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BY ELECTRONIC AND U.S. MAIL

Mr. Rick Weston
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Dear Mr. Weston:

The Conservation Law Foundation appreciates this opportunity to comment on the November 2001 Public Review Draft of the "Model Regulations for the Output of Specified Air Emissions from Smaller-Scale Electric Generation Resources" (hereinafter "Model Regulations").

CLF applauds the Regulatory Assistance Project and all who helped prepare the Model Regulations for their efforts. Overall, the Model Regulations contain a useful structure and make reasonable choices, e.g., about dividing generators into three categories (emergency, peaking and baseload). CLF does have several specific comments that we believe would help the Model Regulations achieve their goals of environmental protection and administrative efficiency while reducing unintended consequences.

Sulfur emissions: CLF agrees that the best way to regulate sulfur emissions is to require low sulfur fuels. We are concerned, however, that the Model Regulations rely too heavily on external definitions of "road grade diesel" and other fuels to determine acceptable fuel sulfur content. Accordingly, CLF recommends that the Model Regulations explicitly set a maximum sulfur content, perhaps decreasing over time, so that even if federal road diesel standards and other standards weaken the standard for distributed generation emissions will be clear. CLF recommends that the rules call for use of "ultra-low sulfur diesel" or its equivalent by no later than January 2006. This fuel is widely available today, and has a far lower sulfur content than even California currently mandates for diesel fuel used in that state.

Carbon Dioxide (CO_2) emissions standards: CLF strongly supports the inclusion and retention of carbon dioxide and efficiency-based standards in the Model Regulations. There must be greater pressure for improvement in generation efficiency over time, however. Based on the numbers expressed in pounds per megawatt-hour (lbs/MWh) in the Model Regulations, the proposed standards for 2009 require emergency generators to achieve 42% efficiency, peaking units to achieve 26.5% efficiency and baseload units to achieve 28.5% efficiency. Absent more compelling analysis, CLF believes these efficiencies should be raised at least to 42%, 29.5% and 32% respectively. The

suggested efficiencies would translate to CO_2 emissions rates of 1300, 1350, and 1250 lbs/MWh respectively.

Peaking unit definition and treatment: CLF is comfortable with setting different standards for peaking units because of the technology barriers to achieving stricter standards with units that must be able to perform fast starts. However, the hourly limit is too high. Peaking unit operation currently is in the range of 300 hours per year. Moreover, these units generally operate during periods of worst air quality (during summer months when hot weather drives up demand, increasing emissions, and atmospheric conditions favor ozone smog formation). CLF believes the proposed 700-hour operating limit is far too high – assuming an 8-hour peak per day, that would be 88 days. Instead, the limit should be 300 hours per year, to reflect current and expected future operating conditions and to further the Model Regulations' goal of environmental protection. Accordingly, the numbers both in the definition of "Peaking Generator" and in the definition of "Baseload Generator" should be changed to 300 hours (sections II(B) and II(K)).

Definition of emergency generators: CLF strongly recommends a strict definition of "emergency" in section II(D) since these generators will remain exempt from emission standards. Otherwise, the "emergency" category would include units used for peak generation up to the hourly limit. The California Air Resources Board provides a useful definition to work from: an emergency generator is one that will be used "only used when electrical or natural gas service fails or for emergency pumping of water for fire protection or flood relief." The definition of "emergency" should NOT include pending or expected grid failures, since generators called upon by the grid operator in such situations should be treated as peaking units (because that is how they are used, to shave peaks or avoid grid overload from demand outstripping supply). Given that real-world enforcement of a strict "emergency" definition would prove challenging, CLF also recommends that the definition of "Emergency Generators" in section II(E) and section IV(A) should include an hourly limit in the range of 50 hours per year (perhaps best calculated on a rolling 12-month basis). A region that experiences true emergencies with greater frequency than that has larger problems than distributed generation emissions rates. Nonetheless, to anticipate the possibility that a generator may be used for emergencies more than 50 hours per year, the Model Regulations might require that the owner purchase or obtain offsets for any extra emissions, using a 2:1 or greater ratio.

Existing units: CLF notes that existing units are not treated by this rule. The Model Regulations must be careful to avoid the problem we have observed with large, central power plants under the federal Clean Air Act (CAA). Specifically, the 1977 CAA amendments exempted or "grandfathered" existing power plants, assuming that they would over time retire and be replaced by new units that would in turn be subject to the strict new standards. Of course, what occurred instead was that the new standards were a barrier to the development of new sources and we continue today to suffer the harms from the older plants' emissions. CLF therefore recommends that the Model Regulations require all existing units to meet the new requirements through a phase-in, with all units required to meet the standards set in 2009 and thereafter. We also suggest that the language accompanying the rule should discuss the need to address the emissions from existing units and to ensure that the regulations do not unintentionally prolong the life and operation of existing units.

Credits for end-use efficiency and renewable or other non-emitting resources: Although CLF commends the attempt to encourage energy efficiency and renewable energy resources, we are concerned about how these credits would be implemented in practice. There is considerable risk of "free rider" problems (that is, taking credit for energy efficiency measures that would have been installed regardless of the regulations) and a considerable range of kilowatt-hour energy savings estimates possible. CLF therefore suggests that section VI(C) be dropped from the draft regulation altogether, and the language therein instead be included in the accompanying text discussing the challenges of implementation.

NO_x Emissions Rates for Baseload Generators: CLF recommends that the lower limits set forth in the brackets should be used in section IV(C), especially for 2009 and thereafter.

Flared fuels offsets: CLF recommends that, if the actual emissions cannot be documented as stated in section VI(A), the default value should be provided for CO_2 only (the others being zero). The Model Regulations do not address SO_x, and the other two pollutants would vary considerably by fuel and flaring conditions. The major benefit of using otherwise flared fuels would be in reducing climate change impacts, and so that is the category where the credit should accrue.

Fuel monitoring requirements: Because fuel cells have such low emissions, these should be categorically exempt from the fuel monitoring requirements in section VII(B). A low end cut-off, perhaps at 10kW as suggested, might make sense for other units but should be included only if the requirement is demonstrated to be unduly burdensome for smaller systems.

Record Keeping and Reporting: One way to encourage use of cleaner generators would be to make the regulatory burdens lighter for cleaner systems. Accordingly, units whose emissions rates are at or below those of fuel cells should be exempt. The limits for exemption should be revised pursuant to the periodic future technology reviews, so that only the cleanest units qualify may for this exemption.

Thank you for taking CLF's comments into consideration. Please contact me at 617/350-0990, ext. 744, or by e-mail at rkennelly@clf.org, with any questions or to discuss these matters further. I look forward to seeing the final Model Regulations.

Sincerely yours,

Richard B. Kennelly, Jr.
Director, Energy Project