

## **COMMENTS OF NISOURCE INC.**

### **ON THE**

### **MODEL REGULATION FOR THE OUTPUT OF SPECIFIED AIR EMISSIONS FROM SMALLER-SCALE ELECTRIC GENERATION RESOURCES**

#### **PUBLIC REVIEW DRAFT, NOVEMBER 2001**

NiSource Inc. is a major energy company with subsidiaries engaged in generation and distribution of electricity, interstate transmission and local distribution of natural gas, and related endeavors. Two NiSource companies are actively engaged in development and operation of combined heat and power (CHP) facilities, ranging from larger CHP plants located at industrial sites, to smaller commercial-scale operations.

In evaluating the potential impact of distributed generation facilities on air quality, and the appropriate nature of emissions controls on such facilities, unique characteristics of distributed generation should be considered. First, clean and efficient distributed generation can play a major positive role in achieving air quality (and climate protection) goals. This is particularly true in the case of combined heat and power facilities. Second, distributed generation can produce other important public benefits. Distributed generation provides value to customers in terms of power reliability and quality. In highly efficient applications, it can reduce costs. The efficiency of distributed generation operations such as CHP can reduce the demand for fuel and thus preserve natural resources. In addition, as recognized in national energy proposals, CHP has positive energy attributes such as enhanced energy security and the ability to reduce congestion on electric transmission and distribution systems, in some cases obviating the need for construction of new electric power lines and the environmental impacts of such construction

Despite the benefits to the consumer and nation, market penetration has been limited for many reasons, including the newness of the technology and competitive costs from existing large centralized power plants. Distributed generation has a limited ability to absorb new regulatory burdens. Thus, if excessive conditions are demanded, distributed generation facilities will simply not be built and the environment will thereby suffer. Imposing “technology forcing” standards on a virtually non-existing market segment that would have inherently positive environmental attributes will limit the market to a niche role. On the other hand, a sound model regulation, especially one that recognizes generation efficiency, can provide both air quality benefits and a consistent, streamlined approach to siting, permitting and installing distributed generation across numerous jurisdictions. Such a regulation can also assist equipment manufacturers and project developers by giving them clear regulatory targets and by assisting in technological development.

NiSource commends the Regulatory Assistance Project (RAP) for taking on this important endeavor. We strongly support the following concepts in the draft that we believe provide a solid basis on which to build the model regulation.

1. The emission rate limits are stated in terms of unit output (lb/MWhr). This recognizes the important role of efficiency in meeting air quality and other public policy goals.
2. The model regulation provides performance incentives for the use of environmentally beneficial projects. This includes projects that utilize flared fuels and CHP. By recognizing the increased efficiency gained by the use of CHP, which beneficially utilizes the heat from the production of electricity (which is wasted in central power plants), the model regulatory program appropriately encourages these types of installations.
3. The model provides for manufacturer certification of the emission rates from the engines so that it can be demonstrated to the end user that the engines meet the appropriate limits in the rule. This provision can minimize difficult and expensive on-site testing requirements. This is especially important for the smaller engine sizes. Compliance of engines with the regulated emissions rates for the various engine categories in the rule will then be predetermined. It is not practical to require on-site testing in each installation, especially for the facilities utilizing the smallest of engine classes. Manufacturer certification provides a streamlined method of approval for an end user to meet the requirements of the rule.

While the above elements of the basic design of the model regulation are sound, there are several areas that could use additional work, modifications and/or stakeholder input.

1. The definition section separates generating units into three categories, emergency, peaking, and baseload. Consideration should be given to adding a category of intermediate load. The emissions rates for the intermediate load category may be similar to the baseload case, however, enough difference exists to justify adding this additional category.

The number of hours of operation for the various categories as presently defined does not meet real world expectations of the defined duty cycles. Peaking generators should be listed in the 1000 to 2000 hours per year range, intermediate load generators should be listed in the 3000 to 5000 hours range and baseload should be greater than 5000 hours.

2. Section III Applicability should include a section that requires notification only. Many states will not have a sufficient number of installations to warrant any more than a notification of installation. There are also inherently low emitting technologies, such as fuel cells, for which notification would be sufficient. The first phase of the program in many states should also consider starting the program with only notification requirements. If the number of installations and/or emissions exceeds a certain level than additional limits and requirements could be triggered in a second phase of the program.

In states that elect to fully implement the program, a size (output/emissions) category should be developed for the notification only section.

3. The emission limits found in Section IV of the model rule should be modified with the assistance of stakeholder input. The model regulation should include limits for Phase I only at this time. The development cycles for this equipment are much longer than those used in the rule. The timing and stringency of Phases II and III as currently written would only act to stifle technology advancement and will not allow certain engines and fuels to participate in the program: thereby eliminating many products from the future market, with adverse environmental and public policy impacts.

Rather than set out Phase II and III limits, the model regulation should include a process by which future Phase limits are developed with stakeholder participation and input. Technology review and development as well as timing of future Phase limits would be addressed through this process.

The Phase I limits may exclude many current technologies and fuels and should be reconsidered with the benefit of stakeholder input.

4. Section VI provides for performance incentives for various types of projects, including CHP. The CHP section describes a complicated process through which emission credits can be generated. While we applaud the inclusion of this provision, we believe that this process is excessively restrictive. In particular, we question why a facility that is far more efficient than a central power station must meet increasingly stringent efficiency targets in order to continue to qualify. Such attempted technology forcing creates a disincentive to highly desirable behavior that far outweighs any benefits it may have. Similarly, the section also calculates the thermal energy “credit” by reference to a new boiler, rather than by comparison to the boiler actually replaced. Again, this overly restricts this incentive to desirable behavior. We also believe that it would be useful to provide an example of how the incentive would be applied in practice. The phrase “[u]nits meeting these requirements must still meet the emissions standards set out above” can create some ambiguity about how the provision operates and whether efficiency is being fully recognized. Thus, it would be useful to clarify how the “credit” functions.

5. One of the greatest potential benefits of the model regulation is to streamline the process by which distributed generation facilities which meet the emissions limitations are permitted. The model should provide more detail on how permit procedures can be expedited for facilities, which meet the provisions of the model regulation.

6. The technology review provisions of Section IV.D. should better define the procedures that will be used to carry out the reviews and obtain stakeholder and public input.

7. The model should expand the emissions certification provisions to also allow developers to certify facilities. Restricting certification to manufacturers would prevent

certification of customized facilities that would appropriately benefit from this process. This is particularly important for CHP systems that are combinations of various components to utilize the waste heat. NiSource may not be considered a manufacturer; however, it develops such package “systems” that could be used in various market segments.

8. The record keeping and reporting provisions of Section VIII. may be excessive, particularly for very small facilities. Additional effort should be made to reduce such requirements to the extent feasible.

As noted above, we urge that certain of the Phase I emission limits be revisited and that Phases II and III be deferred to allow for more realistic technology development intervals and better public input. We also strongly urge that the role of technology forcing in this model regulation be reevaluated. There is real value to the environment in setting limitations that prevent inappropriate use of higher emitting technologies and that assure more generally that distributed generation facilities do not undermine clean air goals. But there can be real harm to the environment (and other adverse effects on the public) if the model goes too far.

The assumption that emissions from distributed generation should be measured against the emissions from natural gas combined cycle plants using SCR tends to push the limitations to the point where they may do more harm than good. (This is in addition to the entirely impractical idea that SCR is relevant to small distributed facilities operating in highly populated areas). In addition, as a practical matter, distributed generation displaces a variety of alternative power generation facilities, including base load coal fired plants, or old oil or gas peaking units. Even modern gas fired peaking units are often simple cycle facilities that do not utilize SCR. Joel Bluestein has persuasively demonstrated that the combined cycle assumption is just not realistic. We therefore urge the RAP to reconsider its assumptions and take into account the complex circumstances of distributed generation so as to maximize the environmental (and other) benefits of this model regulation.

Distributed generation, particularly in highly efficient forms such as combined heat and power, can do much to improve the environment and protect the global climate. But distributed generation faces many obstacles, including interconnection to electric transmission or distribution systems and high initial capital costs. This model regulation should not add to these burdens to such a degree as to retard environmental progress.

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