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VIA E-MAIL

February 25, 2022

Kendal Stegmann
Director, Air Quality Division
Oklahoma Department of Environmental Quality
707 N. Robinson
P.O. Box 1677
Oklahoma City, OK 73101-1677

RE: Reply to ODEQ's January 31, 2022 request for additional clarifications on DCP's
October 1, 2020 regional haze 4-four analysis

Dear Ms. Stegmann:

DCP understands the DEQ's letter as requesting additional clarifications on four items: (1) DCP's timing for the planned removal of engine C-5, (2) why the anticipated control efficiency for CBT+SCR is not greater than the anticipated control efficiency for CBT alone, (3) a line-item breakdown of the capital costs for SCR, including any relevant vendor quotes, and a breakdown of the estimated operation and maintenance costs of CBT and SCR, and (4) documentation of the capital recovery interest rate used in the control cost calculations. Each of these items is addressed below.

1. Engine C-5 has not operated in several years, and DCP is amending its Title V permit renewal application that is currently under review by the DEQ to include the retirement of engine C-5. DCP has already confirmed this approach with the permit writer for the renewal permit.
2. The "CBT+SCR (1 g)" option represents the scenario where CBT reduces emissions to 6 g/hp-hr, and then SCR further reduces emissions to 1 g/hp-hr. Therefore, it has the same overall emissions reduction as the "CBT (1 g)" option. Theoretically, SCR could be installed in addition to the "CBT (1 g)" option, but this would exacerbate the already significant spacing concerns for the various control device installations, and neither DCP nor its vendors/contractors are aware of any technical documentation from which the potential incremental NO_x reduction could be estimated. The 1 g/hp-hr emissions guarantee is the lowest for which the SCR vendor, AeriNO_x, provided a certification. Even this option was not recommended by the vendor though due to significant reliability concerns and increases in CO emissions.
3. The SCR quote provided by AeriNO_x was a comprehensive cost estimate, and it included engineering, mixer, catalyst, silencer, control system, urea dosing panel, reagent pump station, reagent pump tank, and commissioning. The SCR operation and maintenance costs

are provided in this quote as well. If additional details are needed for DEQ's purposes, then DCP requests a list of specific items with which it can approach its vendor(s)/contractor(s).

The original cost estimate for CBT provided by Siemens via email is attached. The annual maintenance cost for CBT provided by Cooper via email is attached. The annual maintenance cost for the oxidation catalyst (\$2,550 per unit) was provided by Miratech.

4. DEQ's letter states, "The federal reviewers stated that use of a 7% interest rate in the cost analysis is not appropriate." This appears to be a fundamental shift in policy. The standard, OMB-recommended 7% interest rate has been relied upon commonly for control technology analyses for a long time, including during the regional haze first planning period when the bank prime rate was exactly the same as it is now (3.25%), i.e., from December 2008 to December 2015.

DEQ's letter also states, "For consistency with EPA's Control Cost Manual, the cost analysis should be based on either the bank prime rate or a company-specific interest rate, if available." EPA's Control Cost Manual does not present the bank prime rate as a default, absent a company-specific interest rate. It is mentioned as one of several indicators of the cost of borrowing. The purpose of the bank prime rate is also not related to the cost of capital for a private company and does not represent DCP's cost of borrowing. As of January 2022, DCP's cost of borrowing was being estimated as 5.54%. Recent inflationary economic conditions suggest that the cost of borrowing capital is increasing – likely to greater than 7%. As such, DCP's use of 7% should be considered conservatively low.

Thank you for the opportunity to provide this information. DCP looks forward to working with the DEQ in its revisions to the regional haze SIP. Please contact me at (405) 568-3775 or LCHolt@dcpmidstream.com if you have any questions or need any additional information.

Sincerely

DCP Operating Co.



Lynn Holt
Principal Environmental Specialist

cc: Steve Ondak, DCP Operating Co.
Jeremy Jewell and Kyle Dunn, Trinity Consultants

August 20, 2020

TO: Lynn Holt
DCP Operating Company, LP
Phone: 405-568-3775
Email: LCHolt@dcpmidstream.com

Reference: Chitwood, OK Compressor Station – SCR Budgetary Pricing

Dear Ms. Holt,

We are pleased to submit this budgetary proposal for an **AeriNOx™ Emissions Control System** designed to reduce exhaust emissions from multiple natural gas engines from a range of Base to 6gm and from 6gm to 1gm. Configured as noted below:

-) ITEM A: BASE Emissions to 6gm NOx
-) ITEM B: 6gm NOx to 1gm NOx

AeriNOx does not recommend applying SCR emissions to uncontrolled engines due to a large variance in combustion instability and typically poor air/fuel ratio controls which can cause operational issues for the SCR system to function correctly. We have included the major hardware for your evaluation. Visiting the sites and/or review of site photos and details will allow us to provide a more formal proposal. We have based the pricing on a per engine basis, however, for multiple engines at a facility we can use some common hardware (Pump station, tank, SCR controls) to help reduce overall price and space.

The **AeriNOx™ SCR Systems** offered for this project are based on engine and emissions data provided by DCP Operating Company. The enclosed proposal details the budgetary price, scope of supply, warranty, commissioning and terms and conditions necessary to achieve the required emissions limits. AeriNOx will work with DCP to review and negotiate terms and conditions.

a) EXHAUST GAS DATA & EMISSION REQUIREMENTS

Engine Data:

Parameter = 100% Load	Unit	Cooper-Bessemer GMV8-TF*	Cooper-Bessemer GMV10-TF*	Ingersoll-Rand KVS-8*
Fuel	-	CQNG	CQNG	CQNG
Engine Power	bhp	880	1000	1320
Exhaust Gas Flow Rate (wet)	lb/hr	12,625**	15,750**	11,310**
Exhaust Gas Moisture Content (actual, wet)	Vol. %	6**	6**	6**
Oxygen Content (actual, wet)	Vol. %	11**	11**	6**
Exhaust Temperature	°F	550**	550**	819**

*Per manufacturer data

**AeriNOx estimated, requires verification

Emission Control System Design Parameters:

Parameter	Unit	GMV8-TF	GMV10-TF	KVS-8
Reagent Solution	%	32.5 Urea	32.5 Urea	32.5 Urea
Aqueous Ammonia Solution Consumption Rate (at 100% engine load) approximately, per engine	gph	3.5 – A 3.1 – B	3.9 – A 3.6 – B	2.3 – A 1.9 – B
Total System Backpressure Contribution Mixer + SCR + Silencer	inH ₂ O	6.5	6.5	6.5
Air Consumption, per engine (Based on 87 psi nominal, max 160 psi)	scfm	8	8	8

Emissions Guarantee and Warranty:

Emission*	Current Engine Out	Required Stack Out*
NOx as NO ₂ – ITEM A	11.0 g/bhp-hr	6.0 g/bhp-hr
NOx as NO ₂ – ITEM B	6.0 g/bhp-hr	1.0 g/bhp-hr

* Based on 1 hour averaging with the engine operating at 100% load

Provided the engine is operating under stable operating conditions, AeriNOx guarantees the stack emissions (In % reduction) for a period of 16,000 hours of operation or 12 months after the initial engine performance test date, or 18 months after delivery, whichever comes first. All values are per EPA-approved measurement methods, with one-hour averaging while the engine is operating at 100% load. The mechanical warranty is 12 months after commissioning or 18 months after delivery, whichever comes first.

This guarantee is subject certain maintenance practices and engine operating conditions, as defined in the Terms & Conditions. The guarantee is also based on the emissions data provided to AeriNOx at the time of this quotation and defined in Section 1 of the Technical Description. AeriNOx reserves the right to modify Items 001 in the Scope of Supply and associated price once more accurate and complete emissions data are obtained in order to ensure the emission limits can be maintained as required.

Estimated Maintenance (Estimated)

Parameter	GMV8-TF	GMV10-TF	KVS-8
Reagent Cost Per Year (Based on \$1.3/gal urea, 8760 hrs/yr)	~\$39,410 – A ~\$35,500 – B	\$44,825 – A \$40,915 – B	\$25,900 – A \$21,360 – B
SCR Maintenance (Less SCR Catalyst, hardware only)	\$3,000	\$3,000	\$3,000
SCR Catalyst Replacement (Complete, hardware only)	\$33,600 – A \$22,500 – B	\$42,000 – A \$28,000 – B	\$33,600 – A \$22,500 – B

2. SCOPE OF SUPPLY

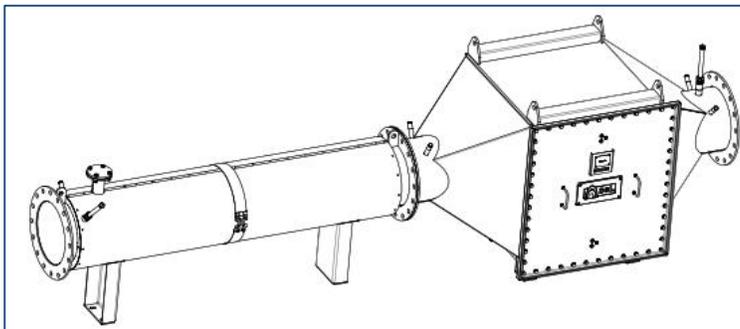
Engineering (Per Unit)

-) Process & Instrumentation Diagram
-) Cable Block Diagram
-) Wiring Diagram
-) Mechanical:
 - Mixing Duct and Injector Drawing
 - SCR Housing and Catalyst Element
-) Silencer with 5ft stack
-) O&M Documentation
-) Commissioning Report (Post-Commissioning)

Mixer + SCR Catalyst + Silencer (Per Unit)

Aqueous urea solution is injected into the exhaust gas with a two-phase nozzle (air and urea solution). An air atomization nozzle is integrated into the mixer to create small droplets such that complete evaporation of the water occurs without contacting the walls of the ductwork. The mixing section with integrated injection nozzle to ensure complete conversion of aqueous urea to ammonia gas. Material: SS304

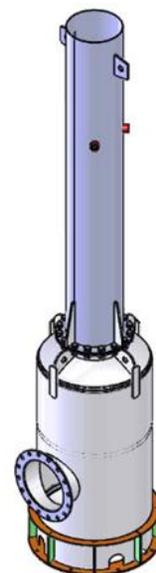
The catalyst is loaded via service panels located on the side of the housing. Housing Material: SS304. Includes (1) expansion joint.



Typical arrangement of mixing duct with SCR housing.

Note the catalyst impurity tolerance specification in Section IV.

Silencer will be a residential grade (15-20 dBA), base mounted, carbon steel with 5ft tailpipe. Painted manufacturer black paint. Includes inlet expansion joint.



SCR Control With Integrated Dosing (Per Unit)

The SCR unit is controlled by a single control system with dosing housed in a single control cabinet. Includes a Siemens Programmable Logic Controller (Simatic 1200): touch screen control with menu-guided parameter inputs (without any program change); password protection; error message and clear display.

-) Siemens 1200 PLC with touch screen user interface (KTP 400)
-) Power Supply: 200-230 VAC, 60Hz, ~3kW (CL 1, D2 Suitable)
-) Reactor temperature (pre/post) measurement with thermocouples
-) Pressure measurement (delta P over the SCR catalyst)
-) eWON switch for network connection
-) NOx sensor for closed-loop control
-) Flow measurement for reducing agent with limit value switch
-) Approximate Dimensions: 30 in L x 30 in W x 18 in D



Urea Dosing Panel (Per Unit)

All components for 32.5% urea dosing are mounted on a steel back panel in a NEMA 4X enclosure; includes steel dosing valve, magnetic valves and shut-off valves. UL Listed electrical components. All reagent fittings/devices/tubing are stainless steel. Suitable for Class 1, Div 2 indoor locations.



Reagent Pump Station (Typical Per Unit or Site)

Eccentric screw pump station (duplex) complete with auxiliary valves, filters; ships fully assembled and pretested from our factory. The pump station has been designed for consumption levels assuming 32.5% urea. NEMA standard protection. Pump designed for indoor installation. Suitable for non-Class 1, D2 locations. Pump will support multiple engines at a common site for units that are <300ft between pump station and injection lance.



Reagent Tank (Typical Per Unit or Site)

Includes a poly-tank, vertical with insulation and heat tracing. Includes level transmitter and vent. Suitable for non-C1 D2 locations. Tank sized for minimum 30 days operation with unit at 100% load.

Commissioning (Per Unit)

Estimated at 4 man-days for the commissioning of the emission control system (Per unit) to meet the required emissions levels; includes estimated costs of travel and accommodations. We can provide qualified personnel to supervise installation at the rate of \$1,350 per man-day, plus travel expenses. Additional time will be billed per the time and material rates.

3. PRICE

The given prices (shown below) for the hardware are net prices, DDP to customer location, per Incoterms 2010. All prices are in US dollars. Not included are taxes. Payment terms are net 30.

ITEM	DESCRIPTION	PRICE (\$)
A	SCR SYSTEM (PER UNIT) **BASE TO 6gm NOx	GMV8-TF \$255,000
		GMV10-TF \$285,000
		KVS-8 \$260,000
B	SCR SYSTEM (PER UNIT) **6gm TO 1gm NOx	GMV8-TF \$245,000
		GMV10-TF \$270,000
		KVS-8 \$250,000

Based on the following payment milestone schedule:

-) 30% upon award of PO/Contract
-) 15% upon issue of engineering drawings
-) 50% upon Ready to Ship
-) 5% upon completion of AeriNOx commissioning

4. SCHEDULING & DELIVERY

Delivery of the drawings and technical documents is approximately 8 weeks after receipt of a purchase order. Ready for shipment of the hardware is approximately 20 weeks after approval of all technical details, per engine. For multiple engines and multiple sites schedule will need to be modified based on total number of engines and sites.

5. QUALITY STANDARD

The electrical components are UL listed components, where feasible. All drawings will be in both metric and English units. We reserve the right to adapt the technical design of the emission control system based on the results of the final engineering work, provided this does not impact the affect the guaranteed performance characteristics and is approved by the customer before production begins.

6. ASSUMPTIONS AND EXCEPTIONS:

Not included in the scope of supply:

- Load signal from the engine (4-20 mA)
- Structural and civil work necessary to complete the installation
- Oxidation catalyst (available as an option), requires additional site information to quote
- Urea solution (available as an option)
- Thermal insulation for the catalyst housing (available as an option)
- Expansion joints and piping not listed herein (available as an option)
- Installation of all hardware listed herein
- Compressed air, per ISO 1.3.4 requirements
- Provision for electricity and connection of the power supply to the enclosure
- System integration (design and engineering) with the building structure
- Connection to the local supply and disposal network
- Platforms and other support structures
- Any 3rd party emission certification of stack test

Should you have any questions or comments, please do not hesitate to contact me.

Sincerely,



Loran Novacek
Chief Executive Officer

AeriNOx Inc.

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Eaton, CO 80615
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Web: www.aerinox-inc.com

STANDARD TERMS AND CONDITIONS OF SALE
(Effective November 2017)

1. **Application.** These Standard Terms and Conditions apply to any sale of equipment, parts, materials and related services (the “Products”) by AeriNOx Inc. (“AeriNOx”) to any AeriNOx Customer (the “Customer”). Acceptance of these Standard Terms and Conditions by an AeriNOx Customer is an express condition of any such sale.
2. **Entire Agreement.** These Standard Terms and Conditions, the Order Confirmation (the “AeriNOx Order Confirmation”) issued by AeriNOx in respect of each sale and supply of Products and any other document expressly incorporated by reference in a AeriNOx Order Confirmation (collectively, the “Agreement”) constitute the entire agreement between AeriNOx and the Customer regarding a sale of Products or related services by AeriNOx to the Customer. These Standard Terms and Conditions supersede all other discussions, proposals, quotes, negotiations, statements, representations, understandings and the like, whether written or oral. AeriNOx rejects any differing or supplemental terms that may be printed or otherwise found in any purchase order or other document sent by the Customer prior to the acceptance of Agreement, except as expressly accepted by AeriNOx in writing with the signature of an authorized representative. If there are inconsistencies in the documents constituting the Agreement, such documents shall take precedence in the following order:
 - i. the AeriNOx Order Confirmation;
 - ii. a contract document or addendum incorporated by reference into the AeriNOx Order Confirmation; and
 - iii. these Standard Terms and Conditions.
3. **Terms of Payment.** Unless otherwise agreed by AeriNOx in writing, signed by an agent of AeriNOx, AeriNOx invoices for the Customer’s purchase of Products are payable within thirty (30) days of the date of the invoice with place of payment to be PO Box 490, Eaton, Colorado 80308 or as designated in the AeriNOx Agreement. Should payment not be made to AeriNOx when due, such payment shall bear an interest at the rate of one and one-half percent (1½%) per month (18% per annum). The charging of such interest shall not be construed as obligating AeriNOx to grant any extension of time in the terms of payment. No cash discount shall be available to the Customer. If prior to any delivery of Products, AeriNOx has concern regarding timely payment of the purchase price because of a material adverse change in Customer’s circumstances or otherwise, AeriNOx may require payment of all or additional parts of the purchase price before shipment or delivery and/or AeriNOx may require satisfactory security for the payment of the purchase price.
4. **Cancellation of Contract before Delivery.** In the event the Customer cancels the Agreement after the date such Agreement is accepted, Customer agrees to pay the following charge as liquidated damages in lieu of actual damages, it being understood and agreed between the parties that actual damages to AeriNOx would be impractical or extremely difficult, time consuming and expensive to ascertain. It is as follows:

% of Time Elapsed From Date of Agreement to Time of Cancellation (calendar days)	% of Sales Price Due (Not including Shipping Costs)
0 % Time Elapsed < 33 1/3%	50%
33 1/3 % Time Elapsed < 50%	75%
50 % Time Elapsed < 66 2/3%	85%
66 2/3 % Time Elapsed < 80%	95%
80% % Time Elapsed 100%	100%

5. **Delivery Terms.** Each Product subject to sale shall be shipped in accordance with the International Commercial Trade Terms known as IncoTerms 2010 specified in the AeriNOx Agreement. If shipping instructions are not so specified for any supply of Products, such supply shall be shipped ex works (IncoTerms 2010). Ex works deliveries of the shipped Products are deemed complete upon release of the Products to the Customer’s carrier at AeriNOx’ facilities (the “AeriNOx Plant”) located in Eaton, Colorado, United States of America; or one of AeriNOx’s partner facilities located in Canada, Germany or elsewhere. If the Customer is unable or unwilling to accept physical delivery at the time specified for delivery, AeriNOx may store Customer’s Products at Customer’s cost and the delivery of such Products shall be deemed complete as of the date of storage.
6. **Taxes.** Unless otherwise expressly provided for in an AeriNOx Agreement, or otherwise implicit in the IncoTerms 2010 specified for a particular supply, the price of the Products shall not include sales, use, excise, value added or any similar taxes, duties or other export/import charges.
7. **Delivery Schedule.** Time for delivery is approximate and starts on the later of the date specified in the AeriNOx Agreement or the receipt by AeriNOx of any advance payment or first payment as set forth in the AeriNOx Agreement. Should Customer not make an advance payment or first payment as set forth in the AeriNOx Agreement, AeriNOx may request from the Customer credit approval or placement of security for the balance of the purchase price. Unless otherwise specified in an AeriNOx Agreement, AeriNOx shall not be liable for losses of any kind incurred by the Customer for delays in or failure to deliver all or any part of the Products. Changes in the delivery schedules requested by the Customer must be in writing and received by AeriNOx at least two (2) business days prior to the previously scheduled delivery date. AeriNOx is under no obligation to accept any changes in delivery dates requested by the Customer.
8. **Title Retention.** Title or ownership of the Products shall not pass to the Customer, notwithstanding delivery thereof, but shall remain vested in AeriNOx until the purchase price of the Products is paid in full. As security for the full payment of the purchase price of the Products, the Customer hereby grants to AeriNOx, and AeriNOx hereby reserves, a purchase money security interest and charge in the Products and in all substitutions, replacements and additions thereto and the proceeds thereof. Until such time of full payment, the Customer shall: (a) insure the

Products against loss, damage or destruction for full replacement value; and (b) execute such additional documents as AeriNOx shall request for the confirmation or perfection of such security interest and charge. Upon any default by the Customer, and subject to applicable law, AeriNOx may repossess and deal with the Products as it shall see fit and retain all payments which have been made by the Customer for the account of the purchase price as liquidated damages. Upon any such realization of security, the Customer shall remain liable for any deficiency in the purchase price and shall reimburse AeriNOx for all costs and expenses, including reasonable legal fees, incurred in enforcing its rights. All rights and remedies of AeriNOx are cumulative and in addition to those available at law or in equity.

9. **AeriNOx Property.** All supplies, materials, tools, jigs, dies, gauges, fixtures, molds, patterns, equipment and other items procured by AeriNOx to perform the supply of Products under its Agreement with Customer shall be and shall remain the property of AeriNOx under all circumstances, including, without limitation, reimbursement of AeriNOx by the Customer for all or any portion of the cost of such items.
10. **Risk of Loss.** Unless otherwise specified or confirmed in the AeriNOx Agreement, the risk of loss or damage to the Products, including any repaired or replaced items, and the responsibility for the payment of insurance premiums and freight passes to the Customer upon AeriNOx's delivery as provided in Sections 5 and 7 above. No loss of or damage to the Products or any part or portion thereof shall relieve the Customer from its obligations for payment hereunder.
11. **Inspection, Rejection, Remedy.** Customer shall have the right to reasonable inspection of the Product after delivery to destination, which inspection shall be completed within ten (10) days of the date of delivery to destination. Any rejection by Customer as to part or all of the Product shall be in writing, specifically stating the damage or design non-conformance. In such event, AeriNOx shall have a reasonable period of time to determine the validity of and, if necessary, to repair any damage to a Product or correct a design non-conformance of a Product. Should a design non-conformance form the basis of the Customer's rejection, at AeriNOx's option and if appropriate, it may replace part or all of the Product. Upon validating damage to a Product or a design non-conformance, AeriNOx shall provide Customer with a date certain for completion of repair or replacement or provision of a design conforming item.

Subsequent to installation and commissioning and within the Product warranty period, should the Product delivered be found not to meet functional specifications set forth in the AeriNOx Agreement for measured emissions, AeriNOx shall provide a date certain for bringing the Product into functional conformance per the AeriNOx Agreement. The time period to do so shall not exceed sixteen (16) weeks from the date of discovery of failure to meet functional specifications. The time period within which to correct such a functional non-conformance shall commence at the later of the commissioning date or the date that the emissions non-conformance was discovered.

Customer's failure to make rejection as herein stated, or to allow AeriNOx to cure Customer's objections, shall be deemed to conclusively establish acceptance by Customer of the Product.

12. **Limited Warranties.** AeriNOx warrants that each Product is free of defects in material and workmanship strictly in accordance with the terms and conditions of the limited warranty statement specified or confirmed in the AeriNOx Agreement. Copies of Product Warranties are available from AeriNOx upon request. Throughout the Warranty Period, AeriNOx warrants that the Product will achieve the emissions levels set forth in the accepted AeriNOx Agreement, subject to the following conditions:
 - a) the Product is operated and maintained at all times in accordance with AeriNOx's written instructions;
 - b) the Customer's equipment is operated and maintained at all times in accordance with all manufacturer's instructions and guidelines;
 - c) the Customer's equipment, during operation, never exceeds the engine-out emissions rate, the flow rate or temperature levels set forth in the AeriNOx Agreement;
 - d) the Customer's equipment never falls below the lower temperature limits stated in the AeriNOx Agreement;
 - e) the Customer operates the equipment so as to eliminate any Oxides of Nitrogen (NOx), Carbon Monoxide (CO) and Total Hydrocarbons (THC) fluctuations greater than one (1%) respectively of the engine-out emissions stated in the engine performance data; and
 - f) all operating parameters including engine load, fuel consumption, and hours of operation are recorded and/or logged hourly (excluding exhaust gas flow rates, engine-out emissions data and post-after treatment emissions data).

Emissions levels, temperature and flow rates from Customer's equipment and the Product discharge point shall be tested at the Customer's expense, in accordance with a mutually agreed upon test procedures and protocol consistent with customary and accepted industry practices. AeriNOx's limited warranty shall expire in the event the Product is misused, neglected, not properly maintained or operated other than for its intended use or purpose by the Customer.

If the above conditions are met and the Product fails to achieve the output performance stated in the AeriNOx Agreement within the Warranty Period, AeriNOx shall replace or modify and adjust its Product as needed to meet such output performance standards. Consistent with Section 11 above, Customer is required to notify AeriNOx, in writing, of any specific defect(s) and provide AeriNOx with complete documentation of the defect(s) and proof of satisfaction of all conditions, a) through f), of this Section 12. If AeriNOx is unable to achieve the output performance standards under the AeriNOx Agreement conditions, Customer may rescind the sale, and AeriNOx shall return the purchase price that shall be Customer's sole remedy for breach of the warranty made in this paragraph. In no event shall AeriNOx be responsible for consequential or punitive damages or otherwise.

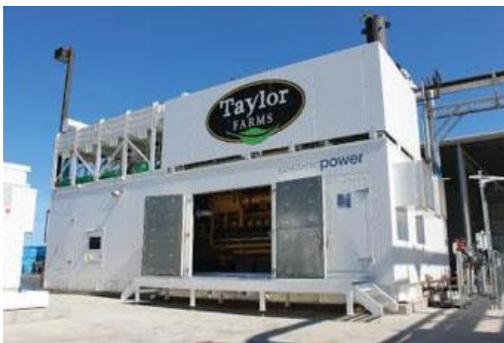
13. **NO OTHER WARRANTIES EXPRESS OR IMPLIED.** THE LIMITED PRODUCT WARRANTIES REFERRED TO IN SECTION 12 ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS IN RESPECT OF THE PRODUCTS, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE REMEDIES PROVIDED IN THE APPLICABLE PRODUCT WARRANTY ARE THE CUSTOMER'S SOLE REMEDIES FOR ANY FAILURE OF AERINOX TO COMPLY WITH ITS WARRANTY OBLIGATIONS.
14. **LIMITATION OF LIABILITY.** THE TOTAL CUMULATIVE LIABILITY OF AERINOX TO THE CUSTOMER FOR ALL LIABILITIES OF ANY KIND, WHETHER BASED ON TORT, NEGLIGENCE, CONTRACT, WARRANTY, STRICT LIABILITY OR OTHERWISE, ARISING FROM OR RELATING TO THE AERINOX AGREEMENT SHALL NOT BE GREATER THAN THE AGGREGATE PURCHASE PRICE OF THE PRODUCTS SUPPLIED BY AERINOX UNDER SUCH AGREEMENT.
15. **Consequential Damages.** AeriNOx shall not be liable for and shall be held harmless by the Customer from any damage, loss, claim or expense, including without limitation indirect, special, consequential, incidental or punitive damages in relation to loss of use of facilities or equipment, loss of production, revenue or profits, downtime costs, or costs of capital or of substitute equipment or services arising directly or indirectly from the Products or the sale thereof, including without limitation the manufacture, handling, use, installation, operation or dismantling of the Products, whether alleged in contract, negligence or otherwise.
16. **Re-sale of Products.** In respect of any re-sale of the Products or sale of any Customer product which incorporates a Product as a component, the Customer shall indemnify, defend and hold AeriNOx harmless against any and all claims, actions, liabilities and expenses (including all legal fees, on a substantial indemnity basis) arising from a representation or warranty to a third party for the Products made by the Customer other than, as limited by the Product Warranties, or arising from an allegation of process patent infringement relating to a Customer process in which the Products are used as a component part.
17. **Survival.** All payment obligations, provisions for the limitation of or protection against liability of AeriNOx and any other provision of an Agreement which by its nature is continuing, shall survive the termination, cancellation or expiration of such Agreement.
18. **Permits.** The Customer shall obtain, at its expense, all licenses, permits and approvals for the purchase, delivery, shipment, installation and use of any Products.
19. **Force Majeure.** AeriNOx shall be excused from the timely performance of its obligations in the sale or other supply of Products and/or services if its performance is impeded or prevented by circumstances beyond its control (other than its own financial difficulties) (a "Force Majeure Event") and AeriNOx shall take all reasonable steps or actions to mitigate the effect of the delay. This provision shall specifically apply to Section 7 above. Upon the occurrence and the termination of a Force Majeure Event, AeriNOx shall promptly provide the Customer with written notice and reasonable particulars of the Force Majeure Event. Either party may terminate any Agreement affected by a Force Majeure Event if such circumstances continue for more than six (6) months and written notice of termination is delivered to the non-terminating party. Upon and notwithstanding any such termination, the Customer shall pay AeriNOx for that portion of the Products manufactured or delivered prior to the date of the above mentioned initial notice of the Force Majeure Event. Notwithstanding anything in this Section 19, the Customer shall extend any security granted for the payment of the purchase price of Products for a period equal to the delay caused by the Force Majeure Event.
20. **Governing Law.** The sale of the Products and this Agreement are and shall be governed by the laws of the State of Colorado and the laws of the United States of America as applicable therein. Each of the parties irrevocably attorns and agrees to the exclusive jurisdiction of the Courts of the State of Colorado, provided that the parties shall not be prevented from seeking injunctions or other temporary relief or enforcing judgments of the Courts of Colorado in another jurisdiction.
21. **Confidential Information.** Proprietary or confidential information disclosed for supply of any Products may not be used or disclosed by the recipient, Customer or AeriNOx other than for the express purpose for which it was disclosed. The owner of such proprietary or confidential information shall be responsible for designating it as such by clear and timely notice thereof to the recipient at the time of or before its conveyance to the recipient.
22. **Assignment.** Neither party may assign all or any part of the AeriNOx Agreement without the prior written consent of the other party.
23. **Waiver, Amendment.** Any waiver, modification or amendment of an Agreement shall only be effective if such waiver, modification or amendment is contained in a written instrument prepared or otherwise accepted in writing by AeriNOx and Customer and signed by their respective authorized agents.
24. **Suspension, Cancellation or Termination.** Subject to Sections 4, 11 and 19 hereof, no AeriNOx Agreement may be cancelled or suspended by the Customer without the express written consent of AeriNOx, such consent to be granted in AeriNOx's sole and unrestricted discretion and upon such terms, including the payment of all costs incurred and profits foregone, as AeriNOx may require. Termination may be effected as set forth in Section 19 by either party.
25. **Severability and Reconstruction or Termination.** If a binding court determination, ruling or judgment is made that a provision of these Standard Terms and Conditions or any other document which forms the AeriNOx Agreement is unenforceable (in whole or in part), then such provision shall be void only to the extent that such determination, ruling or judgment requires, and the parties shall replace such void provision with one that is enforceable and valid and, to the greatest extent permitted by law, serves the intent and purpose of the void provision. No other provision shall be affected as a result thereof, and, accordingly, the remaining provisions shall remain in full force and effect as though such void, voidable or inoperative provision had not been contained herein.

REFERENCES



Fairbanks Morse Engine
Abbvie North / Abbvie South – Puerto Rico
Project Contact: Jonathan Hoke
Engines: 2 x MAN 9L-50/60DF Engines

Equipment: SCR Controls, Exhaust Silencer and 48in insulated exhaust piping



Peterson Power
Taylor Farms and True Leaf Farms - California
Project Contact: Mike Short
Units: 2 x Caterpillar G3516H NG Engines

Equipment: SCR Controls, 100% NH3 dosing, housing, elements, EGHX, Silencer



Martin Energy
Multiple N.E. and California Based Projects
Project Contact: Derek Loganbill
Units: Multiple Siemens NG Engines

Equipment: SCR Controls, Dosing, Pump Station, Housing/Elements



Enbridge Energy
Danville, KY
Project Contact: Bob Amsberry
Units: 2 x GE Frame 3 Turbines

Equipment: SCR Controls, Enclosure, NH3 Tank, Unloading Station, Support Structure, Ducting, Silencer, Tailpipe

Kyle Dunn

Subject: FW: DCP Midstream // GMV modifications for haze - Indicative Pricing for Turnkey Solution

Thank you for taking some time to speak with Steve and me earlier – it was a pleasure to speak with you.

As promised, we committed to provide some indicative pricing that includes the required hardware, engineering and project management labor, and field service supervision, commissioning, and required subcontractor labor to deliver a complete turnkey package. Moving towards a proposal stage, we would need to confirm unit serial numbers, HP ratings, equipment on the engines and any known modifications made to the units over the years.

The table below shows the basic engine details we were provided with:

Emission Unit ID No.	Emission Unit Description	NOx		
		g/bhp-hr	lb/hr	t/yr
<i>Compressor Engines</i>				
C-1	Cooper-Bessemer GMV-8	14.0	27.16	118.96
C-2	Cooper-Bessemer GMV-8	14.0	27.16	118.96
C-3	Cooper-Bessemer GMV-8	14.0	27.16	118.96
C-4	Cooper-Bessemer GMV-8	14.0	27.16	118.96
C-5	Clark HRA-8	14.0	27.16	118.96
C-6	Ingersol-Rand KVS-8	11.0	32.01	140.21
C-7	Ingersol-Rand KVS-8	11.0	32.01	140.21
C-8	Cooper-Bessemer GMV-10	14.0	33.92	148.71
C-9	Cooper-Bessemer GMV-10	14.0	33.92	148.71

The following pricing as mentioned above is for a full turnkey solution and is budgetary only - non-binding for informational purposes only. Under no circumstances shall it establish any obligation or liability on Siemens Energy's behalf nor shall it be considered to be a firm or binding offer by Siemens Energy. We also need to state that the worldwide outbreak of the coronavirus disease ("COVID-19"), affects or is likely to affect usual business activities and/or the execution of work describe here.

Since we currently don't have the specific HP ratings – DCP will need to convert the gms/bhp-hr to lbs/hr and tons/yr.

2- Stroke

Item	Unit	Pricing	Scope of Work	Lead Time	Emissions
1	GMV-8	\$1,710,000	HPFi, iBALANCE, ePCi, Turbocharger	Hardware – 24 weeks	1g/hp NOx
2	HRA-8	\$1,710,000			
3	GMV-10	\$1,800,000			
4	GMV-8	\$1,120,000	Modified Heads for PCC, ePCi, Turbocharger	Hardware – 24 weeks	6g/hp NOx
5	HRA-8	\$1,120,000			
6	GMV-10	\$1,160,000			

4- Stroke

Item	Unit	Pricing	Scope of Work	Lead Time	Emissions
1	KVS-8	\$1,420,000	HPFi, iBalance, ePCi, Turbocharger	Hardware – 24 weeks	1g/hp NOx
2		\$1,300,000	Port4, iBalance, ePCi, Turbocharger		2g/hp NOx
3		\$820,000	Modified Heads for PCC, ePCi, Turbocharger		6g/hp NOx

The solution for the maximum reduction in emissions (1g) is intended to include the following items:

- Installation of HPFi™
 - HPFi – Direct into Cylinder High Pressure Fuel Injection system
 - An electronically controlled fueling system
- Installation iBALANCE™ g2
 - Direct power cylinder peak firing pressure measurement
 - Enables auto-balancing of engine in combination with electronically controlled fuel injection
- Modify Heads to receive PCC
 - PCC – pre-combustion chambers
- Installation of ePCi™
 - Electronic pre-combustion chamber fueling injectors
 - Use instead of mechanical fuel check valves for PCCs
- Upgraded Turbocharger
 - Necessary to meet necessary air specification for lean operation to reduce NOx

The solution for a medium reduction in emissions (6g) (traditional “lean burn conversion”) is intended to include the following items:

- Modify Heads to receive PCC
- Installation of ePCi™
- Upgraded Turbocharger

The KVS engines, as 4-stroke design, have a second fuel injection modification option for a 2 gm-NOx emissions levels: Port4™ – Mid-Pressure Injection into air intake port system.

Assumptions

We have made the following assumptions for the price & scope indication outlined above:

- Power cylinder heads do not have PCCs; but they can be machined to accept PCCs.
- Engines do not have turbochargers, or require replacement turbochargers to meet necessary air spec for NOx reduction
- Existing turbo pads are adequate for supporting the new turbocharger, its mounting structure and modification to piping.
- Assume engines have PLC based Unit Control Panels
- Our controls will be placed in their own subpanel with HMI and set adjacent to existing unit control panels.
- Altitude of all engines is ~ 1170 feet ASL
- The major components have been designed based on standard pipeline quality gas. Should gas quality change significantly, there may be additional costs associated with modifications to components to accommodate that change.
- CO-carbon monoxide – is not under regulatory permit restricted level and may increase to drive NOx down
- Modified cylinder heads for pre-chambers and the turbo charger will be the long lead items
- Estimated total project duration is 42 weeks ARO.

- An engine health assessment will be performed on the engine by DCP Midstream or by Dresser-Rand EASE program resources (charged at T&M rates) to verify engine operating condition and health prior to completing design work for the solution package.
- No underground piping, civil, or excavation work will be required for the project.
- Safety, inspectors, and fire watch personnel have not been included in this estimate.
- No pricing escalation is factored in at this time

DCP also asked via email for some typical maintenance costs.

- Only increase will be more frequent replacement of spark plugs ~ every 90 days.
- Engine and turbocharger LO and coolant service, inspection and overhaul schedules remain standard.
- HPFi hydraulic system will need to be bled for air as needed. Estimated 6,000 hours of operation.

With best regards,

Mario Polselli

Project Development Manager, Modernizations & Upgrades

SE O SV NA S M&U PAC

Mobile: (360) 961-5968

mail: mario.polselli@siemens.com

Customer: DCP
 Date: 8/18/2020

Ref. Item	Description	Unit Qty	Recmn'd Svc. Interval	Svc. Freq, P/Yr	Price,	Ext'd Price P/Yr
1	Pilot fuel check valve	10	2K	4	\$ 880.16	\$ 35,206.40
2	Gasket	10	2K	4	\$ 2.01	\$ 80.40
3	Element, filter	1	4K	2	\$ 307.78	\$ 615.56
4	Pre-chamber assy	10	8K	1	\$ 1,250.00	\$ 12,500.00
5	Gasket	10	8K	1	\$ 46.65	\$ 466.50
6	Seal, O-ring	10	8K	1	\$ 1.49	\$ 14.90
7	Turbocharger	1	24K	0.33	\$ 20,000.00	\$ 6,600.00
8	Wastegate assy	1	24K	0.33	\$ 3,000.00	\$ 990.00
9	Aux. water TCV assy	0	8K	1	\$ -	\$ -
10	Motor-driven L/O pump	0	24K	0.33	\$ -	\$ -
11	Induction air I/C	0	24K	0.33	\$ -	\$ -
12	Aux. water heat exchanger	0	24K	0.33	\$ -	\$ -
						\$ 56,473.76

Kyle Dunn

Subject: FW: DCP Chitwood Plant - Oxy Cat Costs

Lynn,

For budgetary purposes, \$40,000 a unit is a conservative estimate.

The annual price for washes / gasket would be \$800.

Replacements would be needed between 3 – 5 years at a cost of \$7,000.

Please give me a call at your convenience.

Thanks,

Mike



Meet with me virtually! – [Book now](#)

MIKE WIELAND *Regional Account Manager, Gas Compression*

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