 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for transfer switches.
  - 2. Include rated capacities, operating characteristics, electrical characteristics, and accessories.

#### B. Shop Drawings:

- 1. Include plans, elevations, sections, details showing minimum clearances, conductor entry provisions, gutter space, and installed features and devices.
- 2. Include material lists for each switch specified.
- 3. Single-Line Diagram: Show connections between transfer switch, power sources, and load; and show interlocking

- provisions for each combined transfer switch and bypass/isolation switch.
- 4. Riser Diagram: Show interconnection wiring between transfer switches, bypass/isolation switches, annunciators, and control panels.

#### 3.9 FIELD CONDITIONS

- A. Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electrical service:
  - 1. Notify owner's representative no fewer than two (2) days in advance of proposed interruption of electrical service.
  - 2. Do not proceed with interruption of electrical service without Owner's Representative written permission.

#### **PRODUCTS**

#### 3.10 PERFORMANCE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Comply with NEMA ICS 1.
- C. Comply with NFPA 99.
- D. Comply with NFPA 110.
- E. Comply with UL 1008 unless requirements of these Specifications are stricter.
- F. Indicated Current Ratings: Apply as defined in UL 1008 for continuous loading and total system transfer, including tungsten filament lamp loads not exceeding thirty percent (30%) of switch ampere rating, unless otherwise indicated.
- G. Tested Fault-Current Closing and Short-Circuit Ratings: Adequate for duty imposed by protective devices at installation locations in Project under the fault conditions indicated, based on testing according to UL 1008.

- 1. Where transfer switch includes internal fault-current protection, rating of switch and trip unit combination shall exceed indicated fault-current value at installation location.
- 2. Short-time withstand capability for three cycles.
- H. Repetitive Accuracy of Solid-State Controls: All settings shall be plus or minus two percent (-2%) or better over an operating temperature range of minus twenty percent (-20%) to plus seventy (+70) deg C.
- I. Resistance to Damage by Voltage Transients: Components shall meet or exceed voltage-surge withstand capability requirements when tested according to IEEE C62.62. Components shall meet or exceed voltage-impulse withstand test of NEMA ICS 1.
- J. Electrical Operation: Accomplish by a nonfused, momentarily energized solenoid or electric-motor-operated mechanism. Switches for emergency or standby purposes shall be mechanically and electrically interlocked in both directions to prevent simultaneous connection to both power sources unless closed transition.
- K. Oversize Neutral: Ampacity and switch rating of neutral path through units indicated for oversize neutral shall be double the nominal rating of circuit in which switch is installed.
- L. Heater: Equip switches exposed to outdoor temperatures and humidity, and other units indicated, with an internal heater. Provide thermostat within enclosure to control heater.
- M. Battery Charger: For generator starting batteries.
  - 1. Float type, rated 10 A.
  - 2. Ammeter to display charging current.
  - 3. Fused ac inputs and dc outputs.
- N. Annunciation, Control, and Programming Interface Components:

  Devices at transfer switches for communicating with remote programming devices, annunciators, or annunciator and control panels shall have communication capability matched with remote device.
- O. Factory Wiring: Train and bundle factory wiring and label, consistent with Shop Drawings, by color-code or by numbered or lettered wire and cable with printed tape shrinkable sleeve] markers at terminations.

- 1. Designated Terminals: Pressure type, suitable for types and sizes of field wiring indicated.
- 2. Power-Terminal Arrangement and Field-Wiring Space: Suitable for top, side, or bottom entrance of feeder conductors as indicated.
- 3. Control Wiring: Equipped with lugs suitable for connection to terminal strips.
- 4. Accessible via front access.
- P. Enclosures: General-purpose NEMA 250, Type, complying with NEMA ICS 6 and UL 508, unless otherwise indicated.

#### 3.11 CONTACTOR-TYPE AUTOMATIC TRANSFER SWITCHES

- A. ASCO, Kohler, Cummins-Onan and Russel Electric.
- B. Comply with Level 1 equipment according to NFPA 110.
- C. Switch Characteristics: Designed for continuous-duty repetitive transfer of full-rated current between active power sources.
  - 1. Limitation: Switches using molded-case switches or circuit breakers or insulated-case circuit-breaker components are unacceptable.
  - 2. Switch Action: Double throw; mechanically held in both directions.
  - 3. Contacts: Silver composition or silver alloy for load-current switching. Contactor-style automatic transfer-switch units, rated 600 A and higher, shall have separate arcing contacts.
  - 4. Conductor Connectors: Suitable for use with conductor material and sizes.
  - 5. Material: Tin-plated aluminum.
  - 6. Main and Neutral Lugs: Compression type.
  - 7. Ground Lugs and Bus-Configured Terminators: Compression type.
  - 8. Ground bar.
  - 9. Connectors shall be marked for conductor size and type according to UL 1008.
- D. Automatic Open-Transition Transfer Switches: Interlocked to prevent the load from being closed on both sources at the same time.

- 1. Sources shall be mechanically and electrically interlocked to prevent closing both sources on the load at the same time.
- 2. Failure of power source serving load initiates automatic break-before-make transfer.

#### E. Automatic Transfer-Switch Controller Features:

- 1. Controller operates through a period of loss of control power.
- 2. Undervoltage Sensing for Each Phase of Normal and Alternate Source: Sense low phase-to-ground voltage on each phase. Pickup voltage shall be adjustable from eighty-five (85) to one hundred percent (100%) of nominal, and dropout voltage shall be adjustable from seventy-five (75) to ninety-eight percent (98%) of pickup value. Factory set for pickup at ninety percent (90%) and dropout at eighty-five percent (85%).
- 3. Voltage/Frequency Lockout Relay: Prevent premature transfer to generator. Pickup voltage shall be adjustable from eighty-five (85) to one hundred percent (100%) of nominal. Factory set for pickup at inity percent (90%). Pickup frequency shall be adjustable from ninety (90) to one hundred percent (100%) of nominal. Factory set for pickup at ninety-five (95%).
- 4. Time Delay for Retransfer to Normal Source: Adjustable from zero (0) to thirty (30) minutes, and factory set for ten (10) minutes. Override shall automatically defeat delay on loss of voltage or sustained undervoltage of emergency source, provided normal supply has been restored.
- 5. Test Switch: Simulate normal-source failure.
- 6. Switch-Position Pilot Lights: Indicate source to which load is connected.
- 7. Source-Available Indicating Lights: Supervise sources via transfer-switch normal- and emergency-source sensing circuits.
  - a. Normal Power Supervision: Green light with nameplate engraved "Normal Source Available."
  - b. Emergency Power Supervision: Red light with nameplate engraved "Emergency Source Available."

- 8. Unassigned Auxiliary Contacts: Two (2) normally open, single-pole, double-throw contacts for each switch position, rated 10 A at 240-V ac.
- 9. Transfer Override Switch: Overrides automatic retransfer control so transfer switch will remain connected to emergency power source regardless of condition of normal source. Pilot light indicates override status.
- 10. Engine Starting Contacts: One isolated and normally closed, and one isolated and normally open; rated 10 A at 32-V dc minimum.
- 11. Engine Shutdown Contacts: Instantaneous; shall initiate shutdown sequence at remote engine-generator controls after retransfer of load to normal source.
- 12. Engine Shutdown Contacts: Time delay adjustable from zero (0) to five (5) minutes, and factory set for five (5) minutes. Contacts shall initiate shutdown at remote engine-generator controls after retransfer of load to normal source.
- 13. Engine-Generator Exerciser: Solid-state, programmable-time switch starts engine generator and transfers load to it from normal source for a preset time, then retransfers and shuts down engine after a preset cool-down period. Initiates exercise cycle at preset intervals adjustable from seven (7) to thirty (30) days. Running periods shall be adjustable from ten (10) to thirty (30) minutes. Factory settings shall be for seven (7) day exercise cycle, twenty (20) minute running period, and five (5) minute cooldown period. Exerciser features include the following:
  - a. Exerciser Transfer Selector Switch: Permits selection of exercise with and without load transfer.
  - b. Push-button programming control with digital display of settings.
  - c. Integral battery operation of time switch when normal control power is unavailable.

### 3.12 SOURCE QUALITY CONTROL

- A. Factory Tests: Test and inspect components, assembled switches, and associated equipment according to UL 1008. Ensure proper operation. Check transfer time and voltage, frequency, and time-delay settings for compliance with specified requirements. Perform dielectric strength test complying with NEMA ICS 1.
- B. Prepare test and inspection reports.

- 1. For each of the tests required by UL 1008, performed on representative devices, for emergency systems. Include results of test for the following conditions:
  - a. Overvoltage.
  - b. Undervoltage.
  - c. Loss of supply voltage.
  - d. Reduction of supply voltage.
  - e. Alternative supply voltage or frequency is at minimum acceptable values.
  - f. Temperature rise.
  - g. Dielectric voltage-withstand; before and after short-circuit test.
  - h. Overload.
  - i. Contact opening.
  - j. Endurance.
  - k. Short circuit.
  - 1. Short-time current capability.
  - m. Receptacle withstand capability.
  - n. Insulating base and supports damage.

#### **EXECUTION**

#### 3.13 INSTALLATION

- A. Set field-adjustable intervals and delays, relays, and engine exerciser clock.
- B. Comply with NECA 1.

#### 3.14 CONNECTIONS

- A. Wiring to Remote Components: Match type and number of cables and conductors to generator sets, motor controls, control, and communication requirements of transfer switches as recommended by manufacturer. Increase raceway sizes at no additional cost to Owner if necessary to accommodate required wiring.
- B. Wiring within Enclosures: Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii.
- C. Ground equipment according.

- D. Route and brace conductors according to manufacturer's written instructions. Do not obscure manufacturer's markings and labels.
- E. Final connections to equipment shall be made with liquidtight, flexible metallic conduit no more than eighteen inches (18") (457 mm) in length.

### 3.15 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.
- C. Perform the following tests and inspections with the assistance of a factoryauthorized service representative:
  - 1. After installing equipment, test for compliance with requirements according to NETA ATS.
  - 2. Visual and Mechanical Inspection:
    - a. Compare equipment nameplate data with Drawings and Specifications.
    - b. Inspect physical and mechanical condition.
    - c. Inspect anchorage, alignment, grounding, and required clearances.
    - d. Verify that the unit is clean.
    - e. Verify appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
    - f. Verify that manual transfer warnings are attached and visible.
    - g. Verify tightness of all control connections.
    - h. Inspect bolted electrical connections for high resistance using one of the following methods, or both:
      - 1. Use of low-resistance ohmmeter.
      - 2. Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method according to manufacturer's published data.
    - i. Perform manual transfer operation.
    - j. Verify positive mechanical interlocking between normal and alternate sources.
    - k. Perform visual and mechanical inspection of surge arresters.
    - 1. Inspect control power transformers.

- 1. Inspect for physical damage, cracked insulation, broken leads, tightness of connections, defective wiring, and overall general condition.
- 2. Verify that primary and secondary fuse or circuit-breaker ratings match Drawings.
- 3. Verify correct functioning of drawout disconnecting contacts, grounding contacts, and interlocks.

#### 3. Electrical Tests:

- a. Perform insulation-resistance tests on all control wiring with respect to ground.
- b. Perform a contact/pole-resistance test. Compare measured values with manufacturer's acceptable values.
- c. Verify settings and operation of control devices.
- d. Calibrate and set all relays and timers.
- e. Verify phase rotation, phasing, and synchronized operation.
- f. Perform automatic transfer tests.
- g. Verify correct operation and timing of the following functions:
  - 1. Normal source voltage-sensing and frequency-sensing relays.
  - 2. Engine start sequence.
  - 3. Time delay on transfer.
  - 4. Alternative source voltage-sensing and frequency-sensing relays.
  - 5. Automatic transfer operation.
  - 6. Interlocks and limit switch function.
  - 7. Time delay and retransfer on normal power restoration.
  - 8. Engine cool-down and shutdown feature.
- 4. Measure insulation resistance phase-to-phase and phase-to-ground with insulation-resistance tester. Include external annunciation and control circuits. Use test voltages and procedure recommended by manufacturer. Comply with manufacturer's specified minimum resistance.
  - a. Check for electrical continuity of circuits and for short circuits.
  - b. Inspect for physical damage, proper installation and connection, and integrity of barriers, covers, and safety features.
  - c. Verify that manual transfer warnings are properly placed.
  - d. Perform manual transfer operation.
- 5. After energizing circuits, perform each electrical test for transfer switches stated in NETA ATS and demonstrate interlocking sequence and operational function for each switch at least three times.

- a. Simulate power failures of normal source to automatic transfer switches and retransfer from emergency source with normal source available.
- b. Simulate loss of phase-to-ground voltage for each phase of normal source.
- c. Verify time-delay settings.
- d. Verify pickup and dropout voltages by data readout or inspection of control settings.
- e. Test bypass/isolation unit functional modes and related automatic transfer-switch operations.
- f. Perform contact-resistance test across main contacts and correct values exceeding five hundred (500) microhms and values for one pole deviating by more than fifty percent (50%) from other poles.
- g. Verify proper sequence and correct timing of automatic engine starting, transfer time delay, retransfer time delay on restoration of normal power, and engine cool-down and shutdown.
- 6. Ground-Fault Tests: Coordinate with testing of ground-fault protective devices for power delivery from both sources.
  - a. Verify grounding connections and locations and ratings of sensors.
- D. Coordinate tests with tests of generator and run them concurrently.
- E. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation and contact resistances and time delays. Attach a label or tag to each tested component indicating satisfactory completion of tests.
- F. Transfer switches will be considered defective if they do not pass tests and inspections.
- G. Remove and replace malfunctioning units and retest as specified above.
- H. Prepare test and inspection reports.
- I. Infrared Scanning: After Substantial Completion, but not more than sixty (60) days after Final Acceptance, perform an infrared scan of each switch. Remove all access panels so joints and connections are accessible to portable scanner.
  - 1. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
  - 2. Record of Infrared Scanning: Prepare a certified report that identifies switches checked and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

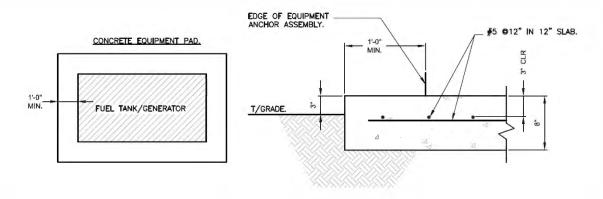
3. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each switch eleven (11) months after date of Substantial Completion.

#### 3.16 DEMONSTRATION

- A. Train Owner's maintenance personnel to adjust, operate, and maintain transfer switches and related equipment.
- B. Training shall include testing ground-fault protective devices and instructions to determine when the ground-fault system shall be retested. Include instructions on where ground-fault sensors are located and how to avoid negating the ground-fault protection scheme during testing and circuit modifications.
- C. Coordinate this training with that for generator equipment.

#### 3.17 REINFORCED CONCRETE PAD DETAIL

Concrete for the reinforced pad shall be 4000 psi and be constructed as noted on detail below.



**FUEL OIL PIPING** 

#### PART 1 – GENERAL

#### 1.1 SECTION INCLUDES

- A. Furnishing and installing of the fuel oil supply and return piping system between the aboveground fuel storage tank and the emergency generator including valves, fittings, and pipe supports.
- B. The exposed fuel oil piping shall be protected by a corrosion resistant galvanized metal shield that is bolted to the concrete pad. The metal pipe shields will protect the pipes from physical damage and also prevent excessive heating by the sun.

#### 1.2 REFERENCES

- A. America National Institutes (ANSI)
  - 1. Referenced Standards.
- B. American Society of Mechanical Engineers (ASME)
  - 1. Referenced Standards.
- C. American Standards Testing and Materials (ASTM)
  - 1. Referenced Standards.
- D. National Fire Protection Agency (NFPA)
  - 1. NFPA 30 Flammable and Combustible Liquids Code.
- E. State of Florida Department of Environmental Protection (DEP):
  - 1. DEP 62-762 Aboveground Storage Tank Systems.
- F. American Petroleum Institute (API)
  - 1. API 607- Fire Test of Quarter Turn Valves and Valves Equipped with Non-metallic seats.

#### 1.3 SUBMITTALS

- A. Shop drawings for all piping, fittings, valves and pipe supports shall be provided including all certifications as required.
- B. Submit head loss calculations showing that the pressure drop through the fuel oil piping, valves, elbows, anti-siphon valve, does not exceed the capability of the engine generator fuel pump.

#### 1.5 QUALITY ASSURANCE

- A. Qualifications of Welders: All welders employed for this work shall be qualified under the requirements of ANSI B31.1.0 Section 127.5. Certification of welder's qualifications shall be submitted to the Engineer before any welds are made.
- B. Pipe Welding Qualifications: Qualify procedures and personnel according to ASME Boiler and Pressure Vessel Code.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. The supplier will be responsible for shipping, delivery, and rigging costs.
- B. Provide pipe end caps and other protective materials to keep all piping, valves and fittings clean and free from damage.

#### PART 2 – PRODUCTS

#### 2.1 FUEL OIL PIPING SYSTEM

- A. General: Fuel oil piping and equipment shall be located as shown on the Drawings. Coordinate piping with outside utilities and with equipment suppliers utilizing shop drawings or installation instructions. All piping shall be supported according to standard engineering practice. Pipe supports shall be suitable for outdoor use. Provide removable ten (10) gauge aluminum diamond plate protective covers over the exposed fuel oil pipes.
- B. Aboveground Piping: Piping shall be ASTM A53, black steel, schedule 40, type E or S, Grade B. Piping exterior shall be coated with appropriate coating for outdoor service.

#### C. Fittings:

- 1. Malleable-Iron Threaded Fittings: ASTM A B16.3, Class 150, standard pattern.
- 2. Wrought-Steel Welding Fittings: ASTM A 234, for butt and socket welding.
- 3. Unions: ASME B16.39, Class 150, ground joint, and threaded ends.
- 4. Forged-Steel Flanges and Flanged Fittings: ASME B16.5, minimum Class 150, including bolts, nuts, and gaskets.

#### 2.2 FUEL OIL VALVES

- A. BALL VALVES Ball valves shall be two (2) piece, full port, steel ball valve with stainless steel trim meeting API 607 standards and shall include the following features:
  - 1. Threaded Ends: Comply with ASME B1.20.1.
  - 2. Tamperproof Feature: Locking feature for valves if indicated on Drawings.
  - 3. Body: Carbon Steel or Stainless Steel
  - 4. Stem: Stainless Steel, blowout proof.
  - 5. Seats: Reinforced TFE, blowout proof.
- B. ANTI-SIPHON -3/4" UL listed anti-siphon valve designed for diesel fuel applications with a filed adjustable hydrostatic head pressure of 0'-12'. The anti-siphon valve shall be installed in the fuel supply line from the tank with manual ball valves for bypassing and isolating the anti-siphon valve. Provide valve equal to Franklin Fueling systems Model 605-300-01.

- 1. Valve construction: body- Ductile iron-zinc plated, Spring material: Zinc plated steel, Adjustment screw: Stainless steel, Disc: Fluorocarbon seal.
- 2. Valve Features: Field-adjustable hydrostatic head pressure settings, internal pressure relief valve.

#### **PART 3 - EXECUTION**

#### 3.1 INSTALLATION

- A. General: The Drawings are generally diagrammatic and should not be considered final layout. The location and quantity of piping and fittings on the Drawings are for illustration only and careful coordination of the Work is necessary to avoid conflicts. Additional venting and low point drains may be required dependent on the final layout of piping.
- B. Piping: Run all piping parallel or perpendicular to the building lines unless otherwise indicated.

#### 3.2 JOINING PIPE

- A. Join pipes with ASTM A53, black steel, schedule 40 threaded couplings and fittings.
- B. Welder Filler Metals: Comply with AWS D10.12 for welding materials appropriate for wall thickness and chemical analysis of steel pipe being welded.
- C. Equipment Connection: Flexible fuel oil supply and return piping connections at the standby engine generator shall be provided by the generator manufacturer.

#### 3.3 TESTS

A. Piping: Piping shall be disconnected from tanks and equipment prior to testing. Piping shall be tested at 50 psig air pressure for a period of four (4) hours.

### PHOTOGRAPHS OF EXISTING GENERATOR AND ATS:

### 1) Coral Reef Northbound, Building 6390, SR 821 MP 15.5



GENERATOR UNIT TAG



EXISTING AUTOMATIC TRANSFER SWITCH (ATS)

### 2) NW 41ST Street Toll Plaza Southbound, Building 6088, SR 821 MP 29.0



**GENERATOR UNIT** 



GENERATOR UNIT TAG



AUTOMATIC TRANSFER SWITCH (ATS)

### **EXISTING EQUIPMENT INFORMATION**

Mile Post	Equipment	Quantity	Make	Model No.	Serial No.	KW Rating	Voltage	Hertz	Amp	Phase	Fuel	Replace Equipment	Replace Concrete Pad	MOT Required
1) Cor	Coral Reef Northbound, Building 6390, SR 821 MP 15.5													
15.5	Emergency Generator 1		KOHLER	80RZ62	373532	60	120/240	60	250	SINGLE	LP	YES	NO	NO
13.3	ATS	1	ASCO	J07ATSA20400F5XC	N/A	N/A	120/240	60	400	SINGLE	N/A	NO	N/A	NO
2) NW	2) NW 41ST Street Toll Plaza Southbound Milepost 29.0													
20.0	Emergency Generator	1	KATOLIGHT	SNL60GG6	MRP0175936-0109	60	120/240	60	250	SINGLE	LP	YES	NO	NO
29.0	ATS	1	GENERAC	92A02271-W	19273	60	120/240	60	300	SINGLE	N/A	YES	N/A	NO

### **ATTACHMENT "C"**

## CERTIFICATION DISBURSEMENT OF PREVIOUS PAYMENTS

Contract No.:		, 2019
Financial Project No(s):		
Contract For:		
To release payment for all work perfo	ormed in the Month of,	
(State)	(Zip)	
material suppliers having an interest	referenced contract, hereby certifies that all in this contract have received their pro rata s completed and materials and equipment furn	hare of all previous payments
(Name of Business)	(Signature) Owner, President, Vice President	or Designated Officer (Corp. Resolution*)
(Address)	(Print/Type Name)	
(City)	(Title)	

\*If person signing for the Business is someone other than the Owner, President, or Vice President, a copy of the Corporate Resolution granting signature authorization must be attached to form.

### CERTIFICATION MUST BE ATTACHED TO INVOICE

#### **ATTACHMENT "D"**

### STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION CERTIFICATE OF CONTRACT COMPLETION

Contract Number	FPIN.: 190734-1-93-22	
Project Description <u>Replacement of Emergency Standby Clocations along the Florida's Turnpike System – South Re</u>		(ATS) at various
Contractor		
Contract Date		
CONTRACT	TOR'S AFFIDAVIT	
I solemnly swear and affirm: That the work under the thereto have been completed in accordance with the required materials, labor, and services against the project have been that no suits are pending by reason of work on the project covered by Worker's Compensation insurance as required insurance, and that the Owner shall save, protect, defend, any and all claims which arise as a direct or indirect result of the work contemplated under said contract.	uirements of said contract; that all costs i een paid; that no liens have been attach at under the contract; that all Worker's Co d by law; that all public liability claims are , indemnify, and hold the Department han	incurred for equipment, led against the project; impensation claims are adequately covered by mless from and against
(Signature), Owner, President, Vice President or other Designated Office	er (Corp. Resolution) (1	Γitle)
	(Corporate Seal)	
STATE OF		
COUNTY OF		
The foregoing affidavit was acknowledged before me this	d	ay of, 20
by, on beha (Print/Type Name of Person Signing Above)	alf of the Vendor. He/She is personally kno	own to me or has
produced		as identification.
(Type of Identification)		
Notary Public:(Signature)	(Notary Stamp)	
Type/Print Name:		

CERTIFICATION MUST BE ATTACHED TO THE FINAL INVOICE

<sup>\*</sup> If person signing for the Business is someone other than the Owner, President, or Vice President, a copy of the Corporate Resolution granting signature authorization must be furnished in the bid package.



### **EXHIBIT "B"**

### **METHOD OF COMPENSATION**

### **DOT-ITB-19-8012-RM**

REPLACEMENT OF EMERGENCY STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH (ATS) AT VARIOUS LOCATIONS ALONG THE FLORIDA'S TURNPIKE SYSTEM – SOUTH REGION

FPID No. 190734-1-93-22

### EXHIBIT "B" METHOD OF COMPENSATION

# REPLACEMENT OF EMERGENCY STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH (ATS) AT VARIOUS LOCATIONS ALONG THE FLORIDA'S TURNPIKE SYSTEM – SOUTH REGION

#### 1.0 General

The Vendor shall accept the compensation as provided in this Contract as full payment for furnishing all labor, materials and equipment, for performing all work under this Contract, and for all other costs including, but not limited to: tolls, dump fees, fuel, permits, and any documentation required in this Contract. All work not specifically defined shall be included to the bid item(s).

### 2.0 Pay Item Definition (Basis of Payment)

The Department agrees to pay the Vendor for the services performed, an amount of compensation and method of payment as described and detailed herein and in Exhibit "C," Bid Blank.

#### 2.1 Generator and ATS Replacement Services

The following pay items represent the total and full compensation to the Vendor for furnishing all labor, materials, tools, equipment including pickup, handling and delivery of Vendor supplied equipment, permits, supplies, travel time and expenses, transportation, mobilization, disposal, profit, overhead, mark-ups and all other incidental expenses and costs incurred by the Vendor necessary to perform generator and ATS replacement as specified in this Contract and Attachment "A," Scope of Services and General Requirements for a turn-key project. The removal and disposal of existing equipment shall be done in accordance with all applicable local, state, and federal requirements, laws, and regulations.

Payment will be made on the basis of the Contract lump sum prices as shown in Exhibit "C," Bid Blank, under the following item numbers:

### Pay Item No. 1 - Coral Reef Northbound, Building 6390, SR 821 MP 15.5 -Lump Sum (LS).

The Contract lump sum price for this pay item shall cover the cost of replacing the existing outdoor Liquid Propane 60 KW generator and all incidental services needed to complete the work as specified in this Contract.

### Pay Item No. 2 - NW 41ST Street Toll Plaza Southbound, Building 6088, SR 821 MP 29.0 - Lump Sum (LS).

The Contract lump sum price for this pay item shall cover the cost of replacing the existing outdoor Liquid Propane 60 KW generator and 400 AMP ATS units and all incidental services needed to complete the work as specified in this Contract.

#### 3.0 Method of Measurement

All measurement of payment will be based on the actual amount of work completed and accepted, in strict accordance with the specifications and all codes/standards specified herein, and approved by the Department's Project/Contract Manager. Work completed under this Contract shall be measured according to the methods outlined in the basis of payment hereunder and shall be paid for at the Contract lump sum price for such activity.

### 3.1 Compensation

The Vendor shall be paid, per the compensation details in the Exhibit and price schedule in the Exhibit "C," Bid Blank for the work accomplished and accepted by the Contract Manager. The total payment made to the Vendor shall not exceed the maximum amount of the face value of the Contract, without Supplemental Agreement being processed.

#### 3.2 Invoicing

Payment will be made following receipt and approval of an invoice package for all work performed and accepted by the Department's Project/Contract Manager.

The Vendor's invoice package shall be submitted to the address below.

Florida Department of Transportation PO Box 9828 Ft. Lauderdale, FL 33310 Attn: To Be Determined (TBD)

- A. The invoice package shall be a legible summary on the Vendor's letterhead that includes the following:
  - 1. Company Name
  - 2. Address
  - 3. Remittance address if different from mailing address
  - 4. Date of Service
  - 5. Contract or Purchase Order Number
  - 6. Pay Item Number & Description
  - 7. Quantity
  - 8. Unit Price
  - 9. Total Amount of Invoice
  - 10. Total Labor Hours
- B. The "LABOR HOURS" are the total number of expended hours times the number of employees assigned to perform the work. The information is required for entry into the Department's Maintenance Management System (MMS) only, and not intended as a basis of payment.
- 3.3 The Vendor shall provide a statement (**Attachment "C,"** Disbursement of Previous Payments), with all but the first and last pay request to the Department which certifies that the Vendor has disbursed to all sub-vendors, laborers, and materials suppliers, having an interest in the Contract, their pro-rata shares of the payment, out of the previous payments received by the Vendor for all work completed and materials furnished in the previous period. This certification shall be in the form designated by the Department. The Department shall not make any payments after the initial payment until the Vendor furnishes said certification, unless the Vendor demonstrates good cause for not making any such required payment and provides written notification of any such good cause to both, the Department and the affected sub-vendors, laborers, and material suppliers.
- 3.4 The Vendor shall submit a Certificate of Contract Completion with the final invoice (see **Attachment "D"**).

3.5 In the event that funds paid to the Vendor under this Contract are subsequently disallowed by the Department because of accounting errors or charges not in conformity with this Contract, the Vendor agrees that such disallowed amounts are due to the Department upon demand. Further, Vendor agrees that the Department shall have the right to deduct from any payment due to the Vendor under any other contract between the Vendor and the Department or under this Contract, an amount sufficient to satisfy any amount due and owing the Department by the Vendor.



### **EXHIBIT "C"**

### **BID BLANK**

**DOT-ITB-19-8012-RM** 

REPLACEMENT OF EMERGENCY STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH (ATS) AT VARIOUS LOCATIONS ALONG THE FLORIDA'S TURNPIKE SYSTEM – SOUTH REGION

FPID No. 190734-1-93-22

### **EXHIBIT "C" - BID BLANK**

# REPLACEMENT OF EMERGENCY STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH (ATS) AT VARIOUS LOCATIONS ALONG THE FLORIDA'S TURNPIKE SYSTEM – SOUTH REGION

PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	PAY ITEM TOTAL
1	Coral Reef Northbound, Building 6390, SR 821 MP 15.5 – Services as specified in this Contract.	Lump Sum	1	\$
2	NW 41ST Street Toll Plaza Southbound, Building 6088, SR 821 MP 29.0 - Services as specified in this Contract.	Lump Sum	1	\$

				TOTAL	AMOUNT O	F BID	FOR THIS	CONTRAC	Г	\$			
									(ADD	FOGETHER .	ALL ABOVE	E TOTALS)	
MFM 1000	<b>1P Transaction Fee</b> General Contract Co	e: All payment( ondition #14. T	s) to the Vend ne Transaction	or resulting from Fees imposed	om this competitiv d shall be based up	e solicita	ation WILL be su	bject to the MFM the payment.	P Transaction	n Fee in accorda	ance with the re	eferenced Form PUF	٤
	Name of Busin	ness								_			

#### **EXHIBIT "C" - BID BLANK**

# REPLACEMENT OF EMERGENCY STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH (ATS) AT VARIOUS LOCATIONS ALONG THE FLORIDA'S TURNPIKE SYSTEM – SOUTH REGION

The undersigned has completed and is returning the following documents as part of its Bid Package and understands that failure to return any of these documents fully completed may cause rejection of the Bid.

The following forms must be completed and s Bid Blank: Exhibit C, Page C-1 thru C-2.	submitted by or prior to the bid due date and time, in	n order for the Bid to be responsive:	
A copy of the Vendor's Business Tax Re-	ceipt, stating the name of the Bidder's business, the sers the services being called for in the Contract.	street address of the business where all the work covered under the Contra	act will
A copy of the Vendor's license(s) as a R accordance with the laws of the State of F	egistered or Certified Electrical Contractor, authoriz lorida. (Refer to Exhibit "A," Scope of Services, sect		
Copy of a Liquefied Petroleum Gas Licen or installing of LP Gas systems and/or equ	•	Consumer Services, authorizing the license's holder to perform servicing,	testing,
Qualifications)		tate of Florida. (Refer to Exhibit "A," Scope of Services; section 3.0, Vo	
All forms supplied with the bid package ( the forms. Sign and return each form.	Forms I thru 6) return Form 5 if applicable. Be certa	ain to fill in all the blanks on the forms supplied; do not leave any blank l	ines on
Fill in the following information, complete v	vith authorized signature and date.		
Name of Business: (Print)		Federal I.D. No. :	
Mail Address:		M.B.E.: □Yes □No	
Street Address:			
City:	County:	State:	
Phone Number: ( )	Email Address:	Fax No. ( )	
Emergency Contact Information (After I	Hours):		
Name:	Phone Number: ( )	Email Address:	
Name:	Phone Number: ( )	Email Address:	
Authorized Signature:	Title:	Owner, President, Vice President or Designated Officer (Corporate Resolution) **	
Print/Type Name: □Mr. □Ms. □Mrs	O		
Phone Number: ( )	Email Address:		

<sup>\*\*</sup>If person signing the form is someone other than the Owner, President or Vice President, a copy of the Corporate Resolution granting signature authorization must be furnished in the bid package.