



# Air Resources Board



**Matthew Rodriguez**  
Secretary for  
Environmental Protection

**Mary D. Nichols, Chairman**  
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**Edmund G. Brown Jr.**  
Governor

**Confidential**

June 18, 2014

Mr. Ivan Luke  
Nett Technologies Inc.  
2 – 6707 Goreway Drive  
Mississauga ON L4V 1P7, Canada

Dear Mr. Luke:

Using the *Verification Procedure, Warranty, and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines*, title 13, California Code of Regulations (CCR), section 2700 through 2711, (Procedure), the Air Resources Board (ARB) has reviewed the Nett Technologies, Inc. (Nett) application for the verification of the BlueMAX™ NOVA 300e titled, "California Air Resources Board Verification Application Nett BlueMAX™ NOVA 300e System," dated May 5, 2014. Based on the evaluation of the data provided, and pursuant to the terms and conditions specified below, ARB hereby finds that the BlueMAX™ NOVA 300e reduces emissions of diesel particulate matter (PM) consistent with a Level 3 device (greater or equal to 85 percent PM reduction) (CCR, title 13, sections 2702(f) and 2708) and complies with the ARB January 1, 2009, nitrogen dioxide (NO<sub>2</sub>) limit (CCR, title 13, section 2702 (f) and section 2706 (a)) and reduces emissions of nitrogen oxides (NO<sub>x</sub>) consistent with a Mark 5 device (greater or equal to 85 percent NO<sub>x</sub> reduction) (CCR, title 13, sections 2702(f) and 2708).

ARB also finds that the BlueMAX™ NOVA 300e satisfactorily completed the durability demonstration period for stationary prime generator applications. Accordingly, ARB determines that the system merits verification and, subject to the terms and conditions specified below, classifies the BlueMAX™ NOVA 300e as a Level 3 plus Mark 5 system for stationary prime generator applications powered by certified Tier 3, 2, or 1, off-road diesel engines. The executive order (EO DE-14-004) for the BlueMAX™ NOVA 300e, which includes a list of applicable engine families for which the BlueMAX™ NOVA 300e is verified, the verified parts list, and verification labels, is attached. This information and additional verification information can be found at <http://www.arb.ca.gov/diesel/verdev/vt/stationary.htm>.

The aforementioned verification is subject to the following terms and conditions:

- The engine must be used in a stationary application associated with prime generators and rated greater than or equal to 75 horsepower (hp).

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

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- The engine must be certified for use in California or certified by the United States Environmental Protection Agency and the engine must be in its original certified configuration.
- The engine must be certified Tier 1, Tier 2, or Tier 3 nonroad or stationary diesel engine meeting 0.2 grams per brake horsepower hour (g/bhp-hr) diesel particulate matter (PM) or less based on certification or in-use emissions testing (as tested on an appropriate steady-state certification cycle outlined in the ARB off-road regulations – similar to ISO 8178 D2).
- The attached engine family list identifies the certified engines applicable to the BlueMAX™ NOVA 300e when used in stationary applications associated with prime generators. The engine family list will be posted at:  
<http://www.arb.ca.gov/diesel/verdev/vt/stationary.htm>.
- The engine must not employ exhaust gas recirculation (EGR).
- The engine must not have a pre-existing oxidation catalyst.
- The engine must not have a pre-existing diesel particulate filter.
- The engine must not have a pre-existing selective catalytic reduction.
- The engine must be four-stroke.
- The engine can be turbocharged or naturally-aspirated.
- Nett must review actual operating conditions (duty cycle, baseline emissions, and engine exhaust backpressure and temperature profiles, and other pre-installation compatibility assessments as required in section 2706 (t) of title 13, of the CCR) prior to retrofitting an engine with the BlueMAX™ NOVA 300e to ensure compatibility.
- The engine should be well maintained and not consume lubricating oil at a rate greater than that specified by the engine manufacturer.
- The Nett BlueMAX™ NOVA 300e must not be operated with fuel additives, as defined in section 2701 of title 13, of the CCR, unless explicitly verified for use with fuel additive(s).
- The other terms and conditions specified in Table 1 below.

<b>Table 1: Summary of Conditions for the Nett BlueMAX™ NOVA 300e System</b>	
<b>Parameter</b>	<b>Value</b>
Application	Stationary Prime Power Generation
Size Range	Diesel engines rated greater than or equal to 75 hp
Engine Type	Diesel, with or without turbocharger, without EGR, mechanically or electronically controlled, Tier 1, Tier 2, or Tier 3 certified to 0.2 g/bhp-hr or less of PM.
Minimum Exhaust Temperature for Filter Regeneration and/or Selective Catalytic Regeneration operation	N/A. Active regeneration with exhaust heater
Maximum Consecutive Minutes Operating Below Passive Regeneration Temperature	N/A
Number of Cold Start and 30 Minute Idle Sessions before Regeneration Required	N/A
Number of Hours of Operation Before Cleaning of Filter Required	Application Specific. 2000 Hours Typical.
Fuel	California diesel fuel with less than or equal to 15 ppm sulfur or a biodiesel blend provided that the biodiesel portion of the blend complies with ASTM D6751, the diesel portion of the blend complies with title 13 (CCR), sections 2281 and 2282, and the blend contains no more than 20 percent biodiesel by volume
Verification Level	Level 3 Plus, Mark 5 Verification: PM – at least 85% reduction NO2 – meets January 2009 limit NOx – at least 85% reduction

The BlueMAX™ NOVA 300e is an active diesel exhaust filter system. It consists of two main components; an active diesel particulate filter and a selective catalytic reduction. In addition, there is a monitoring, data logging, and alarm system for these main components.

This verification is valid provided that installation instructions for BlueMAX™ NOVA 300e do not recommend tuning the engine to specifications different

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from those of the engine manufacturer. The product must not be used with any other systems or engine modifications without ARB and manufacturer approval.

Changes made to the design or operating conditions of BlueMAX™ NOVA 300e, as exempted by ARB, which adversely affect the performance of the engine's pollution control system, shall invalidate this verification.

No changes are permitted to the BlueMAX™ NOVA 300e without ARB evaluation and approval. ARB must be notified in writing of any changes to any part of BlueMAX™ NOVA 300e. Failure to do so shall invalidate this verification.

Marketing of the BlueMAX™ NOVA 300e using identification other than that shown in the Executive Order or for an application other than that listed in the Executive Order shall be prohibited unless prior approval is obtained from ARB.

As specified in the Diesel Emission Control Strategy Verification Procedure, CCR, title 13, section 2706 (j), ARB assigns each Diesel Emission Control Strategy a family name. The designated family name for the verification as outlined above is:

**CA/NET/2014/PM3+/N85/ST/SYS01**

This designated family name must be used in reference to this verification as part of the system labeling requirement. Labels attached to the BlueMAX™ NOVA 300e and the engine must be identical.

Proper engine maintenance is critical for the proper functioning of the diesel emission control strategy. The owner of the equipment on which the diesel emission control strategy is installed is strongly advised to adhere to all good engine maintenance practices. Failure to document proper engine maintenance, including keeping records of the engine's oil consumption, may be grounds for denial of a warranty claim.

The terms and conditions of this verification must be satisfied regardless of where the system is sold in order for the system to be considered verified. Systems sold as verified, or which carry an ARB-approved label, must satisfy all the terms and conditions of the verification executive order.

Systems verified under the Executive Order shall conform to all applicable California emissions regulations. This verification does not release Nett from complying with all other applicable regulations.

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In addition to the foregoing, ARB reserves the right in the future to review this verification letter, associated executive order, and verification to assure that the verified retrofit continues to meet the standards and procedures of CCR, title 13, sections 2222, et seq, and CCR, title 13, sections 2700 through 2711.

Additionally, as stated in the Diesel Emission Control Strategy Verification Procedure, Nett is responsible for honoring the record keeping requirements (CCR, title 13, section 2702), their warranty (CCR, title 13, section 2707), conducting in-use compliance testing (CCR, title 13, section 2709), and complying with the system labeling requirements (CCR, title 13, section 2706 (j)).

Violation of any of the above conditions shall be grounds for revocation of this verification.

Thank you for participating in ARB's diesel emission control strategy verification program. Should you have any questions or comments, please contact Mr. John Lee, Air Resources Engineer, at (916) 327-5975.

Sincerely,

A handwritten signature in blue ink, appearing to read 'C. Marvin', with a long horizontal flourish extending to the right.

Cynthia Marvin, Chief  
Stationary Source Division

Attachments

cc: John Lee  
Air Resources Engineer  
Control Strategies Section