

Attachment 2
2nd 15-Day Change Notice

**Memorandum, dated February 23, 2004,
from Diane Moritz Johnston, General Counsel,
to Alan C. Lloyd, Chairman and Honorable Board Members
on the Legal Authority for Air Toxics Control Measures
for Diesel Particulate Matter from In-Use Diesel Engines**



Terry Tamminen
Agency Secretary

Air Resources Board

Alan C. Lloyd, Ph.D.
Chairman

1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov



Arnold Schwarzenegger
Governor

MEMORANDUM

TO: Alan C. Lloyd, Ph. D.
Chairman

Honorable Board Members

THROUGH: Catherine Witherspoon
Executive Officer

FROM: Diane Moritz Johnston
General Counsel

DATE: February 23, 2004

SUBJECT: LEGAL AUTHORITY FOR AIR TOXICS CONTROL MEASURES FOR
DIESEL PARTICULATE MATTER FROM IN-USE DIESEL ENGINES

At the California Air Resources Board (ARB or Board) December 2003 public meeting and hearing, the Board requested a memorandum discussing its legal authority to adopt diesel particulate matter (PM) air toxics control measures (ATCM) for in-use diesel engines. Questions of legal authority have arisen as the Board considers various measures to control the diesel PM associated with in-use diesel trucks and other diesel engines. The sources of the diesel PM included stationary in-use, internal combustion diesel engines and, on the vehicular side, both the diesel engines that provide the motive power for diesel trucks and the diesel engines that power ancillary functions on-board diesel trucks, such as transportation refrigeration units (TRU).

General Authority for Air Toxics Control Measures (ATCM)

The California Health and Safety Code (H&SC) authorizes the ARB to adopt ATCMs. Sections 39600 (General Powers) and 39601 (Standards, Definitions, Rules, and Measures) confer on the ARB the general authority and obligation to adopt rules and measures necessary to execute the Board's powers and duties imposed by State law. Health & Safety Code sections 39666 and 39667, respectively, direct the Board to adopt ATCMs for non-vehicular and vehicular sources.

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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California's Air Toxics Program, established under California law by Assembly Bill (AB) 1807 (stats. 1983, ch. 1047, the Tanner Act) and set forth in Health and Safety Code sections 39650 through 39675, mandates the identification and control of toxic air contaminants (TAC) in California. The identification phase of the Air Toxics Program requires the ARB, with participation of other State agencies such as the Office of Environmental Health Hazard Assessment (OEHHA), to evaluate the health impacts of, and exposure to, substances and to identify those substances that pose the greatest health threat as TACs. The ARB's evaluation is made available to the public and is formally reviewed by the Scientific Review Panel (SRP) established under Health and Safety Code section 39670. Following the ARB's evaluation and the SRP's review, the Board may formally identify a TAC at a public hearing. Following the identification of a substance as a TAC, Health and Safety Code sections 39658 and 39665 require the ARB, with the participation of the air pollution control and air quality management districts, and in consultation with affected sources and interested parties, to prepare a report on the need and appropriate degree of regulation for that substance (risk management phase).

In August 1998, the Board identified diesel PM as a TAC, and in September 2000, the ARB approved the "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles" (Diesel Risk Reduction Plan). The Diesel Risk Reduction Plan was the first formal product of the risk management phase and serves as the needs assessment under the AB 1807 process. In the Diesel Risk Reduction Plan, the ARB identified the available options to reduce diesel PM and recommended control measures to achieve reductions.

In 1999, California's Air Toxics Program was amended by Senate Bill (SB) 25 (stats. 1999, ch. 731) to provide additional requirements for further consideration of health impacts to infants and children. As part of these requirements, the OEHHA was to identify up to five TACs as making children especially susceptible to illness. The OEHHA published the "Prioritization of Toxic Air Contaminants under the Children's Environmental Health Protection Act" in October 2001, identifying diesel PM as one of the five TACs. Additional requirements, established by SB 25 in Health and Safety Code section 39669.5, direct the ARB to adopt control measures, as appropriate, to protect public health, particularly infants and children, from these specially identified TACs.

The diesel particulate ATCMs are proposed to the Board by ARB staff to fulfill the goals of the Diesel Risk Reduction Plan and to comply with the requirements of H&SC section 39666 and 39669.5 to prevent an endangerment to public health. Health & Safety Code

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sections 39666 and 39667, respectively, direct the Board to adopt ATCMs for non-vehicular and vehicular sources.

Specific Authority for Transportation Refrigeration Units (TRU)

Pursuant to the Legislature's directives in Health and Safety Code section 39618, refrigerated trailers (truck and semi-trailer vans, railcars, shipping containers) are considered to be mobile sources and specifically entrusted to the ARB to regulate. For both vehicular and non-vehicular in-use sources, sections 39666 and 39667 specifically direct the ARB to reduce emissions to the lowest level achievable through application of the best available control technology or a more effective control method, unless the Board determines that an alternative level of emission reduction is adequate or necessary to prevent an endangerment of public health. Best available control technology for non-vehicular sources has typically included retrofit technology. In accord, section 39667 suggests that control measures for vehicular sources may include, but are not limited to, the modification, removal, or substitution of vehicle fuel, vehicle fuel components, fuel additives, or the required installation of vehicular control measures (retrofits).

Additional authority to regulate in-use TRU is set forth in Health and Safety Code section 43013(b). Section 43013 entrusts the ARB with authority to adopt emission standards for, among other things, new and in-use off-road and non-vehicular engine categories. TRU are within the category of off-road engines because they are auxiliary or ancillary engines on diesel trucks; TRU are not the motive power for diesel trucks.

At the December 2003 Board hearing both the American Trucking Association (ATA) and the California Trucking Association (CTA) challenged the ARB's authority to regulate emissions from in-use TRU, asserting that Health and Safety Code section 43600 bars the proposed ATCM for TRU. Section 43600 provides authority to the ARB to adopt and implement emission standards for used motor vehicles but provides that the installation of certified devices on such vehicles shall not be mandated except by statute. The statutory bar claimed by ATA and CTA under section 43600, however, fails to consider the engine category for TRU and specific statutes relating to identified toxic air contaminants like diesel PM. First, as noted above, TRU are within the category of off-road engines because they are not the motive power for vehicles. TRU are not motor vehicles engines. Second, even reading motor vehicles broadly to include all sources associated with motor vehicles, the prohibition of section 43600, enacted in 1975, has been superseded by the specific delegations of authority to adopt ATCMs and emission standards for in-use TRU engines. See the discussion of Health and Safety Code sections 39650 through 39675 and 43013 above.

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Specific Authority for Retrofit of In-Use Heavy-Duty Diesel Engines and Vehicles and the Adoption of Regulations for Verification of Retrofit Strategies

The Federal Clean Air Act (FCAA) in section 209(a) preempts states from adopting or attempting to enforce any standard relating the control of emissions from new motor vehicles or new motor vehicles engines. Notwithstanding this preemption for states generally, the FCAA in section 209(b) grants California the authority to control emissions from new motor vehicles and new motor vehicle engines. Neither California nor other states are preempted from adopting and enforcing the use of retrofit technologies on, or other operational strategies to control emissions from, used motor vehicles or used motor vehicles engines. The California Clean Air Act in H&SC sections 39002, 43013, and 43018, among other statutes, establishes the ARB as the state agency that sets standards for vehicular sources, both new and used. As noted above, the ARB has authority to identify TACs and establish ATCMs to reduce the risks and the adverse health impacts of TACs from vehicular sources.

In controlling TACs, the Board is directed to address specific issues pursuant to the need for regulation (H&SC section 39665). These requirements were addressed in detail in the Diesel Risk Reduction Plan, including the extent of present and anticipated future emissions, the estimated levels of human exposure, and the risks associated with those levels. The Diesel Risk Reduction Plan describes the physical and chemical characteristics of diesel PM and the contribution to emissions by present sources, as well as the costs, availability, technological feasibility of control measures, and the potential adverse health or environmental impacts. Each of these issues is considered in the development of diesel PM regulations and is specifically discussed in the staff reports for each of the control measures.

The Engine Manufacturers Association (EMA) and others challenge the Board's authority to adopt the diesel PM ATCMs for in-use vehicles and in-use engines based on the assertion that the ATCMs are subject to the requirements of FCAA section 202(a)(3)(C). This provision of the FCAA requires that in adopting new motor vehicle and new motor vehicle engine standards, the United States Environmental Protection Agency (U.S. EPA) Administrator is to provide specified periods of lead-time and stability to classes or categories of heavy-duty vehicles or engines:

Any standard promulgated or revised under this paragraph [relating to new motor vehicles and new motor vehicle engines] and applicable to classes or categories of heavy-duty vehicles or engines shall apply for a period of no less than 3 model years beginning no earlier than the model year commencing 4 years after such revised standard is promulgated.

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As detailed below, the challenge is not valid, and, therefore, does not preclude the Board's adoption of ATCMs for in-use heavy-duty diesel vehicles and heavy-duty diesel engines or the adoption of regulations for the verification of retrofit strategies and technologies.

Most significantly, the ATCMs for diesel PM from motor vehicles and motor vehicle engines considered by the Board in 2003, and many that will be considering in 2004 and beyond, are ATCMs for in-use vehicles or engines, that is, used vehicles and used engines. The FCAA requirements for lead-time and stability in adopting standards for heavy-duty vehicles or engines relate only to new heavy-duty vehicles and new heavy-duty engines. The FCAA requirement is simply not applicable or relevant.

The applicable and relevant authorities for the ATCMs for in-use diesel vehicles and engines are in State law. First, legislative concern about vehicular sources of pollution and legislative direction to the ARB to control diesel emissions is not limited to directives to impose controls on only exhaust and evaporative emissions via engine emission standards for new vehicles and new engines. Except as provided in specific provisions pertaining to the air districts, ARB authority over "vehicular sources" is plenary, and the ARB is required "to systematically attack the serious problem caused by motor vehicles, which is the major source of air pollution in many areas of the state." (Health and Safety Code section 39003.) Vehicular sources are defined as "those sources of air contaminants emitted from motor vehicles." (Health and Safety Code sections 39060, 39059, and 39017.) A systematic attack implies and requires an arsenal greater than emission standards imposed on manufacturers.

That the ARB's effort to control vehicular emissions is not confined to the adoption of emission standards and test procedures is borne out by additional statutes. Section 43000.5 exhorts the ARB to "take immediate action to implement both short- and long-range programs of across-the-board reductions in vehicle emissions and smoke, including smoke from heavy-duty diesel vehicles" and to "act as expeditiously as is possible to reduce nitrogen oxide emissions from diesel vehicles" in order to contribute to the attainment of ambient standards (emphasis added). Section 43013 refers not only to "motor vehicle emission standards," but also requires the ARB to "adopt standards and regulations" for various sources, including heavy-duty vehicles and fuels (see subdivisions (b), (c), (d), and (e) of section 43013), and requires the ARB to consider cost-effectiveness and technological feasibility "prior to adopting or amending any standard or regulation" relating to motor vehicle fuel specification. The ARB regulates vehicle and engine manufacturers by adopting emission standards and test procedures. Use by the Legislature of the conjunctive "and regulations" implies a wider

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scope of regulatory activity as necessary to meet the overarching control objectives enunciated above.

Second, an uncodified provision of the Health and Safety Code, section 1(b)(5) of the California Clean Air Act (stats. 1988, ch. 1568), states that "it is necessary for the state . . . to develop and implement its own program to attain air quality standards" through such measures as "the application of best available control technology and operating methods, the required use of cleaner burning fuels, the implementation of stricter new vehicle emission standards and warranty requirements, and the design and implementation of transportation control and vehicle fleet management measures"

EMA and others also assert that ARB must seek and obtain a waiver from U.S. EPA for the diesel PM ATCMs for in-use motor vehicles and motor vehicle engines. The FCAA in section 209(b) requires California to obtain a waiver for its new motor vehicle and new motor vehicle engine standards. This FCAA requirement is simply not applicable or relevant on two counts. First, the challenged ATCMs do not set standards for new motor vehicles or new motor vehicle engines but are ATCMs related to in-use motor vehicles and in-use motor vehicle engines. Second, the ATCMs require the use of verified technologies and strategies; they neither set standards for engine-output, or tailpipe, emissions nor do they set evaporative emissions standards. ARB will seek authorization under FCAA section 209(e) for the ATCM for TRU, however, as a nonroad engine standard.

Commerce Clause Challenge to the TRU Regulation and Other ATCMs

The current draft of the TRU regulation provides that all TRU operated in California after January 1, 2008, would be required to meet specified emissions standards. The regulation would provide owner/operators of TRU engines and systems with flexibility in how they achieve such reductions. Such reductions could be achieved in various ways through installation of a VEDEC technology, coordinated facility/TRU technologies such as electric standby or cryogenic temperature control, or purchasing a new TRU engine or system. The regulation would apply equally to all TRU that are equipped on vehicles that travel only within California and those that travel into California from other states.

The Commerce Clause of the United States Constitution grants Congress the power "[t]o regulate Commerce with foreign Nations, and among the several States. . . ." The Supreme Court has recognized that the Commerce Clause in addition to granting Congress an affirmative grant of authority "also encompasses an implicit or 'dormant' limitation on the authority of the States to enact legislation affecting interstate commerce." The responsibility for interpreting this implied limitation has been left

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largely to the courts. The Supreme Court has interpreted the limitation on the states to mean that the "states cannot impede substantially the free flow of commerce from state to state, or regulate those phases of national commerce which, because of need of national uniformity, demand that their regulation, if any, be prescribed by a single authority." The Supreme Court has allowed the states to regulate matters of local state concern, even though such regulations may have an effect on interstate commerce. Such regulation has been permitted so long as the burden is neither excessive nor interferes with commerce for which uniformity of regulation is of predominant national concern.

The courts have found that Congress has exempted certain state legislation from the Commerce Clause, thereby allowing the states to engage in regulation that the Commerce Clause might otherwise forbid. But, recognizing the importance that the "dormant" Commerce Clause plays in protecting the free flow of interstate trade, the Court has limited the exemption to those times when Congress has made its intent unmistakably clear that it is authorizing state or local action.

Presently, no federal court has ruled on the question as to whether California's authorization to set standards for new and in-use off-road, or nonroad, engines under §209(e)(2)(A) of the FCAA exempts ARB emission standards and other emission-related requirements from Commerce Clause's bar. Several California courts have opined that an exemption exists under FCAA §209(b). The exemption is argued in that Congress has made its intent unmistakably clear by establishing a comprehensive legislative scheme in the FCAA that provides that California may adopt its own emission standards and other emission-related requirements for in-use nonroad engines upon obtaining authorization from U.S. EPA. In such cases, the authorized California regulations should not be subject to Commerce Clause. In place of a Commerce Clause review, Congress created in section 209(e)(2)(A) a review procedure requiring the Administrator of U.S. EPA to review California's regulations and authorize it to adopt and enforce emission standards and other related requirements for the control of emissions from, among other things, all in-use nonroad engines. Obtaining authorization from the U.S. EPA effectively waives federal preemption for California from the prohibition that the states may not regulate such engines. Congress, in fashioning the waiver from preemption, made a determination that interstate commerce would not be disrupted by California having exclusive authority among the states to establish separate, more stringent regulations than adopted by U.S. EPA for the rest of the nation.

Indeed, Congress, in section 209(e)(2)(A), provided California with exclusive authority to regulate emissions from non-new nonroad engines for the nation in

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section 209(e)(2)(A). Section 209(e)(2)(B) requires that other states, if they so choose to regulate nonroad engines, must adopt regulations identical to California's. By entrusting California with exclusive authority, Congress assured itself of uniform national regulations and avoided the possibility of the country facing 50 different sets of regulations. In sum, by enacting section 209(e)(2)(A), it is reasonable to conclude that Congress expressly exempted California's nonroad regulations that have received U.S. EPA authorization from the limitations imposed by the Commerce Clause.

In the context of the TRU regulation, a stakeholder raised the question as to whether an early draft of the TRU regulation would have an impermissible territorial effect under the judicial concept of the dormant Commerce Clause in that the regulation would control conduct occurring wholly outside of the state.

By its terms, the TRU regulation would only apply to TRU equipped vehicles that operate in the State of California. The proposed regulation would impose no requirement or condition on commerce that occurs wholly outside of California. As stated, the focus of the regulation is only on the operation of TRU within the state. The regulation, as proposed, would not regulate the sale or servicing of new or in-use TRU engines or systems or in-use retrofit kits, whether such transactions occur within California or out-of-state. The U.S. EPA has proposed emission standards for new TRU engines and the standards will apply nationally. Also, it is anticipated that retrofit kits and their installation will be available nationally to be installed on out-of-state vehicles that travel into California. Thus, no in-state interests should gain any economic benefit through implementation of the TRU regulation.

The concerns expressed by the ATA at the December Board hearing are unsupported and overstated. It contends that the regulation would have an extraterritorial effect because out-of-state trucking fleets would be forced to convert their entire fleet to complying TRU "on the chance that their units may someday service California [even though] they may never enter the State." Whether trucking companies decide to operate TRU in California after December 31, 2008, is a business decision that each company will have to make. With the lead-time provided, the ARB does not believe that the regulation will impose a significant burden on these trucking companies. First, the decision to comply with the regulation does not have to be made until the business decision is made that a company's trucks will operate in California. ARB does not envision that trucking fleets will have to convert all of their fleet, or any more than the portion of their fleet that actually comes into California. Second, given the location of California, the ARB does not believe that there will be many trucks that merely drive through California on their way to out-of-state destinations without delivering or picking up perishable goods in California. Third, modern-day truck dispatching, which uses the

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latest communication technology, including global position systems and inventory recordkeeping, should allow trucking companies to know the location and type of vehicle at any particular moment in time. With such knowledge they can direct their fleet accordingly and send only compliant vehicles into the state. Fourth, with approximately five years of lead-time until the regulation is implemented, the ARB staff estimates that many, if not most, over-the-road, long-haul trucking companies will be replacing their TRU engines with engines that meet the 2008 federal Tier 4 standards. This should be occurring irrespective of California's regulation, given the heavy use and relatively shorter lifetime of TRU used in such operations. The staff understands that engine manufacturers are claiming that TRU engines manufactured as early as the 2004 model year will be able to meet the 2008 standard. Thus, with expected turnover, most long-haul trucking operation fleets should be in compliance with the California regulation by December 31, 2008 – not because of the regulation, but because of normal engine turnover.

To the extent that it could be argued that the proposed TRU regulation would impact transactions occurring in other states by influencing the sale of TRU engines and systems or retrofit kits that meet the California standards, these effects can only be described as indirect and incidental to the regulation. As stated, the regulation imposes no requirements, obligations, or liability on such transactions. The TRU regulation would be limited to regulating commerce that operates within the state and would not project the terms of the regulation on businesses in other states.

To the extent other states adopt California's TRU regulation, this is expressly authorized by statute. (FCAA §209(e)(2)(B).) To the extent that uniform, national regulations of in-use TRU engines and systems are considered necessary, the regulations, by law, must be consistent with what California adopts. As discussed above, Congress has given California exclusive authority to adopt emission-related regulations for in-use nonroad engines. While other states may adopt California's standards that have previously been authorized by U.S. EPA, the regulations adopted by other states must be identical to those adopted by California.

In summary, if challenged under the "dormant" Commerce Clause, the TRU regulation should not be subject to rigorous scrutiny by the courts. As stated, the regulation, on its face, does not discriminate against interstate commerce or have a practical effect of favoring in-state economic interests over out-of-state interests. Also for the reasons set forth above, the regulation does not have an extraterritorial effect and thus does not directly regulate interstate commerce.

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As stated above, when a state law has only indirect effects on interstate commerce and regulates evenhandedly, the courts will examine whether the state's interests in adopting the challenged laws are legitimate and whether the burden on interstate commerce imposed by the subject laws clearly exceeds the local benefits. Balancing the local interest in regulation against the burden on interstate commerce is considered on a case-by-case basis, and the more legitimate the public interest, the greater the interference must be to overcome it. Indeed, the Supreme Court has found that there is a strong presumption of validity of local safety regulations when challenged.

In evaluating a state's interests, courts have recognized that a state's interest is never greater than in matters of traditional local concern. Air pollution prevention is undoubtedly a traditional local safety concern. In adopting the FCAA, Congress expressly found that air pollution poses a significant danger to public health and welfare and that "air pollution prevention is primarily a responsibility of the states and local governments." (FCAA § 101(a)(1) and (2).)

The California Legislature has similarly found that a strong public interest exists in the control of air pollution for the purpose of protecting the health and welfare of its citizens. (Health and Safety Code §§ 39000 and 39001.) More specifically, as it applies to the TRU regulation, the Legislature has found that toxic air contaminants pose a grave danger to the citizens of the state and that emissions of such contaminants need to be controlled. (H&SC §39650.)

In an effort to address this problem, the ARB identified diesel PM as a TAC and approved the Diesel Risk Reduction Plan to reduce diesel PM emissions from new and existing diesel-fueled engines and vehicles. ARB staff have identified TRU engines and systems as major contributors of diesel PM emissions, and the TRU regulation would be a major element in the plan to reduce diesel PM emissions in California.

Thus, an undeniable and strong public interest exists for the adoption of the TRU regulation to which courts would give significant deference when reviewing the regulation. Weighed against this strong local public interest are the burdens that would be imposed on interstate commerce by the implementation of the regulation. As stated, the regulation would require that all TRU engines and systems operating in California comply with the emission limits set forth in the regulation. This would require that existing TRU engines either be retrofitted or replaced.

The anticipated burdens to interstate commerce do not outweigh the presumed local health and welfare benefits of the regulation. The primary burden on interstate fleet and truck operators will likely be the cost of retrofitting or replacing the TRU engines and

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systems. These costs are expected to range between \$2,000 and \$5,000. Although these costs are not insignificant, they are costs that for most will not be repeated. They thus should not impose a burden on interstate commerce that outweighs the health and safety benefits of the regulation. Indeed, many, if not most, interstate fleets and truck operators, with the five years of lead-time provided by the regulation, are expected to purchase new complying engines in the normal course of business.

For California, the public interest in reducing the risk from diesel PM is real and vitally necessary. Weighed against the public interest are relatively minimal burdens: carriers would be given a significant lead-time of at least four years to upgrade their engines and/or systems; the costs would be for most a one-time cost; and the total costs would be relatively insignificant when compared to other cases. Additionally, the regulation would provide technology reviews to assure that the regulation remains technologically feasible and cost-effective and could also provide for exemptions from the regulation and/or compliance extensions to both in-state and out-of-state carriers. The regulation is unquestionably a health and safety measure with no aspect of economic protectionism.

Additionally — and this point is not to be understated — courts have long deferred to state regulations unless there is a strong need for national uniformity in regulation. As previously emphasized, Congress has delegated to California exclusive authority to initially establish in-use emission standards and related requirements for nonroad engines. And if any regulations are adopted by other states, they must be identical to California's. (FCAA §209(e)(2)(B).) A patchwork of different state regulations cannot develop; states must adopt California's standards or no standards at all. Interstate fleets and trucks that operate in California and meet the State's standards will not be subjected to a myriad of different regulations as they move across state borders. Thus, without conflicting requirements between the states possible, the proposed TRU regulation should not be found to interfere in a matter for which uniformity of regulation is of predominant national concern.

Conclusion

For the foregoing reasons, there is ample authority for the Board to adopt regulations that control diesel PM from stationary in-use, internal combustion diesel engines and, on the vehicular side, from both the diesel engines that provide the motive power for diesel trucks and the diesel engines that power ancillary functions on-board diesel trucks, such as transportation refrigeration units.