

# Memorandum of Meeting

## DNREC – Air & Waste Management

### Air Quality Management Section

**Meeting Date:** December 16, 2003 1:00-4:00 pm

**Location:** Division of Motor Vehicles Dover Conference Room, Dover, DE

**Purpose:** DG Regulatory Development Workgroup Meeting #2

#### Work Group Members:

AFFILIATION	NAME	PHONE #	E-MAIL ADDRESS	PRESENT?
American Lung Association	Martha Bogdan	302-655-7258	<a href="mailto:mbogdan@alade.org">mbogdan@alade.org</a>	NO
Conectiv	Stu Widom or Bob Jubic (alternate)	302-451-5319 302-454-4036	<a href="mailto:Stu.widom@conectiv.com">Stu.widom@conectiv.com</a> <a href="mailto:Bob.jubic@conectiv.com">Bob.jubic@conectiv.com</a>	YES
Delaware Department of Corrections	Jerry Platt	302-739-5601	<a href="mailto:Jerry.platt@state.de.us">Jerry.platt@state.de.us</a>	NO
Delaware Electric Cooperative	Bill Andrew	302-349-3174	<a href="mailto:bandrew@decoop.com">bandrew@decoop.com</a>	YES
Delaware Energy Office – DNREC	Suzanne Sebastian	302-739-1530	<a href="mailto:Suzanne.sebastian@state.de.us">Suzanne.sebastian@state.de.us</a>	YES
Delaware Farm Bureau	Robert Baker	302-697-3183	<a href="mailto:rbaker28@earthlink.net">rbaker28@earthlink.net</a>	NO
Delaware Healthcare Association	Suzanne Raab-Long	302-674-2853	<a href="mailto:Suzanne@deha.org">Suzanne@deha.org</a>	YES
Delaware Nature Society	Seth Ross	302-368-5674	<a href="mailto:Sethross2001@yahoo.com">Sethross2001@yahoo.com</a>	YES
Delaware Public Service Commission	Bruce H. Burcat or Bob Howatt (alternate)	302-739-4247 302-739-3227	<a href="mailto:bruce.burcat@state.de.us">bruce.burcat@state.de.us</a> <a href="mailto:Robert.howatt@state.de.us">Robert.howatt@state.de.us</a>	YES
Delmarva Poultry Industry, Inc.	Bill Satterfield	302-856-9037	<a href="mailto:Satterfield@dpichicken.com">Satterfield@dpichicken.com</a>	YES
DNREC-AQM	Al Deramo	302-739-4791	<a href="mailto:Alfred.deramo@state.de.us">Alfred.deramo@state.de.us</a>	YES
DNREC-AQM	Mark A. Prettyman	302-739-4791	<a href="mailto:Mark.prettyman@state.de.us">Mark.prettyman@state.de.us</a>	YES
DNREC-AQM	Brad Klotz	302-323-4542	<a href="mailto:Bradley.klotz@state.de.us">Bradley.klotz@state.de.us</a>	NO
MBNA America	Galina Chadwick	302-457-5654	<a href="mailto:Galena.chadwick@mbna.com">Galena.chadwick@mbna.com</a>	NO
University of DE, Center for Energy & Environmental Policy	Dr. John Byrne or Terri Brower or Leigh Glover (alternates)	302-831-8405	<a href="mailto:jbyrne@udel.edu">jbyrne@udel.edu</a> <a href="mailto:tbrower@udel.edu">tbrower@udel.edu</a> <a href="mailto:lglover@udel.edu">lglover@udel.edu</a>	YES

## Other Persons in Attendance

NAME	AFFILIATION	PHONE #	E-MAIL ADDRESS
Rick Weston	Regulatory Assistance Project	802-223-8199	<a href="mailto:RAPWESTON@AOL.COM">RAPWESTON@AOL.COM</a>
Joel Bluestein	Energy & Environmental Analysis, Inc.	703-528-1900	<a href="mailto:jbluestein@eea-inc.com">jbluestein@eea-inc.com</a>
Mike DeFino	Rentar	302-834-1200	<a href="mailto:mdefino@rentar.com">mdefino@rentar.com</a>
Jack Lebeau	Rentar Environmental Solutions	215-572-7033	<a href="mailto:Jack.lebeau@rentar.com">Jack.lebeau@rentar.com</a> or <a href="mailto:sherijac@verizon.net">sherijac@verizon.net</a>
Rich DesJardien	V.A. Medical Center Wilmington	302-633-5270	<a href="mailto:Richard.desjardien@med.va.gov">Richard.desjardien@med.va.gov</a>
Robert (Bobby) Jones	DFD Operating Ser. LLC McKee Run/VanSant	302-672-6302	<a href="mailto:Bobby.jones@d-fd.com">Bobby.jones@d-fd.com</a>
Ron Amirikian	DNREC-AQM	302-739-4791	<a href="mailto:Ronald.amirikian@state.de.us">Ronald.amirikian@state.de.us</a>
Nancy Terranova	DNREC-AQM	302-739-4791	<a href="mailto:Nancy.terranova@state.de.us">Nancy.terranova@state.de.us</a>

### Minutes:

Al Deramo called the meeting to order at 1:10 pm. After introducing himself, Mr. Deramo once again asked everyone to introduce themselves.

After the introductions, Joel Bluestein began his presentation entitled "Overview of Distributed Generation Technologies and Applications." Mr. Bluestein worked with the Regulatory Assistance Project in developing the RAP model rule. His presentation was designed to describe what distributed generation (DG) is, the various types and technology that are currently out there, as well as some insight into the costs, efficiencies, and benefits associated with DG.

During a discussion on peak/load shaving, the issue came up about whether some of this is done for economic reasons, such as generating electricity for sale to the grid. Bobby Jones, of DFD Operating Services, LLC, expressed the opinion that, in his line of work in power generation, reliability is the number one issue. Mr. Jones stated that, if the transmission of electricity becomes unstable, then it is imperative that such peaking units are called upon to restore the reliability of the service, regardless of any sort of economic gain or loss. This issue raised the interest of many attendees, and throughout the rest of the presentation the issue of reliability vs. cost was discussed as it related to the presentation materials. In such discussions, the matter of what constitutes an "emergency" was brought up. Although no one could provide an adequate and all-encompassing definition, it was agreed that an important issue as part of this regulatory development process would be determining such a definition. A question was asked about whether or not emergency generators are an important issue, to which it was responded that emergency generators are very important to this process, primarily in defining what they are and what sort of limits and requirements will be applied to them.

Another important issue which was discussed during the presentation was DG technology options. DG technologies vary in sizes, fuels, efficiencies, emissions, etc.

Due to these differences, it is hard to say that one specific technology is superior over the others, though people seem to have their own opinions about which factor is more important, especially with respect to efficiency. Combined heat and power (CHP) is a very good option for increasing the efficiency of DG, however some attendees questioned the feasibility of CHP for various applications. Some persons questioned the feasibility of retrofitting existing units for CHP, or just the feasibility of using CHP as a residential option. Overall, CHP was viewed as an excellent DG option, but most felt that it may not be economical or feasible for most residential and some commercial applications.

After a 5 minute break at 2:30 pm, Rick Weston began his presentation entitled "Development of a Model Rule for Emissions from Distributed Resources." Mr. Weston is a director of RAP who helped develop the model rule and provides technical assistance to states considering adoption of the model rule. His presentation gave an overview of RAP's purpose for developing the model rule, what issues they wanted to address, and how they went about drafting the model rule. Also addressed within the presentation were some of the key issues of the model rule, which are applicability, proposed emission limits, and emergency generators. This latter issue was again discussed at length among the attendees. Some persons felt that an emergency should not only be a loss of power, but the imminent threat of a loss of power, as well. A question was brought up about the operating hours which "emergency generators" are currently being permitted for in Delaware. Nancy Terranova, a program manager within Air Quality Management's Engineering and Compliance Section, stated that a good portion of emergency generators have the condition included within their permit for use up to 150 hours per year. Some persons believe that this limit is too small and that it prevents the use of such units during true power outages or IF they had to be called upon to run in expectation of a power outage. Mrs. Terranova stated that the 150 hour limit is an adequate benchmark which is now being included in permits which are being renewed and amended. Depending on the circumstances and the requirements of the facility, the permit may include a condition for a larger or smaller time limit; though in no cases may the limit exceed 500 hours per year for an emergency generator. So once again, it was agreed that defining "emergency," and the limits that should apply to such emergency generators, will definitely be an important issue for the group.

The other key issue discussed during Mr. Weston's presentation was the proposed emission limits. Many attendees were curious to know if any technology(s) could currently meet the limits proposed in Phases I, II, or III. Mr. Weston and Mr. Bluestein relayed a few different technologies, with and without add-on controls, which could achieve the Phase I, and possibly Phase II, limits. A question was then asked, if Delaware reached attainment sometime soon, would the emission limits be relaxed to the "attainment limits," being that all counties in Delaware are currently in non-attainment for ozone and subject to the "non-attainment limits" for NOx? Though this question could not be answered definitely, it was stated that, if Delaware does not reach attainment status before the Phase III limits go into effect, it would not matter since they are the same for attainment and non-attainment areas.

At the conclusion of Mr. Weston's presentation, a discussion ensued which reiterated the concerns regarding the issues of defining "emergency" and what limits will be applied to which groupings of generators. Being that the utilities play such a big role in this matter, Mr. Deramo then asked Bobby Jones (DFD Operating Services), Bill Andrew (Delaware Electric Cooperative), and Stu Widom (Conectiv) if each of them could prepare a 20 minute presentation for the next meeting. These presentations will hopefully give the workgroup members a better idea of the generation, distribution, and reliability issues associated with electricity. It was also stated that it would be good for the workgroup to know the current regulatory requirements of generators, such as which regulation applies to what units and why. Also, workgroup members asked if it is possible to try to determine the "universe" of DG within Delaware, such as the type and number of emergency and non-emergency units within the state, as well as potential emissions from these units. It was explained that this would be very hard to do since there is no way to determine every residential, commercial, or industrial unit within Delaware. However, as a start, information from the utilities about known units could be gathered, as well as information from currently permitted units, in an effort to try defining the "universe" of DG.

Mr. Deramo asked Mr. Weston and Mr. Bluestein if they would be interested in returning for the next workgroup meetings, to which they replied they would. Due to conflicting schedules, it was relayed that the next workgroup meeting may not be until the last week of January 2004, but the workgroup and interested persons will be notified by email as soon as a definite day is determined.

At 4:20 pm, Mr. Deramo adjourned the meeting.