

# “World” of Distributed Generation in Delaware

## Load/Peak Management Programs

The following are the latest estimates, provided by each company, of the number and sizes of generators within Delaware Electric Cooperative’s Load Management Program and Conectiv’s Peak Management Program.

<b>Delaware Electric Cooperative - Load Management Program</b>		
Class of customer	Agriculture	Commercial/Industrial
# of generators	215	2
Average Size	90 kW	550 kW
Largest Size	227 kW	750 kW
Smallest Size	40 kW	350 kW
Average Summer Demand	40 kW	418 kW
% Units fueled by Diesel	97%	100%
Units in Kent County	39	0
Units in Sussex County	176	2

<b>Conectiv - Peak Management Program*</b>	
Class of customer	Commercial/Industrial
# of customers	10
Average Size	1.67 MW
Largest Size	15.4 MW (for 2)
Smallest Size	N/A
Average Summer Demand	N/A
% Units fueled by Diesel	100%

All units are in New Castle County

N/A: Information not available

\* This information is as of 2003. In 2004, Conectiv’s program has dropped to just 6 customers with an estimated capacity of approx. 4 MW. NOTE: This estimate is for all of Conectiv’s coverage area, not just DE.

## Poultry Farms

During a recent discussion with Bill Satterfield, executive director of Delmarva Poultry Industry, Inc., (DPI), he made the estimate that there are approximately 900 poultry farms in Delaware. In previous discussions with representatives from the poultry companies of Mountaire Farms and Allen Family foods, it was found that 60% and 40% of the growers for each company, respectively, use tunnel ventilation on their farms. Both of the representatives stated that if a farm has tunnel ventilation installed, they must have an automatic, standby, emergency generator

installed on the farm. Thus, it can be reasoned that about 50% of all poultry farms have an automatic, standby, emergency generator installed, since approximately 50% of the farms are equipped with tunnel ventilation. By applying this approximation to the estimated 900 poultry farms in Delaware, it can be assumed that there are about 450 farms in Delaware that have an automatic, standby, emergency generator.

Since DEC's program contains 215 generators for agricultural use, it can be assumed that these are on poultry farms. By subtracting this number from the estimated total, it leaves 235 generators on poultry farms which could be considered "emergency only" units. Per the discussion with the poultry industry representatives, generators on poultry farms are sized based upon the capacity of the houses on a farm, using the estimate of 1.5 kw/1,000 birds. Based upon this estimate, and estimated poultry farm capacities from DNREC databases, the size range of these could range from 15 kW up to 500 kW.

Another estimate which could be made is the number of generators per county. Based upon the data within the same DNREC database referenced above, about 15% of poultry farms are in Kent County, and about 85% are in Sussex County. Interestingly, these estimates closely match the percentage of agricultural generators, by county, which DEC has in its load management program (18% in Kent County, and 82% in Sussex County).

## **Permitted Generators**

Currently, DNREC's Engineering and Compliance Branch of the Air Quality Management Section are reviewing their files for permits associated with generators. In doing so, it is hoped that a more detailed view of the number and sizes of generators currently being permitted by the State of Delaware, may be found. Updates upon this review will be provided in upcoming DG Workgroup Meetings.