

Overview of Draft 3 of the Distributed Generation Regulation

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**Distributed Generation
Regulation Development Workgroup Meeting
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Overview

- Update from the last workgroup meeting.
- Discussion of comments/issues made on second draft of the DG regulation.
- Discussion of the changes made in the third draft to address these comments.
- Discussion of other changes in the third draft.
- Other issues

Update

- Presented draft regulation at DPI's September Grower Committee Meeting.
- DNREC met with DPI, DEC, & others in October to try to resolve some of the outstanding issues with Draft 2.
- Met with DEC's attorney to finish addressing comments submitted on Draft 2, as requested in previous meeting.

Comments

- General comments made on Draft 2 of the Distributed Generation Regulation.



- What changes were made in Draft 3 to address those comments.

Comments

- Change title to clarify what equipment is subject to the regulation.



- Title changed to read “Control of Stationary Generator Emissions” to reflect that stationary generators will be controlled by the regulation.

Comments

- The purpose could be clarified to reflect who will be subject to the regulation.



- Purpose changed to reflect that *stationary generators* will be controlled by the regulation. Reference to “distributed generation units” deleted from purpose.

Comments

- Regulation language should use all adjectives (*new, existing, emergency, distributed*) to describe the type of *generator* being discussed.



- Using every adjective in all instances of “generator” could make language confusing.
- New sentence added to *generator* definition to state that the term “generator” shall refer to any and all *generators*, unless otherwise specified.

Comments

- There should be a “low-end cut-off” for generators.



- Most “low-end” *generators* are at residences for *emergencies* only.
- Applicability includes an exemption for *emergency generators* at residences and *generators* covered by a permit with NOx limitations under New Source Review.

Comments

- Applicability should clarify that regulation does not apply to portable (*mobile*) generators.



- New section added under “Applicability” specifically stating that the regulation does not apply to *mobile generators*.
- Definition for *mobile* added to regulation.

Comments

- Why are combustion turbines being included in the regulation? Aren't they already regulated?



- It was agreed to include turbines since they operate in a similar manner as other generators requiring controls.
- Turbines emit at high “daily” rates (i.e., they are small on an annual basis, but are significant since the days they operate correspond to days conducive to ozone formation).
- Yes, they are regulated by other rules, but...*they have met the other regulatory limits without installing controls or reducing emissions, and still emit pollutants at high rates.*

Comments

- Definition of *distributed generator* is unclear as to when it may be used.



- *Distributed generator* clarified to reflect that it may be used for *emergency* purposes and for any purpose in addition to times of *emergency*.

Comments

- Definition of *distributed generation* is debatable as to what sizes and types of generation it includes.



- Definition of distributed generation has been removed from Draft 3.
- Language seems clearer by simply stating applicability of regulation to *stationary generators*.

Comments

- Do voltage or frequency deviations warrant the use of *generators*?



- Definition of *emergency* amended to include voltage or frequency deviations from the electrical provider as an *emergency*.

Comments

- Owners of *existing generators* should be able to join a load management program after 9/1/03 without being considered new.



- References to the 9/1/03 date have been deleted.
- Only effective date of regulation will be determination of what is *existing* vs. *new*.

Comments

- The requirements for the *reconstruction* of a *generator* are too vague and are confusing.



- Idea of *reconstruction* replaced with *repower*.
- A *generator* is repowered if its engine is completely replaced.
- Once *repowered*, a *generator* is considered *new*.

Comments

- The compliance schedule for existing *generators* is still not long enough.



- Compliance schedule for existing *generators* changed:
 - Emergency generators: 3 months
 - Distributed generators: 12 months
 - Generators subject to exemption: 3+? months

Comments

- Requirement for existing *emergency generators* to follow “good air pollution control practices” too vague.



- “Good air pollution control practices” deleted from language.
- Requirement clarified to require such *generators* to follow manufacturer’s instructions on operating and maintenance.

Comments

- Microturbines are already much cleaner than other technologies and should be okay “as-is” for *emergency* use.



- Requirement for microturbines for emergency use to be verified under EPA’s Environmental Technology Verification program deleted.
- Any microturbine can be used for *new emergency* purposes (must meet applicable standards for other purposes).

Comments

- Various issues related to exemption & alternative requirements for *existing distributed generators*.



Comments

- Why was the use of *standby power rating* changed to *prime power rating*?



- Denoting capacity by *prime power rating* is more common for larger units, while *standby power rating* is more common for smaller units.
- Both definitions are used in the language of draft 3 where appropriate.

Comments

- Some believe that the “exemption” for poultry growers should apply to other generator owners.



- The Rentar cost-share program was set up for poultry growers to reduce their generators' emissions.
- Provision was tailored around cost-share program so that it was not invalidated.
- Applicability for cost-share program: poultry grower participating in DEC load management.

Comments

- “As an alternative to the *owner* of an *existing distributed generator* installed on *commercial poultry producing premises*, to generate electricity to those premises, the *generator* shall be exempt from the emission standards of 3.2.1.1 if one of the following requirements are met:
 - the *owner* of such a *generator* is participating or is signed up to participate in a *Department* approved, emission control strategy cost-share program for *generators* offered by either the Kent Conservation District or the Sussex Conservation District; or
 - the *generator* is *gaseous fueled*.”

Comments

- Basically:
 - All current participants in DEC's interruptible service program can sign up for the cost-share to be eligible for the alternate provision of 3.2.1.2.
 - Any *existing emergency generator owner* who joins DEC's program at anytime in the future can sign up for the cost-share and be eligible for the "exemption." Sign-up must occur prior to actually operating in DEC's program.
 - Any *new generators* installed are not eligible for this "exemption" and must meet the applicable standards for *emergency or distributed generators*.

NOTE:

- The “Rentar retrofit” cost-share program is being offered by both the Kent & Sussex Cons. Districts.
- Letters are in the process of being sent to all current participants in DEC’s program.
- Expected sign-up time frame is January 2005 through March 2005 (3-month period).
- A lottery system will be used to choose, out of all applicants, who will receive cost-share \$ this year.
- Cost-share \$ will be granted every year until all applicants are retrofitted.

NOTE:

All cost-share applicants will be considered compliant with the regulation, even if they are not currently chosen to receive cost-share \$ for a Rentar Fuel Catalyst.

Comments

- Request by DE Dept. of Ed. for an “exemption” similar to that for poultry growers.



- If school is using is using *generator* only for *emergencies*, only minimal requirements are imposed.
- If using generator for peak shaving/other purposes, should have to comply with same standards as other peak shaving participants.

Comments

- Request by DVFA for an “exemption” from the regulation.



- If fire house is using is using *generator* only for *emergencies*, only minimal requirements are imposed.
- If using generator for peak shaving/other purposes, should have to comply with same standards as other peak shaving participants.

Comments

- Draft 2 emissions standards for *new distributed generators* are unachievable or will require significant aftertreatment devices.



- Draft 3 includes emissions standards for *new distributed generators* suggested by EMA.
- Standards allow for uncontrolled gaseous generators, and controlled diesel generators.

Comments

- The 15 MW size above & below which there are different standards for *new distributed generators* should be changed to be consistent with FERC/PJM interconnection procedures.



- 15 MW size is kept in Draft 3.
- Originally chosen to be consistent with applicability of units to Reg. 39, NOx Budget Trading Program.

Comments

- Waste gas standards may not be achievable for reciprocating engine generators.



- Waste gas limit (in draft 3) for NO_x is lower than NO_x limit for *new distributed generators* (1.5 vs 2.2 lb/MWh).
- However, draft 3 still allows credit for the use of flared fuels.
- This credit allows *generators* operating on flared fuels to actually emit more than the 2.2 lb/MWh limit.

Comments

- Sulfur limits for *gaseous fuel* should be amended.



- Received verification from local gas company that limits in draft are achievable, and are well above actual sulfur contents in *gaseous fuels*.
- Sulfur limits for *gaseous fuel* will not be changed.

Comments

- A non-resettable fuel metering device is unnecessary for determining fuel usage.



- Requirement for fuel metering device deleted.
- *Generator owners* must still monitor and record the monthly and yearly amounts of fuel used by their *generators*.

Comments

- Why is an hour metering device needed?
They will cost too much to install.



- Most generators include an hour metering device install by the manufacturer.

\$49.99 Heavy Duty Hr. Meter – Federated Auto Parts, Dover

- Their use will help in keeping track of the overall operating hours of a generator:

(Current Total) – (Last Month's Total) =

Current Month's Operating Hours

Comments

- The requirement to obtain fuel receipts verifying *biodiesel blends* is unreasonable for persons who mix their own *biodiesel blends*.



- Sections requiring verification of % biodiesel in blends, by supplier or by third party laboratory, deleted.
- Biodiesel blends* must still meet sulfur limits.

Comments

- Various issues related to section on “Emissions Certification by a Supplier.”



Comments

- Who does the certification process apply to?



- Certification is to be performed by *suppliers/manufacturers of new generators.*
- Title and language changed to reflect that section 7.1 deals with the “Emissions Certification of *NEW DISTRIBUTED GENERATORS* by a Supplier.”

Comments

- Requiring manufacturers to certify *generators* to 15,000 hours or 3 years is beyond current industry standard and technical capabilities.



- Certification of a *generator* by a supplier or manufacturer is optional.
- However...requirement changed to “the lesser of 3,000 hours of operation or five years.”
- Corresponds to warranty period now required by EPA for non-road engines subject to new Tier 4 Stds.

Comments

- It will be expensive for owners to “certify” their *generators* if *suppliers/manufacturers* do not.



- Draft 2 language was misleading in that the same certification is NOT required by *owners*.
- Owners must VERIFY their *generators'* COMPLIANCE with the regulation, if not installing a pre-certified *generator*.
- Title and language of section changed to reflect this (same background information on generator/control equipment must be submitted to verify compliance).

Comments

- *Generator owners* have to spend \$\$\$ to certify and recertify their *generators* since manufacturers say they can't certify for 15,000 hrs or 3 yrs.



- Draft 2 language misleading in that the “recertification” is meant to mean a “reverification of compliance.”
- Section title and language changed to reflect this.
- Reverification time frame changed to just “five years” to coincide with “3,000 hrs or five years” time frame for certification by *suppliers*.

New Stuff

- Initial Notification



- Requirement to submit general info about generator and letter classifying *generator*.
- Same information which was required in past draft, just reorganized into new section for clarity.
- (Requirement previously in Section 7.)

New Stuff

- Initial Notification & Dates



- New language requesting *owner* to send in letter if *generator* is changing classification from *emergency generator* to *distributed generator*, or vice versa.

New Stuff

- Definitions



- Due to added/changed language, new definitions were added for:
 - Commercial poultry producing premises
 - Standby power rating
 - Mobile
 - Repower

Other Stuff

- Permitting



- Permitting will be based upon requirements in Regulation No. 2.
- Many think *generators* are exempt from permitting due to “fuel burning equipment” exemption in Appendix “A”.
- Exemption is meant for external combustion equipment (boilers) and is not meant to apply to *generators*...
- Regulation No. 2 may be amended coincidentally with Reg. 44 proposal to clarify this.

Other Stuff

- Permitting

- Amend Appendix “A” in Reg. 2 to clarify the exemption from permitting refers to *EXTERNAL COMBUSTION* “fuel burning equipment” (i.e., boilers).
- Add a new exemption to Appendix “A” that defines an appropriate threshold for internal combustion engines.

Other Stuff

- Permitting
- AQM will develop a policy statement that specifically states how potential to emit (PTE) calculations are performed relative to *generators*.
- Policy will consider allowing PTE calculations for *emergency generators* that operate only during “lights out,” and for necessary *testing* and *maintenance* purposes, to be based on operating hours less than 8760 hours per year.

Other Stuff

- Fuel Distribution Costs Analysis



- Fuel delivery scenarios sent to local fuel distributors.
- Trying to obtain base price of fuels and actual delivery price for fuels.
- If there is a big difference in prices, it may impact the fuel requirements of the draft.