MEMORANDUM

To: Regional Greenhouse Gas Initiative Agency Executives

From: Members of the Technical Data & Analysis Subgroup,

as Led by Representatives from Connecticut

Date: January 16, 2004

Re: Update on Subgroup Activities and Next Steps

This memorandum describes the efforts of the Technical Data & Analysis Subgroup since the beginning of October, 2003. Set out below first is the Subgroup's assigned task as described in the Action Plan adopted by the agency chief executives on September 29, 2003. Second, we briefly describe the Subgroup's accomplishments to date. Lastly, we explain the Subgroups next steps.

The Task

The Action Plan tasked the Technical Data & Analysis Subgroup with proposing a plan for data gathering and technical analysis that includes an assessment of what data and analysis will be required, how that gathering and analysis will be accomplished, and when.

Accomplishments

The Subgroup has identified several potential sources of data as described in the attached table and continues to identify new potential sources of data. Since no one source contains all the data elements the RGGI effort will need for its various analyses, the Subgroup is assembling a master database using data taken from these various sources. Initial efforts have begun to merge multiple data sets into one spreadsheet to facilitate state review and to serve as the foundation for the master database needed to support this effort.¹

¹Some of the basic data elements needed for the inventory include: facility name, unit ID, ORIS #, state, program indicator, nameplate MW capacity, CO2 emissions data for multiple years.

Next Steps

The Subgroup will focus its future efforts on the following tasks:

- 1. <u>Complete Source Inventory</u>. The Subgroup will complete a reliable emissions inventory for units in the electric generating sector across all participating states. In developing this inventory, the Subgroup will:
 - A. develop reliable procedures for calculating GHG emissions for units for which emissions records do not exist, and for evaluating the accuracy of emissions data where such data exist; and
 - B. determine which data elements might be needed to support modeling efforts. This effort will require interaction with the Modeling Subgroup and will be ongoing consistent with the deadlines applicable to the modeling tasks.

This inventory will be ready for release in draft form for stakeholder and public review by March 31, 2004.

- 2. <u>Make Recommendation on Size Threshold</u>. For electric generating units (EGUs), the Subgroup will determine if the minimum size threshold should be set at greater than or equal to 15 megawatts (MW), similar to the NOx Budget Program, or at greater than or equal to 25 MW, as in the federal Acid Rain Program.² In making this recommendation, the Subgroup will identify the issues raised by including EGUs below the recommended threshold. A recommendation on size threshold will be made to the Staff Working Group by March 31, 2004.
- 3. <u>Make Recommendation on Measurement and Monitoring Requirements</u>. The Subgroup will make recommendations to the Model Rule Subgroup concerning what EGU measurement and monitoring requirements should be included in the program on a going forward basis. This recommendation will be made to the Model Rule Subgroup by <u>June 30, 2004</u>.
- 4. Analysis of Implications for Including Other Greenhouse Gases and Other non-EGU Sources. The Subgroup will determine what issues are presented by the inclusion of other non-CO2 gases in the program, including whether reliable methods for measuring and monitoring such gases exist and at what cost. In

²It bears noting that carbon dioxide (CO2) emissions data is not readily available for EGUs with a generating capacity under 25 MW, and for cogeneration units of any size. The Subgroup may need to use surrogate data (e.g., MWh output or MMBtu input) to assess the magnitude of CO2 emissions from EGUs between 15 & 25 MWs.

addition, the Subgroup will identify what issues are presented by the inclusion of other stationary sources in the program. This analysis will follow completion of the Subgroups other tasks.

Table of Data Sources

eGRID:

http://www.epa.gov/cleanenergy/egrid/index.html

Emissions data provided by EPA CAMD; generation data provided by DOE EIA. Most recent version (eGRID 2002) contains data for years 1996-2000 and contains boiler data (emissions) and generator data (nameplate capacity & MWhs produced). State familiarity with its units will be needed to coordinate these data.

EPA CAMD Source Management System (SMS) reports:

https://cfint.rtpnc.epa.gov/camd/sms/index.cfm

SMS can be accessed by registered state regulators only and can generate lists of all NBP/ARP units (includes operating, non-operating & retired units), but there are no data elements relating to emissions or nameplate MW capacity.

EPA CAMD – Data and Maps:

http://cfpub.epa.gov/gdm

Can be used to create custom queries or review already-compiled reports.

EPA CAMD - Emissions Data & Compliance Reports:

http://www.epa.gov/airmarkets/emissions/index.html

DOE EIA:

http://www.eia.doe.gov/cneaf/electricity/page/data.html

This site contains links to numerous electricity database files containing electric generation and fuel usage information.

National Emissions Inventories (NEI) for the US:

http://www.epa.gov/ttn/chief/net/index.html

Contains sectoral data, but no unit-level data.

US Emissions Data Inventory 2003 (INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990 – 2001):

http://yosemite.epa.gov/oar/globalwarming.nsf/content/ResourceCenterPublicationsG HGEmissionsUSEmissionsInventory2003.html