### REQUEST FOR PROPOSALS

**FOR** 

# D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

CITY OF ALEXANDRIA, LOUISIANA (OWNER)

MAYOR JACQUES M. ROY

COUNCIL MEMBERS
REDDEX WASHINGTON
GARY JOHNSON
CYNTHIA PERRY
LIZZIE FELTER
CHARLES "CHUCK" FOWLER, JR.
LEE RUBIN
JAMES "JIM" VILLARD

CITY COUNCIL CLERK
DONNA JONES

DIRECTOR OF UTILITIES
MARCUS CONNELLA

July 2024



PAN AMERICAN ENGINEERS, LLC P.0. BOX 8599 (71306) 1717 JACKSON STREET (71301) ALEXANDRIA, LOUISIANA (318)473-2100 PAE Job No. 12741

# CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

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### CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

# I. ADVERTISEMENT FOR REQUEST FOR PROPOSALS/INVITATION TO BID

#### I. ADVERTISEMENT FOR REQUEST FOR PROPOSALS/INVITATION TO BID

#### CITY OF ALEXANDRIA, LOUISIANA PURCHASING DEPARTMENT

### BID # 2492 D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 - WARTSILA OVERHAUL/MAINTENANCE SERVICES

Separate sealed proposals for D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 - WARTSILA OVERHAUL/MAINTENANCE SERVICES, will be received by the CITY OF ALEXANDRIA at the CITY COUNCIL MEETING CHAMBERS, ALEXANDRIA CITY HALL, ALEXANDRIA, LOUISIANA, until 10:00 AM CST CDT. TUESDAY. September 3, 2024, and then at said office publicly opened and read aloud.

Complete proposal packet and specifications may be obtained at the City of Alexandria's website, <a href="www.cityofalexandriala.com">www.cityofalexandriala.com</a> under the heading "Business", and drop down to "RFP/RFQIRFI/B/DS". There is no charge to download bid documents from the City's website.

Pursuant to LA RS. 38:2212.1 B.(4)(a), vendors have the <u>option</u> to submit their bids electronically. Please find bid related documents and place electronic bids at <u>www.centralbidding.com</u>. For questions regarding the electronic bidding process, please call Central Bidding at 225-810-4814.

The City will hold a Non-Mandatory Pre-Proposal Conference on-site to allow potential proposers the opportunity to evaluate existing site conditions and work setting. The Pre-Proposal Conference will be held at the Power Plant, 1011 North 3<sup>rd</sup> Street, Alexandria, LA 71301 on **Wednesday, August 14, 2024 at 11:00 a.m.** 

Questions and/or request for clarification of bid specifications are to be in written form only, either mailed or emailed to Thomas C. David, Jr., Pan American Engineers, LLC, 1717 Jackson Street, Alexandria, LA 71301; P.O. Box 8599, Alexandria, LA 71306; Emailed to: <a href="maileo-received-within-ten">Tom@paealex.com</a> and must be received within ten (10) calendar days of the scheduled receipt of proposals.

#### **Address for Postal Delivery:**

City of Alexandria Donna Jones, City Clerk PO Box 71 Alexandria, LA 71309-0071

### Address for Courier or Overnight Delivery:

City of Alexandria Donna Jones, City Clerk 915 Third Street, 1<sup>st</sup> Floor Alexandria, LA 71301 Phone: 318-449-5047

### Address for Electronic Bid Submission:

www.centralbidding.com

Phone: 225-810-4814

#### PLEASE PUBLISH THREE (3) TIMES:

July 26, 2024 August 2, 2024 August 9, 2024

### CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

### II. PROPOSAL COVER SHEET

### CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES



### City of Alexandria

Purchasing Department P. 0. Box 71 Alexandria, Louisiana 71309-0071



Office: (318) 441-6180 Fax: (318) 441-6185

#### II. PROPOSAL COVER SHEET City of Alexandria Bid #2492 Sealed bids will be received until 10:00 AM, Tuesday, September 3, 202424, and Page: 1 of 1 publicly opened in the Council Chambers or Date Specifications Prepared: 07/05/2024 Council Committee Room. Bid Bond Requirements: A bid bond or check Please file bid with the following: for NIA% of the total amount of bid. **Donna Jones, City Clerk** City of Alexandria 915 Third Street Performance Bond Requirements: In the event bid is accepted, a performance bond shall be required P. 0. Box 71 in the amount of NIA%. **Alexandria, LA 71309-0071** Phone: 318-449-5047

It is the intent of the City of Alexandria, Louisiana to secure price proposals for services related to the Overhaul/Maintenance for three (3) Wartsila Engines at the City's D.G. Hunter Electrical Power Plant Units 5, 6, & 9.

Completed proposal should be returned as issued by the City of Alexandria with ALL PAGES intact and all columns filled in. Incomplete columns or missing pages, to include addendum pages, may result in the proposer's entire proposal being rejected.

Questions and/or clarifications of the proposal and specification must be submitted in written form only, either mailed, faxed, or e-mailed to the attention of Thomas C. David, Jr., Pan American Engineers, LLC, 1717 Jackson Street, Alexandria, LA 71301; P.O. Box 8599, Alexandria, LA 71306; Fax: (318) 473-2275; Email: tom@paealex.com and must be received within 10 calendar days of the scheduled receipt of proposals.

<u> Bidder Information:</u>		
Addenda Acknowledged:		
Company Name:		
Address:		
City/State/Zip:		
Telephone	Fax#:	
#:( )		
Authorized Printed Name and Title:		
Authorized Signature:		
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### CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5. 6. & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

### III. PROPOSAL FORM

### CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5. 6. 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

#### III. PROPOSAL FORM

This service work will take place at the following location: City of Alexandria D.G. Hunter Electrical Power Plant, 1011 North 3rd Street, Alexandria, LA 71301

### A. ON-SITE MAINTENANCE SERVICES AND OFF-SITE SHOP WORK

DESCRIPTION:				
REF. NO. 1	QUANTITY;'.	UNIT•OF - MEASURE:•	UNIT,PRICE	LUMP SUM OR UNIT PRICE EXTER SION ' (Quantify times Unit Price) (iif;:'\-
Mobilization and De-Mobilization	Job	Lump Sum	N/A	\$
DESCRIPTION:				
REF. NO. 2	QUANTITY:	!t UNIT Of •.MEASURE:	UN IT PRICE	LUMP SUM OR UNIT PRICE EXTENSION(Quantity times Unit Price}
Engine 5 - Combined 8,000, 12,000, and 16,000 Running Hours On-Site Maintenance Services and Off-Site Shop Work  Engine Type: PME264151 Wartsila 20V34SG  Fee Structure: Lump Sum fee shall include all field service labor expenses, cylinder head overhauls, cylinder liner overhauls, turbo charger inspection and overhaul, charge air cooler overhaul, lube oil cooler overhaul, main bearing replacements, cam shaft bearings, turbo crating, airfare, hotel, car/rental, per diem and other job related incidental costs.	Job	Lump Sum	N/A	\$

### CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5. 6, 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

#### III. PROPOSAL FORM

This service work will take place at the following location: City of Alexandria D.G. Hunter Electrical Power Plant, 1011 North 3rd Street, Alexandria, LA 71301

DESCRIPTION:				
REF. NO. 3	QUANTITY:	UNITOF' -'MEASURE:	.UNIT,PRICE <sup>,-</sup>	LUMP SUM OR UNIT PRICE EXTENSION (Quantity times Unit Price)
Engine 6 - Combined 8,000, 12,000, and 16,000 Running Hours On-Site Maintenance Services and Off-Site Shop Work				
Engine Type: PAAE264151 Wartsila 20V34SG				
Fee Structure: Lump Sum fee shall include all field service labor expenses, cylinder head overhauls, cylinder liner overhauls, turbo charger inspection and overhaul, charge air cooler overhaul, lube oil cooler overhaul, main bearing replacements, cam shaft bearings, turbo crating, airfare, hotel, car/rental, per diem and other job related incidental costs.	Job	Lump Sum	N/A	\$

# CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5. 61 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

#### III. PROPOSAL FORM

This service work will take place at the following location: City of Alexandria D.G. Hunter Electrical Power Plant, 1011 North 3rd Street, Alexandria, LA 71301

DESCRIPTION:				
REF. NO. 4	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	LUMP SUM OR UNIT PRICE EXTENSION (Quantity times Unit Price)
Engine 9 - Combined 8,000, 12,000, and 16,000 Running Hours On-Site Maintenance Services and Off-Site Shop Work  Engine Type: PAAE264151 Wartsila 20V34SG  Fee Structure: Lump Sum fee shall include all field service labor expenses, cylinder head overhauls, cylinder liner overhauls, turbo charger inspection and overhaul, charge air cooler overhaul, lube oil cooler overhaul, main bearing replacements, cam shaft bearings, turbo crating, airfare, hotel, car/rental, per diem and other job related incidental costs.	Job	Lump Sum	N/A	\$

### CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6. 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

#### III. PROPOSAL FORM

This service work will take place at the following location: City of Alexandria D.G. Hunter Electrical Power Plant, 1011 North 3rd Street, Alexandria, LA 71301

#### B. NON-BASELINE REPAIR CASH ALLOWANCES

DESCRIPTION:				
REF. NO. 5	QUANTITY:	UNIT OF MEASURE:	'UNIT PRICE	LUMP SUM OR UNIT PRICE EXTENSION (Quantity times Unit Price)
Engine 5 Non-Baseline Repair Work  General: Owner authorized non-baseline repair work shall include the total cost of each specific repair item. Expenses for approved repairs will be charged against the stated allowance amount.	Job	Allowance	N/A	\$100,000.00
Pricing Structure: Pricing for authorized non-baseline repairs shall be scoped and a lump-sum price developed for owner review and approval. Repair cost shall include labor, parts, shipping, packaging, and other related incidental costs.		,		<b>\$</b> 1.50,650.00

DESCRIPTION:				
REF. NO. 6	QUANTITY:	UNITOF: MEASURE:	UNIT PRICE	LUMP SUM OR UNITPRICE EXTENSION (Quantity times UnitPriceJ
Engine 6 Non-Baseline Repair Work  General:				
Owner authorized non-baseline repair work shall include the total cost of each specific repair item. Expenses for approved repairs will be charged against the stated allowance amount.				
Pricing Structure: Pricing for authorized non-baseline repairs shall be scoped and a lump-sum price developed for owner review and approval. Repair cost shall include labor, parts, shipping, packaging, and other related incidental costs.	Job	Allowance	N/A	\$100,000.00

### CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5. 6, 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

#### III. PROPOSAL FORM

This service work will take place at the following location:
City of Alexandria D.G. Hunter Electrical Power Plant, 1011 North 3rd Street, Alexandria, LA 71301

RECORDED				
DESCRIPTION:				
REF. NO. 7.	QUANTITY:	. U_IT OF MEASURE:	UNIT PRICE	LUMP SUM OR UNIT PRICE EXTENSION • (Quantity times.Unit Price) •۱;:
Engine 9 Non-Baseline Repair Work	-			
General: Owner authorized non-baseline repair work shall include the total cost of each specific repair item. Expenses for approved repairs will be charged against the stated allowance amount.				
Pricing Structure: Pricing for authorized non-baseline repairs shall be scoped and a lump-sum price developed for owner review and approval. Repair cost shall include labor, parts, shipping, packaging, and other related incidental costs.	Job	Allowance	N/A	\$100,000.00
TOTAL OF REFERENCE NO's 1-7 (Including Stated Allow	vances)			\$

### C. ADDITIONAL OWNER <u>REQUESTED</u> SERVICE WORK

Hourly Rates Shall be Provided for Regular a\_nd Overtime for Owner Reguested Additional Services-

	NORMAL RATE	OVERTIME RATE
Service Technician	\$	\$
Service Engineer	\$	\$
Superintendent	\$	\$

### CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

# IV. PROPOSER'S BACKGROUND AND CAPABILITIES

# CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

### IV. PROPOSERS BACKGROUND AND CAPABILITIES

1.	Proposer's Official Business Name and Corporate Structure:
2.	Proposer's Headquarters' Location and Other Office Locations' Addresses:
3.	Identification of Proposer's Project Lead Along with Title And Bio: (Attach Biographical Information In Separate Document)

# CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5. 6, & 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

4.	Proposer's Expected Project Team Members and Bios: (Attach Biographical Information In Separate Document)
5.	Location of Proposer's In-House Maintenance Operation:  (Attach Narrative In-House Maintenance Expertise In Separate Document)
6.	Description of Proposer's Capabilities Relevant to this Project. a. List of Similar Projects Completed (At Least Ten (10) Engines).

# CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

	b. References (At Least Three):
7.	Proposer's Project Safety Performance Record.  (Attach Safety Performance Records In Separate Document).
8.	Location To Nearest Service Center to Alexandria, Louisiana.

# CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6. & 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

9.	Location of S Accomplished.		Other	Facilities	Where	Off-Site	Refurbishment	Work	Would	Ве
10	Listing and Pri	cing of Ant	icinate	d Snara P	arte in Δ	ddition to	Those Listed in	Δttach	ment A	that
10		Be Needec	for th	e Overhai			Services of Uni			
11.	Provide Non-Bi Attach Sample)					l Services	<b>.</b>			

### CITY OF ALEXANDRIA, LOUISIANA O.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

# V. GENERAL CONDITIONS FOR PROPOSERS

### CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

### V. GENERAL CONDITIONS FOR PROPOSERS PLEASE READ CAREFULLY

- 1. Pursuant to LA R.S 38:2212.1. C.(1)(2), any manufacturer's preference in this proposal is descriptive, but non-restrictive, and is used only to indicate minimum requirement for type, grade and quality unless otherwise specified.
- 2. Each proposer shall submit his proposal on the proposal form furnished by the City of Alexandria Purchasing Department. The complete proposal package must be returned as issued by the City with all pages intact and all specification response columns filled in. Incomplete columns or missing pages, to include addendum pages, shall result in the vendor's entire proposal package being rejected.
- 3. Literature, brochures, and other related paperwork attached to the proposal should be identified with the name of the proposer.
- 4. In case of a mathematical discrepancy between unit price and extensions, the unit price shall prevail.
- 5. The City of Alexandria reserves the right to award by item or by total proposal, unless otherwise specified in the proposal specifications.
- 6. All erasures or corrections on the proposal form must be initialed and the City of Alexandria may rely on the apparent authority represented by the initials.
- 7. The City of Alexandria reserves the right to reject for cause any and all proposals or parts of proposals, or accept proposals most beneficial to the City.
- 8. Any proposal submitted which contains additions, conditional or alternate proposals, or irregularities which may make the proposal incomplete, indefinite, or ambiguous as to its meaning, thus requiring clarification after the specified date and time of proposal opening shall be rejected.
- 9. Proposals shall be opened publicly in the City Council Chambers or Council Committee Room.
- 10. The City of Alexandria shall schedule for payment the invoices for articles or services purchased under this proposal within thirty (30) days after due and proper delivery accompanied by invoice.
- 11. The City of Alexandria is exempt from all sales taxes or value added taxes. A sales tax exempt form shall be furnished by the City of Alexandria Purchasing Department to the successful proposer, if requested.
- 12. Proposer(s) awarded item(s) by the City of Alexandria shall be responsible for supplying all products at the awarded price(s). Failure may result in the City's cancellation of the remaining items awarded.

### CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

- 13. Regarding Service Contracts and Procurement Contracts, the terms of the contract shall be binding upon any and all parties involved until goods and supplies are delivered, services have been rendered, and/or work has been completed and accepted by the Mayor on behalf of the City of Alexandria and all payments required to be made to the Contractor have been made. However, a contract may be terminated under any and all of the following conditions:
  - (a) By mutual agreement and consent of either party upon thirty (30) days written notice to the other party;
  - (b) By the Mayor, on behalf of the City of Alexandria, as a consequence of the failure of the Contractor to comply with the terms and conditions of the contract or the progress or quality of work to be performed in a satisfactory manner, proper allowance being made for circumstances beyond the control of the Contractor; or
  - (c) By satisfactory completion of all services and obligations described in the contract.

If the contract is terminated for any of the terms and conditions authorized in sub-paragraph (b) above, Contractor shall be formally notified in writing by the City of Alexandria Purchasing Department by means of certified mail informing him of cancellation of the contract, giving specific reasons for said cancellation. Contractor shall have the right to appeal to the City Council within ten (10) days from the date that said notification is placed in the U.S. Mail. Contractor's appeal shall be accomplished by means of a letter addressed to the City Council and delivered to the City Clerk, stating that an appeal to the decision of cancellation is desired. The City Council shall thereafter hold a hearing on the appeal, giving all parties the opportunity to present any and all evidence concerning the decision of cancellation. After hearing the appeal, the city Council may, by a majority vote, sustain, modify,

or reverse the findings for said decision and shall provide, if requested by Contractor, a written

14. Insurance: The proposer shall at its own cost provide for and maintain comprehensive insurance coverage to protect its own property and personnel. The proposer shall provide a waver of all rights of recourse and subrogation against the City from its insurers as well as, indemnify and hold the City harmless for all claims of the City's insurers.

Minimun Scope and Limits of Insurance:

determination of its findings.

Worker's Compensation

Worker's Compensation insurance shall be in compliance with the Worker's Compensation law of the Contractor's headquarters. Employers Liability is included with a minimum limit of \$1,000,000 per accident/per disease/per employee. If Work is to be performed over water and involves maritime exposure, applicable LHWCA, Jones Act or other maritime law coverage shall be included. A.M. Best's insurance company rating requirement may be waived for Worker's compensation coverage only. To the

### CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

fullest allowed by law, the insurer shall agree to waive all rights of subrogation against the Owner, its officers, agents, employees and volunteers for losses arising from Work performed by the Contractor for the Owner.

### Commercial General Liability

Commercial General Liability insurance, including Personal and Advertising Injury Liability and Products and Completed Operations Liability, shall have a minimum limit per occurrence totaling \$2,000,000 and a per project aggregate of \$4,000,000. The Insurance Services Office (ISO) Commercial General Liability occurrence coverage form CG 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. Claims-made form is unacceptable. The Owner, its officers, agents, employees and volunteers are to be added as additional insureds as respects liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor, premises owned, occupied or used by the Contractor. The Engineer shall also be named as an additional insured.

#### Automobile Liability

Automobile Liability Insurance shall have a mmImum combined single limit per occurrence of \$1,000,000. ISO form number CA 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. This insurance shall include third-party bodily injury and property damage liability for owned, hired and non-owned automobiles.

#### All Coverages

All policies must be endorsed to require 30 days written notice of cancellation to the Owner. Ten-day written notice of cancellation is acceptable for non-payment of premium. Notifications shall comply with the standard cancellation provisions in the Contractor's policy. In addition, Contractor is required to notify Owner of policy cancellations or reductions in limits.

#### Acceptability of Insurers

All required insurance shall be provided by a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located. Insurance shall be placed with insurers with an A.M. Best's rating of **A-: VI or higher.** This rating requirement may be waived for Workers' compensation coverage.

If at any time an insurer issuing any such policy does not meet the minimum A.M. Best rating, the Contractor shall obtain a policy with an insurer that meets the A.M. Best rating and shall submit another certificate of insurance within 30 days.

### 

#### Waiver of Subrogation

To the extent, damages are covered by and recovery is made against property insurance policies covering the Work, the Owner and Engineer waive all rights for the amount of such recovery against each other and against the contractors, consultants, agents, and employees of the other for damages, except such rights as they may have to the amounts actually recovered from the proceeds of such insurance as set forth herein or by separate work/service order. The Owner and the Engineer, as appropriate, shall require of the contractors, consultants, agents, and employees of any of them, similar waivers in favor of the other parties enumerated herein.

# CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

### VI. PROPOSAL SPECIFICATIONS

### CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 • WARTSILA OVERHAUUMAINTENANCE SERVICES

#### VI. PROPOSAL SPECIFICATIONS

### 1. <u>Introduction:</u>

- A. The City of Alexandria, Louisiana (COA) owns and operates seven (7) Wartsila 20V34SG Reciprocating Internal Combustion Engine (RICE) generator sets (Units 5-11) at its D. G. Hunter Plant located at 1011 North 3<sup>rd</sup> Street, Alexandria, Louisiana 71909. Each of the seven engines has exceeded 16,000 hours of operation. The COA has decided to combine the 8,000, 12,000, and 16,000 Running Hours Maintenance Service described in the Wartsila Operations and Maintenance (O&M) manuals under a two-phase program of overhaul and maintenance services. The work will be undertaken in two (2) phases; three (3) units this phase; four (4) units in the subsequent phase.
- B. The COA is seeking overhaul services for three (3) of the seven (7) units from qualified and experienced vendors familiar with Wartsila 20V34SG RICE generator sets. Overhaul work is to be performed on three selected engines from September 1, 2024 through February 28, 2025 under a single mobilization/demobilization with no more than two (2) engines out of service at the same time. The COA anticipates completing inspections on the remaining four (4) engines one year later (September 2025 through February 2026). Only the first three engines are covered by this RFP.
- C. The COA will provide two (2) mechanical technicians, one (1) electrical technician and one (1) instrument technician to assist vender technicians and engineers in the performance of overhaul work. Lock-out/tag-out (LOTO) functions will be coordinated through COA operations personnel.
- D. The COA will remove from service engines and isolate such to the satisfaction of proposer's field service personnel.
- E. The COA will drain cooling water of engine in preparation for service work.
- F. The Service Provider will provide engine specific tools up to date in terms of calibration, to support the overhaul effort.
- G. The COA will provide miscellaneous consumables to support the overhaul effort.
- H. The COA will provide spare parts to support the On-Site and Workshop Service work. A list of available parts is provided as Section VII. Overhaul Parts List.
- 2. <u>Scheduled Time Frame For Overhaul Services:</u> Six (6) calendar months; September 1, 2024 through February 28, 2025. Mobilization may take place before the beginning, and demobilization after the end, of the specified period, but designated units must remain in service until September 1, 2024.
- 3. <u>Maximum Number Of Engines Taken Out Of Service At One Time:</u> No more than two (2) engines shall be out of service at the same time without written authorization from the COA.

### CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

- 4. <u>Safety:</u> Proposers field service personnel shall have authority to stop work if an unsafe or hazardous condition is observed. Proposers field service personnel shall immediately notify COA Supervisor personnel of noted safety concerns for resolution.
- 5. <u>Criteria for Overhaul Work:</u> All overhaul work shall be conducted in accordance with Wartsila recommended practices and procedures for the specified engine.
- 6. <u>Proposer Qualifications:</u> To be qualified to prosper, Proposer must have performed 8,000, 12,000 and 16,000 Running Hours Maintenance Service on at least ten (10) Wartsila 20V34 SG engines (documentation requirements listed below) and have references from at least three separate owners.
- 7. <u>Proposers' Background Information and Capabilities:</u>
  - A. Proposers are to provide the following information related to the Proposers' background and capabilities as listed below. It is critical that Proposers provide all the requested detail in their proposal to allow the COA to complete a fair review of each Proposers' capabilities to successfully perform the overhaul activities described herein using Form provided in Section IV.
    - 1. Proposer's official business name and corporate structure.
    - 2. Proposer's headquarters' location and other office locations' addresses.
    - 3. Identification of Proposer's Project lead along with title and biography.
    - 4. Proposer's expected Project team members and biographies.
    - 5. Description and location of Proposer's in-house maintenance expertise.
    - 6. Description of Proposer's capabilities relevant to this Project (at least ten (10) Engines).
      - a. List of similar projects completed (at least five).
      - b. References (at least three).
    - 7. Details on Proposer's project safety performance record.
- 8. <u>Engine Routine Maintenance:</u> The Wartsila Operation and Maintenance Manual Routine Operational inspections will be performed by Owner's maintenance personnel as part of routine operational procedures.
- 9. <u>Scope of Maintenance Service:</u> It is acknowledged that as a result of the operational inspections, repairs and shop work may be required for each engine as related to items beyond the baseline maintenance, overhaul, and typical off-site shop work specified below and noted on the proposal form. For purposes of Owner contract budgeting, a cash allowance amount totaling \$100,000 per engine has been noted on the Proposal Form for repair work not typical to the overhaul

### CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

and maintenance effort. Approved charges for the repair work will be charged against the stated allowance for each engine. In the event that the cost for authorized repair work is less than the stated allowance amount, the contract total will be reduced to match the actual repair cost by change order. Accordingly, if the repair work exceeds the \$100,000 allowance amount, a change order shall be negotiated prior to exceeding the allowance amount for the cost of repair work greater than the allowance.

#### A. Interval: 8,000 Operating Hours:

- 1. Air Coolers:
  - a. Clean charge air cooler(s) and perform the pressure test.
    - . Check carefully for corrosion.
- Automation:
  - a. Check the wiring condition inside the cabinets and boxes.
  - b. Check for insulation wear, loose terminals, and loose wires.
  - c. Check for cable insulation wear, damages, loose cable glands, connectors, holders, and loose grounding shields.
  - d. Check for loose grounding straps and corrosion.
  - e. Check the sensors, actuators, solenoids etc. for leakages, physical damages. Also check the signal measurement where applicable.
  - f. Check the condition of the vibration dampers. Replace if necessary.
  - g. Verify correct reading on engine displays and meters.
  - h. Check the electronic modules visually for damages. Rectify, improve or replace the equipment if necessary.
  - 1. Check the sealing condition on cabinets and boxes.
- 3. NOTE: Exhaust manifold leak check and parts replacement will be conducted by Owner maintenance personnel.
- 4. Gas Regulating Unit:
  - a. Overhaul of the gas pressure regulating and safety shut-off valves per manufacturers instructions.
- 5. NOTE: Ignition system maintenance will be performed by Owner maintenance personnel.
- 6. Lubricating Oil Coolers:
  - a. Clean lubricating oil coolers.
    - 1. Unnecessary opening of the plate cooler should be avoided.
    - 11. Examine carefully for corrosion.

#### B. <u>Interval: 12,000 Operating Hours:</u>

- 1. HT Water Pump:
  - a. Inspect the HT water pump.
    - i. Dismantle and check. Replace worn parts.

# CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5. 6. & 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

- 2. HT Water Pump Driving Gear:
  - a. Inspect the HT water pump driving gear.
    - i. Replace parts, if necessary.
- 3. HT Water Thermostatic Valve:
  - a. Clean and inspect the HT water thermostatic valve.
    - 1. Internal thermostatic valve: Clean and check the thermostatic element, valve cone-casing and sealings.
    - For externally mounted thermostatic valves see supplier's operation and maintenance manual.
- 4. LT Water Pump:
  - Inspect the LT water pump.
    - 1. Dismantle and check. Replace worn parts.
- 5. LT Water Pump Driving Gear:
  - a. Inspect the LT water pump driving gear.
    - 1. Replace parts, if necessary.
- 6. LT Water Thermostatic Valve:
  - a. Clean and inspect the LT water thermostatic valve.
    - 1. Clean and check the thermostatic element, valve cone-casing and sealings.
    - For externally mounted thermostatic valves see supplier's operation and maintenance manual.
- 7. Lubricating Oil Automatic Filter:
  - a. Replace the lubricating oil filter candles.
    - Drain the filter housing. Clean the wire gauze. Replace the filter candles.
- 8. Lubricating Oil Pump:
  - a. Inspect the lubricating oil pump.
    - 1. Replace parts, if necessary.
- 9. Lubricating Oil Pump Driving Gear:
  - a. Inspect the lubricating oil pump driving gear.
    - 1. Replace parts, if necessary.
- 10. Oil Thermostatic Valve:
  - a. Clean and inspect oil thermostatic valve.
    - 1. Clean and check the thermostatic element, valve cone-casing and sealings.
- 11. Prelubricating Oil Pump:
  - Inspect the prelubricating oil pump.
    - Replace parts, if necessary.

### CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

- 12. Turbocharger(s) ABB TPL-Chargers:
  - a. Inspect the turbocharger bearings.
    - i. Inspect and replace the bearings, if necessary.
  - b. Replace the bearings on 36,000h at the latest.
    - 1. See the manufacturer's instructions.

#### C. <u>Interval: 16,000 Operating Hours:</u>

- 1. Camshaft:
  - a. Inspect camshaft bearings.
    - i. Replace if necessary.
- 2. Camshaft Driving Gear:
  - a. Inspect the intermediate gears.
    - i. Replace parts if necessary.
- 3. Connecting Rods:
  - a. Replace the big end bearing.
    - i. Replace the big end bearing. Inspect mating surfaces. Measure the big end bore appropriate inspection forms.
  - b. Inspect the small end bearings.
    - Inspect the small end bearings. Replace, if necessary.
  - c. Replace the connecting rod screws.
    - i. The nuts for the connecting rod screws do not need changing, unless they appear damaged. Clean and examine the nuts carefully at every overhaul.
  - d. Replace the connecting rod shims.

#### 4. Crankshaft:

- a. Inspect the main bearings.
  - Inspect one main bearing. If in bad condition, check/change all main bearings. Note the type of bearing in use and do the inspection accordingly.

#### 5. Cylinder Heads:

- a. Overhaul the cylinder head.
  - Dismantle and clean the under side, inlet and exhaust valves and ports. Inspect cooling spaces and clean, if necessary. Grind the valves. Inspect the valve rotators. Check the rocker arms.
  - 11. Replace the O-rings in the valve guides and on the exhaust valve seat rings.
  - Replace the O-rings at bottom of cylinder head screws at every overhaul

# CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

- 1v. Put lubricating oil on the threads of the screw.
- v. Mount the screw and tighten to specified torque.
- vi. Fill the compartment between screw and engine block with lubricating oil.

#### 6. Cylinder Liners:

- a. Inspect the cylinder liners.
  - Measure the bore using appropriate forms; replace liner if wear limits are exceeded. Hone the liners. Renew the anti-polishing ring.

#### 7. Engine Fastening Bolts:

- a. Check the tightening of the engine fastening bolts
  - Replace damaged bolts.

#### 8. Gas Admission Valves:

- a. Replace the main gas admission valves
  - In installations where connectors are used, replace the female connector.
- b. Clean the main gas admission valve insert.
  - i. Replace if needed.

#### 9. Gas System:

- Maintain the gas system
  - Replace the sealings in the pipe connections, check the sealing faces for wear and corrosion. Make the leak test.

### 10. Hydraulic Jack:

- a. Check Function.
  - 1. Replace O-rings in the hydraulic jack if they are leaking when lifting the main bearing cap.

#### 11. Pistons:

- a. Inspect the pistons.
- b. Dismantle the composite piston for inspection of mating surfaces between piston skirt and piston crown. Inspect and clean oil spaces.

#### 12. Pistons, Piston Rings:

- a. Inspect the pistons and replace the piston rings.
  - Pull, inspect and clean. Check the height of the ring grooves, use appropriate forms.
  - 11. Check the retainer rings of the gudgeon pins. Replace complete set of piston rings. Note the running-in program.

# CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

#### 13. Prechamber:

 Replace the prechamber lower part. Renew the O-rings and the bottom sealing rings.

#### 14. Lubrication Oil:

- a. Change the lubricating oil. Clean all oil spaces with a high-quality, fibreand lint-free cloth.
- 10. Parts Availability: The COA anticipates the parts listed (with quantities) in Section VII. Overhaul Parts List will be available at the time overhaul work commences. Proposers are to include a listing and pricing of anticipated additional spare parts they deem may be necessary for the completion of the work in its proposal, in addition to those listed in the Overhaul Parts List. When, during the course of work, the successful Proposer reports that certain parts are needed for the overhaul effort but not listed in the Overhaul Parts List, the successful Proposer shall notify the City to make arrangements to purchase and secure the parts for Proposers use at the prices proposed.
- 11. <u>Deliverables:</u> Proposer will complete the work described above and provide a complete service work report after completion of the service overhaul. The report will include all measurements (both before and after work is completed) taken during the performance of service along with recommendations for any additional work to be completed during the next maintenance outage or overhaul.
- 12. Overhaul Status Conference Calls: The Proposer shall participate in a scheduled status conference call or WebEx (method to be determined by the City) to be held every two weeks with the City's Project Manager, the Production Plant Superintendent, and the City's Electrical Production Consultant. During this call, reporting of percent complete, additional materials or parts needed, issues impacting work schedule etc. will be covered. The City will arrange for the setting of the conference calls.
- 13. <u>Acceptance Criteria:</u> For payment purposes, Work on each engine will be considered to be completed upon completion of: 1) all Work in the attached scope and 2) post-overhaul operational testing as described in Table 3.03, criteria A, and Sections 03.6, 03.7, and 03.8 of the Wartsila 34SG Engine O&M Manual. Testing will be terminated and re-conducted following corrective actions in the event of an engine alarm occurring during the run-in program or the instance of any operating parameter falling outside of the Normal Values presented in tables 01-5, 01-6 and 01-7 in Section 01.2 of the Wartsila 34SG Engine O&M Manual.
- 14. <u>Work Schedule:</u> Proposers shall provide a Work schedule in Microsoft Project or similar readily-available work scheduling software showing at a minimum:
  - a. Mobilization and demobilization
  - b. Engine disassembly and reassembly for each of the seven engines
  - c. Parts shipment to the shop for refurbishment, shop time, and return shipment
  - d. Engine acceptance testing and release dates
  - e. Dependencies among the tasks listed above

# CITY OF ALEXANDRIA, LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUL/MAINTENANCE SERVICES

- 15. <u>Payment Schedule:</u> Proposers shall provide a payment milestone schedule based upon the completion of Work, including acceptance testing, on each engine. The payment schedule shall include mobilization, overhaul for each engine, testing, etc. Billings will be made upon completion of the maintenance service for each engine. No partial payments will be made for the maintenance service for each engine. Payment will be made at 100% upon successful testing of each unit.
- 16. <u>Sample Contract:</u> Proposers shall submit a non-binding sample contract with their Proposal. Contract negotiations are expected to ensue following contractor selection.

### CITY OF ALEXANDRIA. LOUISIANA D.G. HUNTER ELECTRICAL POWER PLANT UNITS 5, 6, & 9 WARTSILA OVERHAUUMAINTENANCE SERVICES

### VII. OVERHAUL PARTS LIST

(The parts listed, with quantities, in the attached sheets, are as reported by the City as being available for the overhaul and maintenance services. Three (3) lists are provided - The Overhaul Parts List, On-Site Maintenance Services List and Off-Site Workshop Services List.)

#### CITY OF ALEXANDRIA, LOUISIANA DG HUNTER ELECTRICAL POWER PLANT UNITS 5-11 -WARTSILA OVERHAUL/MAINTENANCE SERVICES

### VII. OVERHAUL PARTS LIST INVENTORY BALANCE

Row	Item Number	Cominodity.,Group: null  Description	EPN 'Unit	Opening Stock Oty	Qty In Out ,Adj	Closing   Stock
	ATL-2901056300	Kit,Auto Drain (Air Dryer)	<u>P. CE</u>	C	:iO · · · · · · · · · · · · · · · · · ·	3 '
2	MOTO-290CASC	290 C!,SC Mec;:!J. ea!_For:_HT, _LT F'ump, r-Aoto r: F'a r:! s§. Be_aring	PCE	4		4
3 4	W34-131-14 W34-3030069	Outlet Bellow Exhaust <u>Gas Ventilation</u> Fan  Mian Gas Fliter 0-ring (Gas Ramp) New part # B00463  "t:,7:::\:"2,-7:::':: J!om'rn,'?aity'ijr up:'AlJ>(-	0 <u>0</u> 01 <u>E</u> A 0001 EA	1 2 Opening	0 0 0 0 0 0	1 2 <u>•1:.</u> i ClosInifi
Row	Item Number	Descriptio11 .	EPN Unit	Stock Qty	In Out Ad	Stock • Qty
6 7	598*592*360/6F5 77682	ft.]r_bag 2X592X360/6 F5 (ABA_50) Do Not Used		28 1	0 0 0 0 0 0 0 0 0 0	
10	A_BB3AFP90109015	oltage <u>F3.eg (UN192g)</u>	Q 001 .£'C	<u> </u>	0 0 0	
11 12 13	ABB-3AFP9097193 <u>ABB-3AFP9097196</u> ABB-3AFP9872138	earing hell for DE (d_!"lve e11d) Bearing Shell for NDE (non-drive end) varistor Module	- 0001 PCE 0001 PCE 0001-rcr		0 0 0	
14 15 16	A BB-3AFP98771_12 A BB-3AFP9877134	Bea rig_9il rir,g (D!: &_ D\$) PT-100Temp Sensor For Cooling Air "" "cable MoclulePower(Rectifier Diodes Module)	oogl CE 0001 PCE "0001 PCE 0!)01 PCE		Q 0 0 0 0 0 "o' 0 0	_
17 18 19 20	ABB-3AFP9901203 ABB-3AFP9901204 ALF-9460005842 ALF-9460065949	D_E f:loii ng <u>Laby r:i!h   :ea </u> Bearing Labyrinth Floating seal DE & NOE  Safety S\l/itct1_£_or <u>R8- d lor F'clns</u> pan Bliide N12361§ _5/42{PA_!2\'.'LL,141,??§I . 2 A	0001 PCE - 000) EA	, J	JL -2 0 - 0 - 0 1 - 0 - 0 0 - 0 - 0	1 2 2 2
21 22 23	BOLL-1980298 BRO-9460065948 HYDR-B5ETBDB_4_9_C	Main Gas_F'ilter Cartr: i_dge Q_nQii!> R.ii p	0001 E_ 0001 EA 00g1 <u>l'CE</u>		0 _0	3
24	INDU-6DR4004-8V	_§_iemens_ SipIcI"!_P	PCE PCE 	15	Q 0 0 0 0 0	15
26 27 28	PHO-421029 <b>SAU</b> 002552 SAU-002566					_
29	S_AU-002566	J\l Rii:ig (Sauer) ?e.e!'Jote_s9.!:c!ip (Sa1Jer)	0001 f'(:;E (J,Q.01 f:Q_	_	0 0 0	

30 31	S AU-029 88 SAU-033187	Jrc::lip_(sa1Je_)- e_e NTY OF ALEXANDRIA, LOUISIANAPiton PDG JUNGERS TERRICAL POWER PLANT UNITS 5-1: WARTSILA OVERHAUL/MAINTENANCE SERVICES	1 - 0001 PCE 0001 I'CE	_?_ 0 _0 2 Q Q	0	2 2
<b>32</b> 34	<b>SAU-033893</b>	Nadiral Newde Ror Bearing (Sauer) Concentric Valve (Sauer).		3 .0 0 1 0 0	0	3
35	SAU-034552	Piston Pin-Bearirig (Sauei-f ········ """ ·· ···	· "'oocff" PCE"	10 0	0 0 0	1 2
36 37	SAU-034591 SAU-035199	· """concentric vai e (Sauer)·· — — — — — — — — — — — — — — — — — —	0001 <u>PCE</u> - 0001PCE •	1 <b>O</b> - "6 <i>i</i> ·-0 o	0	2
38	SAU-035200	G: J:ng(S:;iu_er)	0001 PCE	2 • 0 6		

#### CITY OF ALEXANDRIA, LOUISIANA DG HUNTER ELECTRICAL POWER PLANT UNITS 5-11 -WARTSILA OVERHAUL/MAINTENANCE SERVICES

39 40	 S <u>NU-037050</u> SAU-037051	- ing.{ auer) G-Ring (Sauer)	0001 0001	PCE PCE		0	0	0	
42 43 44 46 47	S_AU-03/656 SAU-039548 SAU-056235 SAU-056239 SAU-056272	Ring (Saue_!") Filter Element (Sauer.) i:ac _ gf3.i11g C_!:)pper(:S.,aller) See tes Packing Ring (Sauer) onnect!!)g_Rod Bearing	0001 0001 0001 0001	PCE PCE PCE PCE	2 3 5 3	0 0 0 0	0 0 0 0	0 0 0 0	2 3 5 3
48 49 50 51	SAU-056282 <u>SAU-056334</u> SAU-056335 SAU-056369	Gasket (Sauer) asket ( auer) Gasket (Sauer) a 9.t ( aue.r)	0001 0001 0001 0001	PCE PCE PCE	2 5 4 1	0 0 0	0 0 0	0 0 0	2 5 4 1
53 54 55	SAU-062376 SAU-063079 SAU-063748	C::yli de i:ootPa ki g (Sauer) 9? ke_!_(Sau1:1r) Gl:lske! For Cover (Sauer)	0001 0001 0001	PCE PCE PCE	6 3 2	0 0_ 0	0 0 0	0 0 0	6 3 2
56 <u> </u>	SAU-065526 SIER <sub>.</sub> 200-02- <sub>-</sub> IT-AL	!"i tor:,_Pin 3!_d St?ge (Sauer) LEL, Sierra Monitor's_mon!tors combus I g es	0001 0001	PCE EA	1 7	0	0	0	1 7
58 59 60 62 63	\$KF_6308C3_ SKF-6310-C3 W34-289278 W34-33551042-30	Bear ngJor l3adiator f.?n or Bearing for_Ra9iator Fan Motor }'_her:_m rne r.(ln!1:1t & O _t.let on the Sg,13)_ Gasket Set (as it which a Actuator Re build Kit) Exhaust Gas it which the same set of the set of t	0001 0001 0001 8881	EA EA EA BSE	16 9 5 6	0 0	0 0	0 0	16 9 5 6
64	W34-6711162000	Rup_t_1:1re Disc ( TypeCV-S:1-!,W-RI) (qN_12_9_())	0001	PCE	2	0	0	0	2
65 66 67	<u>W34-72</u> 04 W34-77682 <u>W34-FI</u> 31_1	JH.T.Heater Element 54 K_W 1,_t, Heating Eleme t?? YY Flexable Hose OD12	0001 0001 0001	PCE pee- EA	1 <u>"</u> 15	0 0 0	0 0 0	0 0 0	1 1 15
68	W34-PAAF560892	Temperature Sensor for Gen. :::£Co!! mod tvGJO P:J.C:<:SN::::',,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0001	PCE	1	0	0	0	1 73::"t:,:,:.•··::
Row	Item Number , ·	Description -	EPN	Unit	Opening , Stock• Qty,:_	In	ty	Adj.	Stock-! Qty'
69 70	ADVA-UV3.5-15-GA01-25-D070-0 5-V1	D scription: 1St & 2Nd Shut Off Valve For Gas Ramp (V003, Air Tongue Actuator, Advanced Indus	V004)	PCE PCE	7 2	0	0	0	7 2
	<u>YE-E</u> 79	Maintenance Kit For Pressure Control Valve On Urea Pump St	kid	DCE.	2	-	6	6	0
71 72	<u>-0201660123</u> A I-0212320060	Hexagon N!Jt (HT, <u>LT 3-Way '.'{alv13</u> ) _ Head Cap_Sc w. (HT, LT 3-Way Vatv13)		PCE PCE	2	0	0	0	2

73	ARI-0273020061	şliding Pi ce For _CITYQErALEXANDRIA,从AUSANA DG HUNTER ELECTRICAL POWER PLANT UNITS 5-11 -	PCE		0	0	0	_ 1
74	ARJ-0312020329	WARTSILA OVERHAUL/MAINTENANCE SERVICES 901,1p_ling Flange DfJ,,4, (1:J.T,P 3-Wayya!ve)_	PCE		0	0	0	1
75	ARI-0312060206	AnUTorsion Device DP34.(HT, LT 3-Way Valve) .	PCE					
77 79	ARI: _480_1_1031 I-(!_ QOQQ_OQ7	Tt!readed Bush, _M16_1P£'.J4 ( HT, T 3-1/fflY \fal\le) V-Ring:_Unit For Fjg, 41Q.4_50 DJ!(HT, LT 3-Way_ Valve).	PCE _ PCE					
81	ATL-2901-9905-61	Sensor Dew Point for_Air ye_1jKit) P rk. P ! I:lg Boot [t (501 1,9 L	PCE PCE	21	0	0	0	21
82 83	BREN-23022 _ BUSS-FNQ-R2 A	FUSE BUSSMANN, FN 9-R2 ">.	PCE	21	0	0	0	1
84	CAS-0581000047	§traig t j='ipe Co!Jp g, Compressed Air Systems _	PUE	1	0	0	0	1
85	CAS-0603415082	Fla_nge, Compres_se_d ir Sys_!Elf!! .,	PCE	4	0	0	0	4

0 0 0 1 0 0 0 1 2 0 0 0 2 1 0 0 0 1

87	CAS-8204094109	Nee_del Valye,C, <j_mpr_e <u="" ed_r="">Svstem_s</j_mpr_e>		PCE	1	0	0	0	
88	ETHER-1617-7041-11	Air Dry after Filter & PreFil er (2901 2003 07) See Notes		PCE	6	0	0	0	6
89	EXLOC-C15158PB00B	ol ei)oid Vale for M!,1C (r:>e-Gc1ss g valve) See No s.		PCE	2	0	0	0	2
90	EXLOC-VSKC1SP	Seals Kit for C15-s.9ries so lenCJ ig, MMC De-Gassir:ig Vc1_lve		PCE	2	0	0	0	2
				. 0_	_		Ü		_
91	F_A.S.T-1138717	§crew f01?1.75 X., Q mm (3§,Q ' 1 : ) See N.9tes							
				PCE	10	0	0	0	10
93	FAST-1139663	Screw M12-1? x80 12.9SHg_S (2_02)64)		PCE	6	0	0	0	6
94	FAST-1190703	Nu_t, M12-1.:.75 Di11692_?Zinc (?0.?_1_3-2L		PCE	21	0	0	0	21
95	HYDR-S2.50X012	O-Ring for Push . ad Tube. (8136) See Not s	-	PCE	40	0	0	0	40
96	HYDR-S70126	Q-Bing_for_!:ush l3od_J:ube (!4?_Q. )§ee !!!ates		PCE	40	0	0	0	40
97	HYDR -S70220	CI-Ri_ng for Push Rod.ILJbe (1?Q 081) See Notes		PCE	40	0	0	0	40
98	HYDR -S70227	Q Ring f _Pw,h 13_qsl _I_ube_(!_±5 021) See N_ ptes ··-		PCE	40	0	0	0	40
99	HYDR-23MMX18MMX1 <b>MM</b>	Copper Washer, CW23m_rn_X18mmX1mm (1?4 Q )See_Notes		PCE	200	0	0	0	200
100	HMD R -391974	t o.!_v.Ye ir,g _!' _QR_[)-8 (<;)Id <u>Actuator on IY!_MC:: Valve</u> )							
		· ga							
101	HYDR-76MM08040PT	8MM X 10MM 16SS Tubi_r,g For: <lirl (mmc="" ne="" td="" valve)<=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></lirl>							
102	HYDR-8-4HMK4S	Straight Male 4f5 LJ_nion (_M_ Hy _Jack),_		PCE	1	0	0	0	
103	HYDR-8047616	Festa Actuat <jr (="" cy="" for="" mcc="" nder="" notes)<="" see="" td="" valve=""><td></td><td>PCE</td><td>1</td><td>0</td><td>0</td><td>0</td><td></td></jr>		PCE	1	0	0	0	
		1 35.04 7 15.04 (		PCE	5	0	0	0	5
104	HYDR-8082123	_fe_ o Redu ing Sie_eve_for MMC_ a!'!e_(_See Notes)		PCE	2	0	0	0	2
105	HYDR-DST108-85X89X2.5N	_9-RingFor Urea Filter Ho_using (450 016)		PCE	2	0	0	0	2
106	HYDR-MOD 108X 5.3 HNBR	_5.;3x !Q\u2018 HNB.R_ORing ( ?4_'!_ ) L_1:1be_Qi!Mo_dule_fiping		PCE	18	0	0	0	18
107	HYDR-MOR 11SX 3.3HNBR	11Sx 3.3H_NBB O-F,ing (474 1_5_4) Lube_Oil_"")_odu _ Pipir:ig		PCE	10	0	0	0	10
	,		_	PCE	10	0	0	0	10
108	HIDR-MOR 120X 35HNBR	ggx 3: H Q-Ring (474 166) Lube Oil_Module Piping	_	PCE	10	0	0	0	1 <u>0</u>
				PCE	10	0	0		
109	HYDR-MOR-154.3X5.7	O-ring For M56 Hy9 Jack _						0	10
110	HYDR-MOR-194X3	et ic O-R gJ <jr (473="" 066,473="" 069)<="" centrifugal="" oil="" td=""><td></td><td>PCE</td><td>34</td><td>0</td><td>0</td><td>0</td><td>34</td></jr>		PCE	34	0	0	0	34
111	HYDR-MOR-79.6X5.7	O-ring For M56 Hyd J_I!ck		PCE <sup>-</sup>	10	0	0	0	10
	HVDB DDMENI O			PCE	0	0	0	4	4
114	HYDR-PD15N 0	<u>Interr.iil</u> Drai_r, For <u>Air</u> Regu@tCl_r( s;_B§I_!llP)		PCE	7	0	0	0	7
				PCE	10	0	0	0	10
115	HYDR-SS-4CP2-RT-1	/4'.' Che_c;kValv_e_ ( _I?CJsi_r,g Unit, 289 314)		PCE	40	0	0	.9	40
116	HYDR-SUI-8M	8-M_ x 1:9MM- 316 Co 1:1p_!!r:ig I:_or_Air_L!ne (MMC Valve)		PCE	40	0	0	0	40
117	HYD_R-VOR-N90.118X_164.6MMID	. O-!3-ing, _Gas Ramp Filler (3030069) e_e N_otes		PCE	5	0	0	0	5
118	HYDR-VOR-N90.197X55MMID	O-Ring for Pusl: Rod Tub.El(12Q QQ3) SEle Notes		PCE	1	0	0	0	1
119	HYRD-45952	AQU Rehobot Coupler ("='156 Hyd Jack)		PCE	1	0	0	0	1
120	I_N_ DU-6DR50100NG0000AA0	emens £>,_ctuator Sip_art 2Wh:_e_IJYIQ Hart INT, 3-way_valve		PCE	1	0	0	0	
121	INDU-C7345_1-A430-D_B0	Siemens Pizo Valve Block.) ay V11lve	_						
122	I<.!: EII-KLt:1.AUX.24VDC	_ §I_GN_AL HORN (_?_1v) 92 B (A) I_P4						_	_
123	PEI-257962	2/2-Way- olenoid Va_lv.9, No_r:mally Closed (Dosi_ng IJnit)		PCE	2	0	0	0	2
124	PEI-259033	2-vvav-l:roport!<:.   Valve (Ur a §,yatem)		PCE	2	0	0	0	2
125	PEI-260611	f?:Y,.,ay-Solenoid Valve, _Normally Clo ed, ([)_ sing nit)_	_	PCE	2	0	0	0	2
126	PEI-260614	?E: ay-Solenoid Valv . Normally Qp !!.(Dosing Unit)		PCE	2	0	0	0	2
127	PEI-6240	2/?-Way-Servo-Solenoid Valve_(? 8_030) BUR25_16		PCE	2	0	0	0	2
128	P HO-22 8891 4	GABEL FLK 14/EZ-DR 100/KONFEK		PCE	2	0	0	0	2
129	PHO-22 95 55 4	VB adapter PLC-V8/FLK14/OLJI(?_4V)		PCE	1	0	0	0	1
130	PHO-22 96 28 1	f!o11t_qpJ .4 nnels <b>FLYRM</b> 350/4-46K14/PA-S300		PCE	2	0	0	0	2
131	PHO-23 13 45 2	FL COMSERRVER UNI		PCE	2	0	0	0	2
132	PHO-23 20 17 3	QUINT-Oring/24Dc/2X10/1X10		PCE	3	0	0	0	3

133	PHO-2321185	GABEL FCN40/4X14/1.OM/S7-OUT		PCE	2
134	PHO29 66171	_i::'LC:: relay b11se termif:ial b.loc_PLC-SC-24DC/21_		,P.CE	24
135	PHO-30 49 02 6	Bolt connection terminal block		PCE	100

0 0 0 2 0 0 0 24 0 0 0 100

136	PHO- <u>423027</u>	FRMI_I'JAL <u>I.6 2.AKG 16 YELLO'JY-GREEI'J</u>	PCE	15	0	0	0	15
137	PRO-ZK311007	Wafer-Tyr:ie 13al[ yalve, [)_N50,M_MC Valve_	PCE	1	0	0	0	1
138	PRO-ZKD10007	ealing- i!?:K, [)_"!_ 0. PJ:FE for_ C::,Y lve	PCE	2	0	0	0	2
139	RUS-22310E/C3	Bearing, LT & f-it Water Pumr:i (191 013)	PCE	1	0	0	0	1
140	RU S300104	ljyc:!_filt Fe>r Qe_ri ra!_()r Bearing Sys!_ems (01_,E 90.10VG.30.E.P)	PCE	0	0	0	14	14
141	RUS-304657	O-Ring For Hyd Filter For Generator Bearing Systems	PCE	0	0	0	14	14
142	RUS-304660	Teflon Shor E Ring For Hyd Filter For Generator Bearing Systems	PCE	0	0	0	14	14
143	RUS-6304 2ZJEM	Bearing For Oil Centrifugal Filter	PCE	10	0	0	0	10
144	R_US-6308JEM,	earing LT_HT_Wate_r_P_ump (191 012)	PCE	1	0	0	0	1
145	RUS-PS-4077	rI_echanical Seal (Ht, Lt 'vVater Pu111p) see notes	PCE	7	0	0	0	7
146	SAU-005009	asket, Cu, Dii:, r6Q3A 22X27X1.5	PCE	2	0	0	0	2
147	SAU-037839	I"hermometer 3rd_Stage	PCE	1	0	0	0	1
148	SAU-06-465	F>ip_e onnection. 22mm_Tu_be X G_!_/2	PCE	2	0	0	0	2
149	SCHW-0787EX1ACA0X75850210	SE:L:?87, Tra_nsfo_!"_r!le_r F' otectie>!1J3.elay (Sc weitzer)	PCE	2	0	0	0	2
150	SPOC-PP00072	9-14 DC FAN.:48YDC. 135 WATT	PCE		0	0	0	
-		<del></del>						
151	SPOC-SO1017	FR-9-14 DC-DC POWER BOARD	PCE		0	0	0	
			_					
152	STO- QX2WB02HDM	Limit Switch For 1st, 2nd Shut Off Valve On Gas Ramp ( V003, V004)	PCE	7	0	0	0	7
		, , , , , , , , , , , , , , , , , , , ,						
	WEID	TE_RMINAL B1::_OG_K, IJ'JDU 4	DOE	405	0	0	0	405
154	WEID-4		PCE	105	0	0	0	105
155	WEID-WSI 25/2 CC	2 Pole Fuse Block	PCE		0	0	0	1
156	WEID-WSI 6/LD FUSE 100MA	FUES TERM, BLO<::K WSI_§ D FUSE 10Q_n,_	PCE	10	0	0	0	10
157	WEID-WSI 6/LD, FUSE 100MA	F USETERM. BLOCJ <wsi 100ma<="" 6="" fuse="" ld.="" td=""><td>PCE</td><td>1<u>0</u></td><td>0</td><td>0</td><td>0</td><td>10</td></wsi>	PCE	1 <u>0</u>	0	0	0	10
1 <u>.</u> 58	WEID-WTL 6 /1	TERMINAL BLOCK WTL 6/1	PCE	20	0	0	0	20
	WEID WED 6 -D							
15_9_	WEID-WTR 2.5D	DIOD E TERMINAL BLOCK( WTR 2.5D)	PCE	12	0	0	0	12
400	WEID WITDO ED	DIODE TERMINAL DLOV. INTDO ED	PCE	7_	0	0	0	7
160	WEID-WTR2.5D	DIODE TERMINAL BLO<::K, WTR2.5D	PCE	-/-	0	_0	0	7
161	WEID-ZDC 16	TERMINAL BLOCK, ZDC 16-	PCE	10	0	0	0	10
162	WEID-ZDK2.5/1.5	T_RM_INAL_13.1:_QC::!S, 2'DK 2.5/15	PCE	10	0	0	0	10
163	WEID-ZDU 10	TERMINAL BLOCK	PCE	10	0	0	0	1
164	WE_ID-ZDU 2.5/4AN	TERMINAL BLOCK ZDU 2.5/4AN	PCE	45	.0	0	0	45
104	VVL_1D-2DO 2.5/47/1V	TERMINAL BLOCK 2DO 2.3/4AN	FOL	40		0	0_	40
16.5	WED-ZDU 2.AN5	TERMINAL BLOCK, ZDU 2,AN5	PCE	5_	0	0_	0_	5
166	WEID-ZDU 4	TERMINAL BLOC::K, ZDU4	PCE	5	0	0	0	5
167	WEID-ZDU 6	TERMINAL BLOCK (WU 6.)	PCE	5	0	0	0	5
168	WEID-ZDU2.5/3AN	TERMINAL BLOS:f<, ZDU2.8/3AN	PCE	10	0	0	0	10
169	WEILD-WSI 6/LD.FUSE: 1A	FUSE TERMINAL BLOCK, WSI 6/LD, FUSE 1A	PCE	15	0	0	0	15
.00	-< -,.	•: - ,,- ,CommoclityGroup:,ELC:	. 0-		_			
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**Description** Page 37 of 46

Row

Item Number

Qty

Qty

Opening

Stock

EPN Unit

Ir	n Out Adj.	CITY OF ANGENALISHER CAUISIANA DG HUNTER ELECTRICAL POWER PLANT UNITS 5-11 -						
170	ABB-1SCA022731R8150	WARTSILA OVERHAUL/MAINTENANCE SERVICES Terminal shroud	PCE	4	0	0	0	4
171	ABB-FT4A14T10CN4119	t SwiJch ( T1i-4119C)	PCE		0	0	0	1
172 173	ABB-S201U-K1 ABB-S201U-K10	Min. Gire. Breaker Min. Gire. Breaker	PCE PCE	1	0	0	0 0	1
17_4.	ABB-S201U-K15	Min. Gire. Breaker	PCE	3	0	0	0	3
1.7.5. 176	AB.B\$2 0 1UK4 ABB-\$203UP-K10A	MinGire. Bre_a_k er_ Cir, Breaker 480/277V	PCE PCE	5	0	0	0	5

17 <u>-7-</u> -	-AB_B,-\$2C-\$6RU	fircuit_§_rec1 Acc1:1 sory_'!9YC		PCE	7	0	0	0	7
178	FED-FB78WW	Spark PllJg, Bridge Plug_Q.3mm (Federal-Mogul)	_0_0_01_	.PCE	1	0	0	0	1
179	PHQ-4 <u>2</u> 1 032	J'"e!m[n ir.nm2, A G_4_1?!?_C:k		PCE	15	0	0	0	15
180	PHO-423030	Terminal 16mm2, A <:3_16 Black		PCE	15	. 0	0	0	15
	PH-0-42 4026	Termina _:3 mm2, KG_ 3 Elllow-Green		PCE	5	0	0	0	5
182	PHO-424039	Terminal _35mm?, AKG 35 BI ck		PCE	2	0	0	0	2
183	SCHN- RXZ S2	- US J_UMI:ER, RXZ §2_(f:.'A .\_=1Q_Qpcs) (Schneider)	0001	PCE	300	0	0	0	300
184	SCHN- ZB5-AZ103	Base For Control Switch Switch (Schneider)	0001	PCE	2	0	0	0	2
185	SCHN-3593557	.lele_m, SJfElty f3eEJY_2:(ps-Ac51 <u>1.24vdc</u> ( chneider)	0001	PCE	1	0	0	0	1
186	SCHN-3860060	De Aux. Relay 4 C/O Rxm4gb1bd_ (Schn_ei er)	0001	PCE	1	0	0	0	
187	SQHN3XZ, BE-101	_ase_!:rBlack_electoi:_S i!«;:h( <u>chneide!</u> )	0001	PCE	1	0	0	0	
			0001	PCE	1	0	0	0	
188	SCHN-GV2 ME07	fircuit Brea er, Telem, Gv MeQ? (Schneidl:I_r)							
189	SCHN-GV2_ME10	<:::Ircuit Breaker, lelem, v Me!Q (chne de!)	0001	PCE	. 1	0	0	0	1
190	SCHN-GV2 ME16	Circuit Breaker, Telem, Gv2 Me_:@ (SchnE!ide_)	0001	PCE	1	0	0	0	1
191	SCHNGV3G66	§paci_ng foyer,.!el_em, Gv G66 (Se:hn_ei9er)_	0001	PCE	1_	0	0	0	1
192	SCHN-GV3 P32	Circuit I:Ireaker (Schneider)	0001	PCE	1	0	0	O	1
193	S_C <u>HN</u> -GV3 P40	_Girc1:1!!_Br_ea _er, Jele1!7, G_v3 1:40 ( cb_ ! er)	0001	PCE	1	0	0	0	1
194	SCHN-GVAD0110	Fault Single_Contact, Telem, G'{ad0110 (Schr:!_eJder)	0001	PCE	3	0	0	0	3
195	SCHNGVAE 20	f:_lug f!_AuxJGvc1_e29) ( chne! er)	00.01	PCE	3	0	0	0	3
196	SCHN-GVAM11	Short CirctJit Co!]_tact, Telem, Gv A1"!1_11 (Schn_El_id_er)	0001	PCE	1	0	0	0	1
197	SCHNK1B002 A	_l:las !:_or !ele El_can que, Key S itc:h (Scti_n_eider)	0001_	PCE	1	0	0	0	
198	SCHN-K1D024M	Base For C ntrol Switch ( chneider)	0_001	_	1	0	0	0	
199	SCHN-KBC1B	_go_ntrol Swi_tch (S_chn id13r) S e No s	0001	PCE	1	0	0	0	
200	SCHN-KBC1S	Talamananimus V. Cuultash (Caha Fliday). Can til atan	0001	PCE	1	0	0	0	
200	SOI IN-REC 13	Telemecanique, Y <u>Sw.ltc:h</u> (SchnElider)_See t:,l_otes				U	O	U	
201	SCHN LADNZO	go_ntact Blo k (L dn 0) (9bn_eidel).	0001	PC <u>.E</u> .	3 -	0	0	0	3
202	SCHN-LADN22	Telem, Auxiliary Contact Ladr)22 ( chneider)	0001	PCE	1	0	0		
203	S_CHN-LC1 D09F7	ontractor_1 _0_Yac,_:rel_em, Lc:_1 Q09f ? (Schne. ider)	0001	PCE		0	0	_ 0	
204	SCHN-LC1 D118F	C n_tac:tor !!_D Vac, Telem, Lc1 D1!8f (S_chnl:li !)	0001	PCE.	1	0	0	0	1
205	S_C_HN-LC1 D3.2F7	(_on c:toi:_1 QVac, !El!em, _c1 <i>D?.?17.</i> (Schnei _er)	0001	PCE	1	0	0	0	1
206	SCHN-RXM 040W	Diode 4-C/O Rxm 040w (Se:hneider).	0001	PCE	30	0	0	0	30
207	SOHIPAM 4AB1BD	ux, Relay De 4f/Q_Rxm (Sc n Elr)	0001	PCE	1	0	0	0	
208	SCHN-RXM 4GB1BD	D_c Aux _Relay 4-C/O Rxm 4gb1bd (Schneider)	0001	PCE	15	0	0	0	15

209	SCHNRMM4@BIF7	.c ux.!3elay'.!-gl(?CGX;;CEGALEXANDALASLQUISIANA DG HUNTER ELECTRICAL POWER PLANT UNITS 5-11 -	00_01_	PCE	12	0	0	0	12
210	SCHN-RXM4GB1F7	AC AUX. KYARTSUA RYFRHAYI (MAINTFNANCE SERVICES	0001	PCE	5	0	0	0	5
211	SCHNRXZ E2S114M	gonn. 4-C/O,_Rxz!=2s1_1'.!m_(S9hn_eider)	00_01	PCE	50	0	0	0	50
212	SCHN-V260 X1	Vamp 260 Po'JV.Elr Mounting Unit (Schneider)	0001	PCE	15	0	0	0	15
213	SCHN-XB5 AA11	P_ush,_Bu;t '} hite:_1no (Sc:bneid_er)	0001	PCE	1	0	0	0	
214	SCHINEXB5-71/B3 —	J:_jlot ight With Led Green_ ( Ch!Jeider)	0001	PCE	1	0	Ω	Ω	
215	SOI-NAMES AVB4	F'ilot Ught With Led Re .( chn_eider)	0001	PCE	1	0	0	0	1
216	SCHN-XB5-AS542	Emergency Stop Push Button(Schn_eider) See Notes	0001	PCE	1	0	0	0	1
217	SCHN-XPS-AR-UL	. afety f3e(ay A .? d_c (Scti_nei_d r)	0001	PCE	2	0	0	0	2
218	SCHN-XPSAR311144	Safety Relay - Multipurpos_EI, Ir)c::luding !:,ight _9urta_ins (Schneider)	0001	PCE	1	0	0	0	
219	SCHN-2B5-0811	s or_f)us - ttoi'(White) ( hn d )	0001	PCE	1	0	0	0	
220	SCHN-ZB5-AA1	r:>ush Bu!_ton White(Schneider) See Notes	0001	PCE	1	0	0	0	
221	S_CHN-ZB5-AA4	i:.u h ut!on f3ed) ( ghnei_ er) See f-!ojes	0001	PCE	1	0	0	0	
222	SCHN-ZB5-AA7340	Push Button Green/Red (Schneider) See Notes_	0001	PCE	1	0	0	0	

223	SCHN-ZB5-ADi	Control Switch (Black) (Schneider) See Notes	0001	PCE	- 1 -	- O-	<b>-</b> O	0	
224	SCHN-ZB5-AD3	Black Seiector Switch (Schneider) See Notes	0001	PCE	1	0	6	-0	1
225	SCHN-ZB5-AD5	gontr(JI wit h (!31 ) (Schneider) See Notes	0001	PCE	2	0	0	0	2
226	SCHN-ZB5-AK1343	Base Is For Control Switch Red+ 3no	0001	PCE	1	0	0	0	
227	§ C 5- 3	<pre>&lt;:::ontrol Swit h (Whit ) (S hn ide_!") S &lt;&gt;_tes</pre>	0001	PCE	1	0	0	0	
228	SCHN-ZB5-AS844	EmergencyStop_LCJcki11g Bu1:lo_n_{l3-ed) (Schneider) See Notes	0001	PCE	2	0	0	0	2
229	SCHN-ZB5-AWOB11	Base For Push Button (Schneider)	0001	PCE	3	0	0	0	3
230	SCHN-ZB5-AWOB12	ase for Push 81Jtlon (Green)-(Schneider)	0001	PCE	1	0	0	0	
231	SCHN-ZB5-AWOB13	Base for Control Switch (White) (Schneider)	0001	PCE	1	0	0	0	1
232	SCHN ZB5-AWOB41	ControlSwitch Red +-3nC> ( hneide!)See Notes	0001	PCE	1	0	0	0	
233	S CHN-ZB5A.Vv.Qf?i	- se For PUSH BUTTQN (YEL, OW)(Schneider)	0001	PCE	1	0	0	0	1
234	SCHN-ZB5-AWOB51	Base for Push Button (Yellow) (Schneider)	0001	PCE	1	0	0	0	1
235	SCHN-ZB5-AW313	Push Button (White) (Schneider) See Notes	0001	PCE	1	0	0	0	1
236	SCHN-ZB5-AW333	Push Bul:!on (Green)) (Schneider) See Notes -	0001	PCE	2	0	0	0	2
237	SCHN-ZB5-AW343	Push Button (Red) (Schneider) See Notes	0001	PCE	2	0	0.	0	2
238	SCHN-ZB5-AW353	Pushbutton cirangeOr Yellow +1 o (\$ch_n ider) Se N tes	-0001-	· PCE	3	0	0 -	-0 -,-	3-
239	SCHN-ZB5-AWOB11	Base For gu_ar lush_!! me_!:'ush_ utton (SchneJder_)	00_0!	!:_ E	2	0	0	0	
240	SCHN-ZB5-AZ101	Base For Push ButtonY\fh e, Red, Gre (Sch11eider)	0001	PCE	3	0	0	0	3
241	§C.I:IJ::1: B§- I(J2	Base fC>r P_ush B or:i.(NC) (chneid.er)	0001	PCE	2	0	0	0	2
242	SCHN-ZB5-AZ103	Base For Blac . Red, <3reen Selector Switch_(Schneide!)	0001	PCE	2	0	0	0	2
243	S f!N ZE'! 1()'.7	?J for Push _B tto11 (2NC) (S_chrieide ).	Q(J01	Pei::	3	0	0	0	3
244	SCHN-ZB5-CW313	White square flush illume pushbutton (Schneider) See Notes	0001	PCE	1	0	0	0	1
245	SCHN-ZBE 101	Base f_or Contr_C>I S_"NitchJ3.ed. + 3no (Schneider)	0001	PCE	1	0	0	0	1
246	SCHN-ZBE101	Base Push Button (Re_d) (Schneider)	0001	PCE	1	0	0	0	1
247	SCHN-ZBE102	Base for i:_ush Bu_tt(Jn (Green (Schneider)	0001	PCE	_1	0_	Q	0	
248	SIEN-6ES7153-4AA01-0XBO	I11Jerface Module (Sie111ens)	0001	PCE	2	0	0	0 _	_ 2
249	SIEN-6ES7 315-2_1::_l:!_1 -Q	g_Er:,i_T L <u>PROg1:s s 1 r.JG</u> UNJT (Siemens)	Q001	f'CE:	2	0	0	0	2
250	SIEN-6ES7 321-1BLOO-OAAO	Digital Input Module (Siemens)	0001	PCE	2	0	0	0	2
251	SIEN-6ES7 321-1BPOO-OAAO	Digital Input Module (Siemens)	0001	PCE	3	0	0	0	3
252	SIEN-6ES.7:322-1B-LOO-OAAO	DIG!TAL OUTPUT MODULEJSiemens)	0001	PCE	2	0	0	0	2
253	SIEN-6ES7 322- POQ-Q Q	DIGITAL OUTPUT MODULE (Siemens)_	0001	PCE	2	0	0	0	2
254	SIEN-6ES7 331-1KF02-0ABO	ANALOG INPUT MODULE (Siemens)	0001	PCE	3	0	0	0	3
255	SIEN-6ES7 332-5HD01-0ABO	Analog Output Module (Siemens)	0001	PCE	1	0	0	0	1
256 257	<u>SIEN-6ES7 332-5HFOO-OABO</u> SIEN-6ES7 392-1BJOO-OAAO	Anaiog OutputModuie (Siemens) Connector, Spring Type (Siemens)	0001 0001	PCE PCE	2 1	0	0	0	2
				PCE.	3-	-0	-	-	0
258	SIEN-6ES7°i92-1BM01-0AAO	-connecto_!", Spring Type (Siemens)		PCE.	3	-	0	0	3 3
259 260	SIEN-6ES7 392-1BNOO-OAAO SIEN-6ES7 392-4BC50-0AAO	l"erminal BloEk(Siemen ) C_onnectionJ;; le Le!lg!h ? ri:iJ40pins) (Siemens)	0001 0001	PCE	ა 6	0	0	0	ა 6
260	SIEN-6ES7 392-4BC30-0AAO SIEN-6ES7 953 8LL31-0AAO	Memory Card (Sematic S7-300) (Siemens)	0001	PCE	2	0	0	0	2
262	SIEN-6GK7343-1CX10-0XEO	Communication Processor(Siemens) -	0001	PCE	1	0	0	0	1
263	N-6aK53Qf?FL1 Q:tAAf	ectri IJ?w. ch odule ( calance 2(}.Q?:?) {S! mens) _	0001	PCE	2	0	0	0	2
264	SIEN-6Q 320-1BD00-2AA3	Electrical Switch Module (Scalance X320-1fe) (Siemens)	0001	PCE	1	0	0	-0	- 1
265	WSI-25/2	2 Pole Fuse Block	0001	PCE	1	0	0	0	1
		Commodity Group: ENG				<del>-</del>			
			1 4		Opening			132,**	Closing
Row	Item Number	Description	EPN	Unit	Stock	40 40 40 40	Qty		Stock
							-		

					C	Qty-	"ir,- o	ıt Adi:_,	_ Qty!i:j
266	AUX-B00055	Filter element		00 <u>.</u> 01 PC	_	2	0 0	0	2
267	AUX-P00016	Transmitter		ÖÖÖL''' PC		2	0 0	_ 0	2
268	AUX-T00025 AUX-V00083	Temperature sensor		0001 PC		2	0 0	0	2
270		Body gasket		0001 PC		7 2	0 0	0	7 2
271	AUX-V00086	Polling diaphrage		0001 10	,L 2	_	0 0	U	2
272	AUX-V00387	,Rolling diaphragn, Service kit		0001 PC	`= :	2 _	-0 0	0	2
273	AUX-V00388	Gasket		0001 PC	_	<b>-</b> 2	0 0	0	2
						_		-	_
274	AUX-V00391	Gasket		•		-			
075	ALIX 1/00 444	B = 1		0001 PC		2	0 0	0	2
275 276	AUX-V88483	Ball valve. Service kit		8881 F8	Ē į	2 2	0 0	0	2
277	AUX-VDA004	Level switch For Ht & LT Prehearters		0004 PC	_	1	0 0	0	2
278	AUX-VDA0 07	_8afety valve (_Tag# V004)		0003 PC	·  -	3	0 0	0	3
279	AUX-VDA008	Non-return valve		0002 -PC		5	0 0	0	5
			_						
280	AUX-VD4009	ir ve_nting Vcdve		0002 PC		1	0 <u>0</u>	0	1
281	AUX-VDA057	Centrifugal pump		0001 PC		0 2	0 0	1 0	1 2
282	<u>AX-VEA003</u>	Level switch		PC		00	0 0	0	100
		<del></del>		PC	E 3	30	0 0	0	30
283	FAST-1139619	ttex_Sc.1:ew, Ignition CCJiI_(1Q_Z_g_1) See	e r-Jotes	PC		30	0 0	0	30
284	FAST-11507233	_ C_r:_ank C::ase_Qoor_tud (10_Z 0 1) C	s	PC		2	0 0	0	12
				PC PC		00	0 0	0	10 100
285	FAST-90704	Crank C se Door Flange_Nut (107 01_8	B) _s. e Notes	PC		4	0 0	0	4
286	HYDR-5069BJS-06-12	Sdin Banjo X Metric-ES Seals							
287	HYD_R-56 8-112-9 0_D	O- ng 9_0_NBR-1/2_'.'.x3j _2"-C/S (59) (1	107 064) WaWu111p						
			, ,						
288	HYDR-568-222HNBR _	O-Ring HNBR (120 097)							
200	HVDB 569 264 00D	O Bing 00 DILO 224 (407 477) \\(\(\text{U}\)(at \)	Diliur n						
<u>2</u> 89	HYBR-568-261F90D	O-Ring 90 DU Q 221 (107 177) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<u> </u>	PC	E :	5	0 0	_0	5
291	NOR- 28924 0	Pressure transmitter	-	0002 PC	E	1	0 0	0	
							-		
292	NOR-289241	_P_ressure_transmitter _	-	.0002 PC	<u>E</u> _	1	0_ 0	0	1
293	NOR-289249	Flow meter		0005 PC		4	0 0	0	4
294 296	<u>NOR-289276</u> NOR-450014	<u>Sen</u> sor Filter cartridge		000 <u>2</u> PC	/L -			ñ	
296 297	NOR-450014 NOR-450015	Gasket		000110 PC	CE 0 0				
	<u>,</u>	<u> </u>							
298	NOR-450016	Gaket							

299 300 301 302 303 304 305 306	NQ R-452001 NOR-652024 NOR-52025 W34-100003 W34-100110 W34-100113 W34-100131	f"!essur Regulator (Vā) (Vā) (Vā) (Vā) (Vā) (Vā) (Vā) (Vā)	LANT UNITS 5-11 - 0000 NCE SERVICES 0003 001- 008 006 - 001- - 004	PCE	22 2 3 3 3 6 3 3 132	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	22 2 3 3 3 6 3 3 132
307	W34-100142 _	§ .9lir:ig s t		I PCE	6	0	0	0	6
3 <b>9</b> 8 310	<u>W34-1003</u> 41	_la #untapeauridatkit 	-8892		3 3 3	0 0 0	0 0 0	0 0 0 0	3 3 - 3
311	W34-107002 <u>W34-</u> 107009	. f:los_ gas_k_Elt Q-rir,g	003 004		5 2	0	0	0	5 2
312	W34-107018	Nut							

313	W3 4-107114	J:tose gasket			001	PCE	1	0	0	0	1
314	W34-107143	Hose gasket			0005	PCE	3	0	0	0	3
315	W34-1 0 7 274	O-ri_i:ig	_		002	PCE	2	0	<u>o</u>	<u> </u>	2
		<u>_</u> g			001	PCE	7	0			
316	W34-107330	O-ring							0	0	7
317	W34-107332	_Q-ring			002	PCE	21	0	0	0	21
318	W34-107336	_O-ring _			001	PCE	21	0	0	0	21
0.0		_59			003	PCE	21	0	0	0	21
					0042	PCE	3	0	0	0	3
319	W34-107431	Q-ring			0019	PCE	3	0	0	0	3
320 321	W34-111010 W34-111011	Conne_ctLng !Od, lower part Connecting md, upper part			003	PCE	2	0	0	.0	2
			_		0020	PCE	3	0	0 -	- 0	3
322	W34-111012	Screw			0001	PCE	3	0	0	0	3
323		Shim _			0054	PCE	3	0	0	0	3
324		l3ig.end bearing it Piston			0004	PCE	2	0	0	0	
32 <u>4</u> 325	W34-113889	Piston					3				3
	=	<del>-</del>			0006 0150	PCE PCE	3 3	0	0	0	3
326	W34-113010	Gudgeon pir,			0130	FCE	3	U	U	U	3
327	W34-113012	Pis)on ri.rig it									
328	W34-120001	_gylinder head									
329	W34-120013	Valv guid _			8000	PCE	3_	0_	0	0	3
330	W34-120015	Sea(ing s t for cyli er):,.ead replac ment		_	014	PCE	1.0	<u></u>	0	0	10
331	W34-120021	_Seal_r!ng for inle_t_valv:	_		0007	PCE	0	0	0	3	3
			-		011	PCE	0	0	0	3	3
332	W34-120022	eat r!ng for <:J.1:itlet valve			007	PCE	' 1	0	0	0	
333	W34-12003 8	C:onnectio piece_		_	002	PCE	4	0	0	0	4
					8000	PCE	6	0	0	0	6
334	W34-120054	Seali_ng s t for cylinder head overh ul			005	PCE	2	0	0	0	2
335	W34-120095	Ignition co	_		0004	PCE	2	0	0	0	2
000	W04 40000	B:									
336	W34-120096	Pipe		-							
337 _	W34-120098	flar:,ge		-	000		00	_	0	0	00
338	W34-120099	_O-ring			006	EA	32	0	0	0	32
339	W 341 <u>2010</u> 0	Q-ring _			0_0_3	<u>EA</u>	22	0	0	0	22
340	W34-121001	Exhaust valve, compl.			00_1	7 <u>P</u> CE	6	0	0	0	6
							6	0	0	0	6
341	W34-121007	!!Jlet.valve, compl.			0016	PCE					
0.40	-					505					
342 343	W34-123001 W 34-1202 1	Starting valve eaUng_set			0015 0001	PCE PCE	6 1	0	0	0 -	
343	W_34-1 <u>23</u> 02_1	eaong_set			0001	I OL	•	0	0	0	
345	W34-124002	Spark plug			0005	PCE	26	0	0	0	26
	W34-124004	G asket			0000	. 0_				O	
0-10	WOT 12-100-1				003	PCE	19	0	0	0	19
347	W34-124006	O-ring, Middle of Big Prechamber			0003	PCE	19	0	0	0	19
348	W34-124007	9-ring			0004		20	0	0	0	20
352	W34-124032	Spring			003	PCE	2	0	0	0	2
353	W34-124042	Q-rir:,g, Y_'!3.ry Top_of Big Prechamber			200	·	=	-	-	-	_
354	W34-124043	Sealing kit	-								
356	W3.4-1.24052	O-ring. Bottom of ig f:rechamparge 39 of 46			0001	PCE	19				
357	W34-124066		-			PCE	18				
358	<u>W3.4-1.4.5001</u>	Push rod			0005	P.Œ	6				
500							U				

				003 PCE 0003 PCE	38 92	0 0	0	38 96
0_ 00 _ 19	Spare PartHill FER FAR	OF ALEXANDRIA, LOUISIAN GTRICAL POWER PLANT ERHAUL/MAINTENANCE S	UNITS 5-11 -			00	_0_	20
359 W34-145018 360	Valve tappet			- 0007 PCE	3	8 8	8	3
. W 3.4 <u>156026</u>	Bellows		-	0008 PQE	3	00	0_	3
361 W34-1561184 362 <u>W34-1561300</u> 363 W34-1561301	Nozzle _S_hof! artri9ge _ Short cartridge kit	-		0009 PCE 0002 PCE 0003 PCE	1 2 2	0 0 0 0 0 0	0 0 0	1 2 2

364	W34-1562001	§ r ud_ring	0_001 PCE		0	0	0	
365	W34-156383	_ Turbocharger overhaul kit	0001 PCE	2	0	0	0	2
366	W34-164025	!-'.lain. gas_valve	0003 FCE	4	0	0	0	4
367	W34-164089	Sealing kit	0000 PCE	4		0	•	
368			0003 PCE	4	0	0	0	4
	V/34 -181077	§ery)ce kit (#1) Main Oil Pump	<u>001</u> PCE	3	0	0	0	3
369	W34-182062	Sea[ ng set	004 PCE	2	0	0	0	2
371	W34-191051	_ ?.!laling kit	<u>0</u> 06 PCE	2	0	0	0	2
372	W34-191056	Shaft	0001 PCE	2	0	0	0	2
373	<u>W34-1</u> 91 <u>109</u>	_Impeller D= 220 L	0001 PCE	1	0	0	0	1
374	W34-200009	Screw	002 PCE	11	0	0	0	11
377	<u>W</u> 34200018	Gasket	000 PCE	2	0	0	0	
378	W34-200019	Screw	9-01-1 PCE					2
379	W34-200020		002_PCE	26	0	0	0	26
3/9	***************************************	J?i nce p ece		4	0	0	0	4
		· ·	002 PCE	4	0	0	0	4
380	W34-200028	Gasket	0 <u>04</u> P <u>C</u> E	2	0	0	0	2
381	W34-200029	O-ring	002 PCE	2	0	0	0	2
382	W34-200056							
383	W34-200067	Pin	000 2 005	40	_	_		4.0
3	<del>-</del>	Bellows	000 3 PCE	10	0	0	0	10
3 385	'v'.'-94-200081 W34-200084		0017 PCE	0	0	0	2	2
		Screw	007 PCE	15	0	0	0	15
386	W34-200085	Nut	008 PCE	24	0	0	0	24
387	W34-200334	<u>Positioner</u>	0008 PCE	3	0	0	0	3
388	W34-200341	Dist nce_piece	0001 PCE	10	0	0	0	10
389	<u>W34-200347</u>	Sealing ring	0002 PCE	5	0	0	0	5
390	W34-202009	Bellows	0_004 PCE_	5	0	0	0	5
391	W34-202015	Screw	0005 PCE	20	0	0	0	20
202				0.4		•		
392	W34-202053	Screw	0011 PCE	84	0	0	0	84
_	W_34-2_0_2127	F'ipe	0.0.05 PCE	1	0	0	0	1
394	W34-202128	-i e	0001 PCE	0	0	0	1	1
395	W 3420 2 1 32	Nut	0 004 PCE	52	0	0	0	52
396	W34-202148	e li_ng ring	0001 PCE	18	0	0	0	18
397	WB 4 -202149	Nut	0 004 PQE					
398	W34-202333		0003 PCE	71	0	0	0	71
		5-upport (Made From Hays Manufa_cture)	0003 PCE 001 PCE	2	0	0	0	2
399	W34-202334	§ pport		1	0	0	0	1
400	W34-202337	Distance sleeve	0001 PCE	50	0	0	0	50
401	W34-202338	Screw	0002 PCE	52	0	0	0	52
402	W34-202358	Screw	0002 PCE 0002 PCE	48	0	0	0	48
				8	0	0	0	8
403	W3420501_7	Screw	0003 POE	8	0	0	0	8
			,	6	0	0	0	6
				•	_	_	~	_

404	W.34-20520 5	Pin CITY OF ALEXANDRIA, LOUISIANA DG HUNTER ELECTRICAL POWER PLANT UNITS 5-11 -	00_01	PCE					
405	W34-205413	WARTSILA OVERHAUL/MAINTENANCE SERVICES Pin _Butt !1JY valve	0003	PCE PCE	3	0	0	0	3
406	W34- <del>207992</del>	Start blocki g d_evi _	0005	PCE		0	0	0	
407	W34-214001	Repair kit for Main Starting Valve (includes parts 217049 to 217064)	0001	PCE	2	0	0	0	2
408	W34-217048	3, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,			_	0	0	O	_
409	<u>W34217080</u>	_lappet	<u>@</u> 001 F	P_CE	2	0_	0_	0_	2
41.0	W_34217083	Spring	0_0_01	PCE	2	0	0	0	2
411	W34-218131	Cc,mnecti_on piec	001	PCE	3	0	0	0	3

412	W34-218136	()-ring		001 EA	36	0	0	0	36
413	W34-228022	f.lange		003 PCE	1	0	0	0	1
414	W34-228056	O-ring		003 PCE	4	0	0	0	4
415	W34-228106	Lea d-through piece		0002 PCE	6	0	0	0	6
				0001 PCE	12	0	0	0	12
416	W34-228109	O- ing		0002 PCE	1	0	0	0	1
		3		0002 PCE	2	0	0	0	2
417	W34-228124	eg1ing_rj_ng		0002 TOL	_	O	U	O	_
418	W34-228232	f.jxing piece .	_						
419	W34-350790	o ne<::tion_piezJ		001 PCE	1	0	0	0	
420	W34-350808	O-r(ng!OJ <u>Fuel Line</u> Cros	ssov er	001 PCE	12	0	0	0	12
421	W34350815	Q-ring	<u></u>	001 PCE	10	0	0	0	10
422	W34-355378	S S		008 PCE	15	0	0	0	15
		9-ring							
423	W34-355442	Q-ring O-ring		1 02	16	0	0	0	16
424	W34-357365	O-milg		0001 <u>PCE</u>	9	0	0	0	9
40=	145 4 0= 4=0								
425	<u>W3_4-357456</u>	Yalve body							
427	W34-387003	Glue compound							
428	W34-387006	(31ue co mP.e>und							
429	W34-471063	F"ilter cartridge		<del>00</del> 01 <del>P</del> €E	3	0	0	0	3
430	W34-471126	!!		001 PCE	1	0	0	0	
		· –		001 PCE	1	0	0	0	
431	W34-473063		as 1 se! of25 paper i er:t)	0002 PCE	234	0	0	0	234
432	W34-473081	Sealing set		011 PCE	5	0	0	0	5
433	W34-474043	Sea ng set		0004 PCE	22	0	0	0	22
				001 PCE	2	Ö	Ö	0	2
434	W34-476009	ealing set			-		_		
434 435	W34-476009 W34-501108	ealing set_		005 PCE	3	0	0	0	3
434 435	W34-476009 W34-501108	ealing set_ Spare part kJt_		005 PCE 020 PCE	3	0	0	0	3
435	W34-501108	Spare part kJt_		005 PCE 020 PCE 0001 PCE	3 3 28	0 0 0	0	0 0	3 3 28
435				005 PCE 020 PCE 0001 PCE 002 PCE	3	0	0	0	3
435	W34-501108	Spare part kJt_ Knock sensor		005 PCE 020 PCE 0001 PCE 002 PCE	3 3 28	0 0 0	0	0 0	3 3 28
435 436	W34-501108 W34-504103 W34-504128	Spare part kJt_  Knock sensor  _lempe a_! e se11sor	 	005 PCE 020 PCE 0001 PCE 002 PCE PCE	3 3 28 12	0 0 0	0 0	0 0 0	3 3 28 12
435 436 437 438	W34-501108  W34-504103  W34-504128 <u>W3-4-5061-211</u>	Spare part kJt_ <u>Knock sensor</u> _lempe a_! e se11sor .!:_ipe u11ion		005 PCE 020 PCE 0001 PCE 002 PCE PCE 0001 PCE	3 3 28 12 8 2	0 0 0 0	0 0 0	0 0 0 0	3 3 28 12 8 2
435 436 437 438 439	W34-501108  W34-504103  W34-504128  W34-5061211  W34-5061221	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion  Reduction union		005 PCE 020 PCE 0001 PCE 002 PCE PCE PCE 0001 PCE	3 3 28 12 8	0 0 0 0 0	0 0 0 0	0 0 0 0	3 3 28 12 8 2 2
435 436 437 438 439 4_40	W34-501108  W34-504103  W34-504128 <u>W34-5061211</u> W34-5061221  W34-5061266	Spare part kJt_  Knock sensor  _lempe a_! e se11sor !:_ipe u11ion  Reduction union pipe		005 PCE 020 PCE 0001 PCE 002 PCE PCE 0001 PCE 0001 PCE 0001 PCE	3 3 28 12 8 2 2	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0	3 28 12 8 2 2 2
435 436 437 438 439 4_40 441	W34-501108  W34-504103  W34-504128  W34-5061_211  W34-5061221  W34-5061266  W34-506199	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion  Reduction union pipe Pipe unio_n		005 PCE 020 PCE 0001 PCE 0002 PCE PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE	3 3 28 12 8 2 2 2	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	3 28 12 8 2 2 2
435 436 437 438 439 4_40	W34-501108  W34-504103  W34-504128 <u>W34-5061211</u> W34-5061221  W34-5061266	Spare part kJt_  Knock sensor  _lempe a_! e se11sor !:_ipe u11ion  Reduction union pipe		005 PCE 020 PCE 0001 PCE 002 PCE PCE 0001 PCE 0001 PCE 0001 PCE	3 3 28 12 8 2 2	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0	3 28 12 8 2 2 2
435 436 437 438 439 4_40 441 442	W34-501108  W34-504103  W34-504128  W34-506121  W34-5061266  W34-506199  W34-5_07085	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n ::r:emp atu _ n_sor		005 PCE 020 PCE 0001 PCE 0002 PCE PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE	3 3 28 12 8 2 2 2 4 2	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	3 3 28 12 8 2 2 2 4 2
435 436 437 438 439 4_40 441 442	W34-501108  W34-504103  W34-504128  W34-506121  W34-5061266  W34-506199  W34-5_07085  W34-5_077072	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n .::r:emp atu _ n_sor  Control unit CCM	- - - -	005 PCE 020 PCE 0001 PCE 0002 PCE PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE	3 3 28 12 8 2 2 2 4 2	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	3 3 28 12 8 2 2 2 4 2
435 436 437 438 439 4_40 441 442	W34-501108  W34-504103  W34-504128  W34-506121  W34-5061266  W34-506199  W34-5_07085	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n ::r:emp atu _ n_sor	- - -	005 PCE 020 PCE 0001 PCE 0002 PCE 0007 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE 0009 PCE 0002 PCE	3 3 28 12 8 2 2 2 4 2	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	3 3 28 12 8 2 2 2 4 2
435 436 437 438 439 4_40 441 442	W34-501108  W34-504103  W34-504128  W34-506121  W34-5061266  W34-506199  W34-5_07085  W34-5_077072	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n .::r:emp atu _ n_sor  Control unit CCM		005 PCE 020 PCE 0001 PCE 0002 PCE 0007 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE 0009 PCE 0009 PCE 00001 PCE	3 3 28 12 8 2 2 2 4 2 4 2	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	3 3 28 12 8 2 2 2 4 2
435 436 437 438 439 4_40 441 442 443 444	W34-501108  W34-504103  W34-504128  W34-506121  W34-5061266  W34-506199  W34-5_07085  W34-5071072  W34-5071249	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n ::r:emp atu _ n_sor  Control unit CCM Thermoelement		005 PCE 020 PCE 0001 PCE 0002 PCE 0007 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE 0009 PCE 0002 PCE	3 3 28 12 8 2 2 2 4 2	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	3 3 28 12 8 2 2 2 4 2
435 436 437 438 439 4_40 441 442	W34-501108  W34-504103  W34-504128  W34-506121  W34-5061266  W34-506199  W34-5_07085  W34-5_077072	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n .::r:emp atu _ n_sor  Control unit CCM		005 PCE 020 PCE 0001 PCE 0002 PCE 0007 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE 0009 PCE 0009 PCE 00001 PCE	3 3 28 12 8 2 2 2 4 2 4 2	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	3 3 28 12 8 2 2 2 4 2
435 436 437 438 439 4_40 441 442 443 444	W34-501108  W34-504103  W34-504128  W34-506121  W34-5061266  W34-506199  W34-5_07085  W34-5071072  W34-5071249	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n ::r:emp atu _ n_sor  Control unit CCM Thermoelement		005 PCE 020 PCE 0001 PCE 0002 PCE 0007 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE 0009 PCE 0009 PCE 00001 PCE	3 3 28 12 8 2 2 2 4 2 4 2	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	3 3 28 12 8 2 2 2 4 2
435 436 437 438 439 4_40 441 442 443 444	W34-501108  W34-504103  W34-504128  W34-506121  W34-5061221  W34-506199  W34-5071072  W34-5071249  W34-50712837	Spare part kJt_  Knock sensor  _lempe a _! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n .::r:emp atu _ n_sor  Control unit CCM Thermoelement		005 PCE 020 PCE 0001 PCE 0002 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE 0009 PCE 0000 PCE 0001 PCE 0001 PCE 0001 PCE	3 28 12 8 2 2 2 4 2 4 2 1	0 0 0 0 0 0 0 0 0		0 0 0 0 0 0 0 0 0	3 3 28 12 8 2 2 4 2 4 2 2
435 436 437 438 439 4_40 441 442 443 444 444	W34-501108  W34-504103  W34-504128  W34-5061221  W34-5061226  W34-506199  W34-5071072  W34-5071249  W34-5071318	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n .::r:emp atu _ n_sor  Control unit CCM Thermoelement  tignificante food1JJe  Electronic unit IOM		005 PCE 020 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE 0009 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE	3 3 28 12 8 2 2 2 4 2 4 2 2 1	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	3 3 28 12 8 2 2 4 2 4 2 2 2
435 436 437 438 439 4_40 441 442 443 444 444 445	W34-501108  W34-504103  W34-504128  W34-5061221  W34-5061226  W34-506199  W34-5071072  W34-5071249  W34-5071318  W34-5071358	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n .::r:emp atu _ n_sor  Control unit CCM Thermoelement  tight@ptenod1JJe  Electronic unit IOM _§, I strip		005 PCE 020 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE 0009 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE	3 3 28 12 8 2 2 2 4 2 2 1	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0		3 3 28 12 8 2 2 4 2 4 2 2 2
435 436 437 438 439 4_40 441 442 443 444 444	W34-501108  W34-504103  W34-504128  W34-5061221  W34-5061226  W34-506199  W34-5071072  W34-5071249  W34-5071318	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n .::r:emp atu _ n_sor  Control unit CCM Thermoelement  Lightifienterflood1JJe  Electronic unit IOM _§, I strip <:::apleclamr.i		005 PCE 020 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE 0009 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE	3 3 28 12 8 2 2 4 2 4 2 1	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0		3 3 28 12 8 2 2 4 2 4 2 2 4 2 2
435 436 437 438 439 4_40 441 442 443 444 444 445	W34-501108  W34-504103  W34-504128  W34-5061221  W34-5061226  W34-506199  W34-5071072  W34-5071249  W34-5071318  W34-5071358	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n .::r:emp atu _ n_sor  Control unit CCM Thermoelement  tight@ptenod1JJe  Electronic unit IOM _§, I strip	453 <u>W34-</u>	005 PCE 020 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE 0009 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE	3 3 28 12 8 2 2 4 2 4 2 1	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		3 3 28 12 8 2 2 4 2 4 2 2 4 2 2 7
435 436 437 438 439 4_40 441 442 443 444 445 447 448 449 451	W34-501108  W34-504103  W34-504128  W34-5061221  W34-5061226  W34-506129  W34-506199  W34-5071072  W34-5071249  W34-5071318  W34-5071358  W34-5071358  W34-5071500	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n .::r:emp atu _ n_sor  Control unit CCM Thermoelement  Lightifienterflood1JJe  Electronic unit IOM _§, I strip <:::apleclamr.i		005 PCE 020 PCE 0001 PCE 0007 PCE 0001 PCE 0001 PCE 0001 PCE 00001 PCE	3 3 28 12 8 2 2 4 2 4 2 1	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0		3 3 28 12 8 2 2 4 2 4 2 2 4 2 2
435 436 437 438 439 4_40 441 442 443 444 445 447 448 449 453 456	W34-501108  W34-504103  W34-504128  W34-506128  W34-5061221  W34-5061266  W34-506199  W34-507085  W34-5071072  W34-5071249  W34-5071318  W34-5071358  W34-5071358  W34-5071500  W34-5072560  W34-5072560  W34-5072560	Spare part kJt_  Knock sensor  _lempe a _! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n .::r:emp atu _ n_sor  Control unit CCM Thermoelement  Lightificante flood 1 J J e  Electronic unit IOM _§, I strip <:::apleclamr.i Antenna	_ 507289	005 PCE 020 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0004 PCE 0009 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE 0001 PCE	3 3 28 12 8 2 2 4 2 4 2 1	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		3 3 28 12 8 2 2 4 2 4 2 2 4 2 2 7
435 436 437 438 439 4_40 441 442 443 444 445 447 448 449 451	W34-501108  W34-504103  W34-504128  W34-5061221  W34-5061226  W34-506129  W34-506199  W34-5071072  W34-5071249  W34-5071318  W34-5071358  W34-5071358  W34-5071500	Spare part kJt_  Knock sensor  _lempe a_! e se11sor .!:_ipe u11ion Reduction union pipe Pipe unio_n .::r:emp atu _ n_sor  Control unit CCM Thermoelement  Lightificanterflood1JJe  Electronic unit IOM _§, I strip <:::apleclamr.i Antenna Converter		005 PCE 020 PCE 0001 PCE 0007 PCE 0001 PCE 0001 PCE 0001 PCE 00001 PCE	3 3 28 12 8 2 2 2 4 2 4 2 1	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		3 3 28 12 8 2 2 4 2 4 2 2 4 2 2 7

										0 -	_0	0	10 10
					_	_							
							0001	PCE	11	0	0	0	11
		_	 Screw				0001	PCE	20	0	0	0	20
			₫icw				0001	PCE	1	0	0	0	
458	W34-507402		()-ring				0001	PCE	3	0	0	0	3
459	W34-507403		Distance sleeve				0001	PCE	1	_O	0_	0	

460	W34-507405	Screw	0001	PCE	2	0 -	0	0	2
461	W34-516292	Control unit	0001		3	0 -	u.	<u>0</u>	3
462	W34-516387	- ngine s fety module	0003		4				4
463	W34516585	Display unit	_0.001		1	0	0	0	4
464	₩34 <del>5</del> 516 <del>5</del> 0 <del>0</del>	Display unit	_0_001						
4-	W3 4 165.41	Draggura transducer	·0 <del>893</del> 6	RGE	1	0	0	0	
•		Pressure transducer	وتشتاه	PCE	3	0	0	0	4
466	W34-516596	Fuse 1A	0001	PCE	19	0	Ō	Ö	19
467	W34-516597	Fuse 4A		505				_	
468	W34-605002		0001	PCE	22	0_	Õ	0_	22
469	W3_4605016	(? ring	001	PŒ	6	0	0	0	6
470	<u>ws.</u> 4605016 W3 <del>4</del> -605023	e li gring		PCE PCE	2	0	0	0	2
470	VV34-605023	O-ring	0001	PCE	2	0	U	0	2
471	W34-605024	Retaining ring	0001	P <u>CE</u>	2	0_	_0_	0_	2
		Total in g in g		1 <u>0</u> L		_		_	
472	W34-800264	_Seattng setfor hydrauiic tightening-tool-	0001	PCE •	6	0	0	0	6
473	W34-861 220	NO NOT USED ANYMORE Sealing Kit For Hydraulic Cylinder M56	0001	PCE	3	0	0	0	3
_				. 0_	O	O			
474	W34-861003	.9-ring	0001	PCE	4	0	0	0	4
475	W34861004	0-ring	0001	PCE	4	0	0	0_	4
			_	. 0_					
476	W34-861062	upport r)ng.	0001	PCE	4-	0	0	0	4
		, ,							
477	W34-861063	Support ring	0001	PCE	4	0	0	0	4
478	W34-CV321	Solenoid valve	0016	PCE	4	0	0	0	4
479	<u>W34-C_V</u> 331	Solenoid valve	0003	PCE	1	0	0	0_	1
480	W34-CV519	I/P converter	0003	PCE	3	0	0	0	3
481	W34-FH104	_F'lexi _ e hose _, leak fuel drain, d_irty fuel_	0003	PCE	1	0	0	0	3
		Toxi _ o Tioso_, touk tuoi didili, d_itty tuoi_	0000	. 0_	•	Ü	0	Ü	
482	W_ 34-FH1_10	Flexible hose	0003	PCE	2	0	0	0	2
483	W34 H213		0001		_	Ö	Ö	Ö	_
4_	W34-FH214	Flex bJe hos e, lube oil to sepa ratorand drain	0001	PCE		0	0	- 0	
485	W34F_H_3_01	Flexible hose, starting air inlet	0005	PCE	1	Ö	Ö	Ö	1
486	W34-FH402	Flexible hose, HT Or LT- ater outlet	0005	PCE		-O-(	$\circ$	0	4
487	W34-FH404	<u>exible</u> ose, HT water air vent	005		3	0	0	0	3
488	W34-FH416	Flexible hose		PCE	2	Ö	0	a'	2
489	<b>V%</b> 4- <b>I</b> H4831	F lexible hose	0005		_	0	0	0	1
490	W34-FH4832	Flexible hose	0005	PCE PCE		0	0	0	1
491	100 4 EL E04	- Jex_!?_I_e hose, crankca ir ent	0005-			0	0	0	1
492	W34-FH708	Flexible hose	00 02		1	0	0	0	1
.0_			00.02	. 0,		U	U	U	'
494	W34PT201	Pressure sensor	0010	PŒ.	3	0	0	0	3
							0	•	0

495 496 497 498	W34-PT241 W34-PT401 W34-PT471 W34-PT601	CITY OF ALEXANDRIA, LOUISIANA Lube oil pressure filer internical POWER PLANT UNITS 5-11 - Pressure sensor WARTSILA OVERHAUL/MAINTENANCE SERVICES Pressure sensor Pressure sensor	0007 PCE 0,009 PCE 0,007 PC E 0,006 PCE	1 4 8 6	0 0 0	0 0 0	0 0 0	1 4 8 6
499	W34-PT700	Pressure sensor	0005					
500	W34-PT901		PCE	2	0	0	0	2
501 502 503	W34-PT911 W34-SE518 W34-ST173	Pressure sensor Pressure sensor p ed_p k-up Speed pick-up	0006 PCE 0006 PCE- 0012 PCE	6 6 1	Q 0 0	Q_ 0	Q_ 0 	.? 6 1
504 505	W34-ST174 W34-ST196P	peed pick-up Speed sensor	0007 PCE 0010 PCE 0003 PCE	3 2 2	0 <u>0</u> 0	0 0 0	0 _0 0	3 2 2

				_					
506	W34-ST196S	Speed sensC> .		0003 PCE	2	0	0	0	2
507	W34-ST197P	Limit switch		0006 PCE	4	0	0	0	4
508	W34-ST197S	Limit switch		00 <b>0</b> 6_ PCE	8	0	0	0	8
509	W34-TE201	J:emperature sensC>r		0013 PCE	3	0	0	0	3
510	<u>W34-TE401</u>	_!emperature sensor, !:12. ater, bElfore engine		0012 PCE	8	0	0	0	8
511	W34-TE402	}:empe atur:_e sens_or, H_T 'Nat_e . after engine		0015 PCE	3	0	0	0	3
512	W34-TE471	!;,T wat_er!emperatur, b_efo e arge a.ir.cool r		0008 PCE	6	0	0	0	6
513	W34-TE517	T'emperature se sor		0006 PCE	4	0	0	0	4
514	W34-TE600	Jernperature sensor		0007 PCE	4	0	0	0	4
515	W34-TE601	Ç_harge air temperature, i.11let		0006 PCE	3	0	0	0	3
516	W34-TEZ402	${f I}$ emperature sensor, t:l.T'-wa $!$ er out $!$ .eit		0012 PCE	1	0	0	0	
517	W34-TEZ403	TemP.erature seinsor, Hl"-water_o_utlet		0003 PCE	1	0	0	0	
518	W34/R/B -191-001	Rebuild HT & LT Pump Housing With Gear (No	Impeller) 191-001	PCE	1	0	0	0	

#### O\_N-\_SITE MAINI ANCE SERVJCES

PO. Item	Part no.	Material no.	Product no.	Description	Qty	Notes
000100	100003	PAAE042656	PAAE264151	Anti-polishing ring	20	
000200	100015	3371495	PAAE264151	O-ring	2	
000300	100023	3372041	PAAE264151	O-ring	40	
000400	111016	PABA268993	PAAE264151	Big end bearing kit	20	
000500	113012	PAAE027526	PAAE264151	Piston ring kit	20	
000600	120015	4092L004400	PAAE264151	Sealing set for cylinder head replacement	20	
000700	120099	3371345	PAAE264151	O-ring	40	
008000	120100	3371273	PAAE264151	O-ring	20	
000900	124002	PABA209982	PAAE264151	Spark plug	20	
001000	124026	0016E007600	PAAE264151	Valve seat	20	
001100	124028	0016E008000	PAAE264151	Valve	20	The price is for the given quantity. This item has to be specially procured, and shall not be cancelled or returned.
001200	124029	PAAE029496	PAAE264151	Rod	20	The price is for the given quantity. This item has to be specially procured, and shall not be cancelled or returned.
001300	124043	PAAE065493	PAAE264151	Sealing kit	20	
001400	124047	PAAF001455	PAAE264151	Prechamber, lower part	20	
001500	124066	PABA288294	PAAE264151	Spare part kit	20	
001600	145031	PAAC307734	PAAE264151	O-RING	20	Spare part kit includes:  1. Rod and valve assy.  2. Valve seat  3. Cotter pieces (2pcs.)  O-ring kit needs to be purchased separately
001700	156161	3372124	PAAE264151	O-ring	4	
001800	164076	PAAE065983	PAAE264151	Filter	20	
001900	164125	PAAF107044	PAAE264151	Cartridge set	20	
002000	207926	PAAF940240	PAAE264151	Pilot valve	1	
002100	217048	PAAF862593	PAAE264151	Repair kit	1	
002200	355608	3340006	PAAE264151	Gasket	2	
002300	357365	PAAE057839	PAAE264151	O-ring	2	
002400	377002	9422591	PAAE264151	O-ring	10	
002500	471063	PAAE142411	PAAE264151	Filter candle	78	
002600	471126	PAAE088809	PAAE264151	Sealing set	1	
002700	473081	PAAF023641	PAAE264151	Sealing set	1	
002800	474043	PAAE113470	PAAE264151	Sealing set	1	
002900	476009	PAAE140871	PAAE264151	Sealing kit	1	
003000	476018	PAAC000839	PAAE264151	Sealing ring	4	
003100	476019	3371297	PAAE264151	O-ring	4	
003200	476023	3371373	PAAE264151	0-ring	4	
003300	476027	PAAC000833	PAAE264151	Sealing ring	4	
003400	501108	PAAF281416	PAAE264151	ASSEMBLY	20	
003500	504103	PAAF230023	PAAE264151	Knock sensor	20	
003600	CV947	PABA129242	PAAE264151	Solenoid valve	1	
003700	CV957	0017H020900	PAAE264151	Solenoid valve	1	

PO. Item	Part no.	Material no.	Product no.	Description	Qty	Notes
003800	156500	PAAC302471	PAAE264151	0-ring	2	
003900	156501	3371500	PAAE264151	0-ring	2	
004000	181077	PAAE143689	PAAE264151	Service kit	1	
004100	182017	PAAE095837	PAAE264151	Flexible coupling	1	
004200	182062	PAAE163597	PAAE264151	Sealing kit	1	
004300	183003	7890367	PAAE264151	Thermostatic element	5	
004400	183087	PAAF141277	PAAE264151	Service kit	S	183005 IS REPLACED BY 183087
004500	191012	PAAE032377	PAAE264151	Bearing	2	
004600	191013	5130237	PAAE264151	Bearing	2	
004700	191051	PAAE102064	PAAE264151	Sealing kit	2	
004800	473063	PAAF023637	PAAE264151	Paper insert kit	1	The kit includes 25 paper inserts
004900	473081	PAAF023641	PAAE264151	Sealing set	1	
005000	FH108	PAAF026861	PAAE264151	Flexible hose	1	The price is for the given quantity. This item has to be specially procured, and shall not be cancelled or returned.
005100	FHIIO	6190299	PAAE264151	Flexible hose	1	The price is for the given quantity. This Item has to be specially procured, and shall not be cancelled or returned.
005200	FH213	PAAE028986	PAAE264151	Flexible hose, lube oil from separator and filling	1	
005300	FH214	PAAE028986	PAAE264151	Flexible hose, lube oil to separator and drain	1	
005400	FH402	6190122	PAAE264151	Flexible hose, HT water outlet	4	
005500	207927	PAAE127114	PAAE264151	Spare part kit	1	
005600	100113		PAAE264151	0-ring	20	
005700	111004		PAAE264151	Screw	80	
005800	111012		PAAE264151	Screw	80	
005900	111015		PAAE264151	Shim	20	
006000	PT5011A	·	PAAE264151	Cylinder pressure sensor	20	
006100	TE5011A		PAAE264151	TEMPERATURE SENSOR	20	TEMP SENSOR AND POCKET SOLD SEPARATELY, SEE LINE 6200
006200	TESOIIA-1		PAAE264151	PROTECTION WELL	20	
006300	TE7041A		PAAE264151	Thermoelement	40	

### OFF-SITE WORKSHOP SERVICES

PO. Item	Part no.	Material no.	Product no.	Description	Qty	Notes
000100	156161	3372124	PAAE264151	O-ring	4	
000200	476009	PAAE140871	PAAE264151	Sealing kit	1	
000300	476018	PAAC000839	PAAE264151	Sealing ring	4	
000400	476019	3371297	PAAE264151	O-ring	4	
000500	476023	3371373	PAAE264151	O-ring	4	
000600	476027	PAAC000833	PAAE264151	Sealing ring	4	
000700	474043	PAAE113470	PAAE264151	Sealing set	1	
008000	156383	PAAF677980	PAAF677980	Turbocharger overhaul kit	2	The Thrust collar must be replaced as a pair when upgrading to the new Thrust bearing type. See Spare parts noticeWS15P462.
000900	120054	PAAF530251	PAAE264151	Sealing set for cylinder head overhaul	20	
001000	123021	PAAE157048	PAAE264151	Sealing set	10	
001100	120013	00128025300	PAAE264151	Valve guide	40	
001200	120021	0012B024800	PAAE264151	Seat ring for inlet valve	20	Standard size 00128024800
001300	120022	PAAF198061	PAAE264151	VALVE SEAT RING EXHAUST 40° +IMM	40	VALVE SEAT RING EXHAUST 40° +IMM
001400	120017	PAAE162625	PAAE264151	O-RING	40	HI TEMP ORING
001500	121006	9500067	PAAE264151	Exhaust valve	20	
001600	121012	00128024600	PAAE264151	Inlet valve	10	
001700	121003	PAAE098072	PAAE264151	Rotocap	10	
	474 003			New Lube Oil Cooler	1	Spare
	476 001 (0091)			Charge Air Coolers	1	(Spare)To Help Speed Up The Work & Liner Boxes
	504128			Exhaust Temp	20	Per Engine
	5071249			Liner Temp	40	Per Engine
	516 541			Peak Pressure SENSORS	20	Per Engine

PO. Item	Part no.	Material no.	Product no.	Description	Qty	Notes
	ASK LUIS			Re-Gasket The Charge Air	1	Der Engine
	ASK LUIS			Housing	1	Per Engine