



Massachusetts Department of Environmental Protection
Bureau of Air and Waste

AQ 31 Optional Greenhouse Gas Emissions Reporting Form and Spreadsheet for Municipal Retail Sellers of Electricity Instructions and Supporting Materials

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Introduction

MassDEP *Forms*, as well as *Instructions & Supporting Materials*, are available for download from the MassDEP Web site at <http://www.mass.gov/eea/agencies/massdep/> in two file formats: Microsoft Word™ and Adobe Acrobat PDF™. Either format allows documents to be printed.

Instructions & Supporting Materials files in Microsoft Word™ format contain a series of documents that provide guidance on how to prepare a submittal.

Forms in Microsoft Word™ format must be downloaded separately. Users with Microsoft Word™ 97 or later may complete these forms electronically.

Submittal packages in Adobe Acrobat PDF™ format combine *Forms* and *Instructions & Supporting Materials* in a single document. Adobe Acrobat PDF™ files may only be viewed and printed without alteration. *Forms* in this format may not be completed electronically.

MassDEP strongly recommends that municipal retail sellers thoroughly review the *Form* and *Instructions* before beginning to complete the AQ 31 Form and Spreadsheet. Please note that the AQ 31 Spreadsheet at <https://www.mass.gov/how-to/aq-31-32-retail-seller-of-electricity-greenhouse-gas-emissions-reporting> must be completed before you can complete the AQ 31 Form.



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1. What is the purpose of this submittal?

The purpose of the optional AQ 31 Form and Spreadsheet is to allow municipal retail sellers subject to MassDEP regulation 310 CMR 7.75(9)(c) "GHG Emissions Reporting" to annually account for the ownership and/or use of particular generation sources in reporting greenhouse gas (GHG) emissions released in the course of generating the electricity they sell. A separate form and spreadsheet, AQ 32 "Mandatory Greenhouse Gas Emissions Reporting Form for Retail Sellers of Electricity" will be posted for use in reporting annual GHG emissions. The AQ 32 Form and Spreadsheet must be submitted by all retail sellers subject to MassDEP regulation 310 CMR 7.75(9), whether or not the AQ 31 Form and Spreadsheet are submitted.

2. Who must submit?

This submission is optional for municipal retail sellers that wish to account for the ownership and/or use of particular generation sources in reporting GHG emissions. "Retail Seller" means a competitive supplier licensed by the Department of Public Utilities or, as each is defined in Massachusetts General Law (MGL) chapter 164A §1, an electric utility, municipal electric department or municipal light board (municipal retail seller). Submission of this information is now mandatory for electric utilities and competitive suppliers under 310 CMR 7.75(9) and is completed through the submission of the 'GHG tab' of the Renewable Portfolio Standard/Alternative Portfolio Standard/Clean Energy Standard (RPS/APS/CES) Workbook [<https://www.mass.gov/service-details/annual-compliance-information-for-retail-electric-suppliers>].

3. What is the process for retail sellers to determine their GHG emissions?

Each year MassDEP updates and posts on its website draft emission factors (EFs) for public comment. Emission factors reflect average emission rates before and after accounting for ownership and/or use of particular generation sources. After accounting for data from competitive suppliers and electric utilities submitted in the mandatory 'GHG tab' of the RPS/APS/CES Workbook and from municipal retail sellers in the optional AQ 31 Form and Spreadsheet, and any other comments received on the draft EFs, MassDEP posts final EFs.

Final EFs must be used by all retail sellers in determining their annual GHG emissions to be reported on AQ 32 "Mandatory Greenhouse Gas Emissions Reporting Form for Retail Sellers of Electricity." Retail sellers must determine GHG emissions (in short tons) by:

- multiplying:
 - their electricity sales (in megawatt hours, MWh)(less any non-emitting and emitting generation sources submitted in the GHG tab and optional AQ 31 Form and Spreadsheet) by
 - final EFs (in pounds of GHG per megawatt hour, lb GHG/MWh) by
 - 1 short ton per 2000 pounds
- and adding the emissions of any particular generation sources submitted in the GHG tab and the optional AQ 31 Form and Spreadsheet.

4. What are the submittal deadlines for AQ 31 Form and Spreadsheet?

Municipal retail sellers that choose to submit information on the ownership and/or use of particular generation sources must submit the optional AQ 31 Form and Spreadsheet no later than the fifteenth day of November after the calendar year in which the MWh were generated.

5. How will this submittal be used?

Submittal of the AQ 31 Optional Reporting Form and Spreadsheet by a municipal retail seller allows the municipal retail seller to account for ownership and/or use of particular generation sources. MassDEP also



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uses the submittals received to modify the EFs used by all retail sellers to determine their annual GHG emissions associated with MWh that are not reported in the 'GHG tab' or the AQ 31 Form and Spreadsheet.

When individual retail sellers make adjustments in their GHG reporting, this affects the EFs representing the remaining MWh consumed in Massachusetts. Specifically, once individual retail sellers "take credit" for MWh generated by particular generation sources, MassDEP must recalculate the draft EFs based on the emissions of the remaining MWh consumed in Massachusetts to ensure accuracy and to avoid double counting.

6. What categories of ownership and/or use of particular generation sources can municipal retail sellers provide in this optional submittal?

Ownership and/or use is demonstrated by municipal retail sellers as follows:

1. For municipally-owned generation: the Generating Station Statistics pages for Large (pages 58 & 59) and/or Small (page 66) Stations from the Annual Return to the Massachusetts Department of Public Utilities (DPU), and a report from the New England Power Pool Generation Information System¹ (NEPOOL GIS) certificate tracking system showing that the associated certificates were reserved or settled in a municipal retail seller Massachusetts subaccount, or that the certificates were not used by others²;
2. For contracted generation: a contract showing purchase of electricity from the particular generation source for MWh generated by a source not owned by the retail seller, the Purchased Power pages 54 & 55 from the Annual Return to DPU, and a report from the NEPOOL GIS certificate tracking system showing that the associated certificates were reserved or settled in a municipal retail seller Massachusetts subaccount, or that the certificates were not used by others,^{3,4} and
3. For RPS-eligible certificates for power that the municipal retail seller neither owns nor contracts for: a NEPOOL GIS certificate report for the calendar year for MWh that are eligible for RPS showing that the associated certificates were reserved or settled in a municipal retail seller Massachusetts subaccount.

A municipal retail seller must submit the pages of its Annual Return unless the Return has been posted on the DPU webpage at <https://www.mass.gov/service-details/find-an-mlp-annual-return>. All municipal retail sellers that choose to submit the AQ 31 Form and Spreadsheet must submit the "Electric Energy Account" on page 57 of the Annual Return as part of the AQ 31 submittal. It is not necessary to resubmit this documentation with Form AQ 32. The Annual Return pages should be submitted in electronic format, either as a spreadsheet or converted to a legible .pdf file. Please ensure that the Annual Return pages you send are the same as the latest version sent to DPU.

7. How should I enter information onto the AQ31 Spreadsheet?

The AQ 31 Spreadsheet will calculate the MWh and GHG emissions that you will need to transfer onto the mandatory AQ 32 Form and Spreadsheet due by the 15th day of the second September following each calendar year beginning with 2018 calendar year emissions.

¹ The regional certificate tracking system is called the New England Power Pool Generation Information System (GIS). The Operating Rules governing the tracking system can be found at <http://www.nepoolgis.com/documents/>

² While municipal electric departments and light boards document MWh generated by large and small stations they own on pages 58-59 line 12 and page 66 column (e), respectively, of the "Annual Return" they provide to DPU, the values listed on the Annual Return can include MWh for which the municipality has sold the certificates representing the "clean" attribute of the power. Therefore, MassDEP cannot rely solely on the Annual Return to document such MWh.

³ While municipal electric departments and light boards document purchases of electricity on page 55 in column (k) of the Annual Return they provide to DPU, it is not obvious in all cases whether this electricity is from emitting or non-emitting electricity generators. Therefore, MassDEP cannot rely solely on the Annual Return to document such MWh.

⁴ While municipal electric departments and light boards document MWh generated by contracted power on the Annual Return they provide to DPU, the values listed on the Annual Return can include MWh for which the owner or the municipality has sold the certificates representing the "clean" attribute of the power. Therefore, MassDEP cannot rely solely on the contract and the Annual Return to document such MWh.



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You should enter the MWh from your DPU Annual Return as instructed in the two yellow boxes. Then enter the number of MWh, in combination with any NEPOOL GIS certificates, into the appropriate blue boxes. These are organized by row for municipal generation types (owned, contracted, and RPS-eligible certificates for MWh not owned or contracted) and column for non-emitting and emitting (both non-fossil and fossil) fuel types.

The grey and green boxes are used to perform calculations and should not be changed.

The grey boxes total MWh and calculate GHG emissions from each fuel type. In particular:

- N₂O and CH₄ emissions are calculated for all fuels. These emissions are not considered biogenic, even if they result from the combustion of biomass or other biofuel.
- Non-biogenic CO₂ emissions are calculated for fossil fuels, including the non-biogenic component of emissions that result from combustion of municipal solid waste.
- Biogenic CO₂ emissions are calculated for various biogases, wood/biomass, and the biogenic component of municipal solid waste.

The green boxes calculate the MWh and GHG (CO₂e) values to be entered in Steps 1 through 3 of the mandatory AQ 32 Spreadsheet.

8. Where do I get NEPOOL GIS reports required in Parts B and C of Form AQ 31, and in what format do I submit them?

Each retail seller can get its NEPOOL GIS Certificate reports, showing settled or reserved certificates for the calendar year, from their account in the NEPOOL GIS at <http://www.nepoolgis.com/>. Each owner of a generating unit connected to the New England electricity grid can get an Annual "Generator Certificate Disposition" report from their account in the NEPOOL GIS. Retail sellers submitting the AQ 31 Form and Spreadsheet may need to obtain these reports from the owner of the generating unit, as detailed in Question 6 above.

These reports should be submitted in electronic spreadsheet format (which can be downloaded from NEPOOL GIS).

9. In what format and to whom do I send my AQ 31 Optional Reporting Form and Spreadsheet?

Submit electronic copies of signed Form AQ 31 and any supporting materials in Word or Adobe format (for non-spreadsheets), and the AQ 31 Spreadsheet (and other relevant supporting materials) in spreadsheet format (to show calculations) to MassDEP by email to: sue.ann.richardson@mass.gov.

You are not required to submit a hardcopy of AQ 31 Form, Spreadsheet, or supporting documents, but if you choose to do so, submit one hardcopy of all materials to: Massachusetts Department of Environmental Protection, Bureau of Air and Waste, 1 Winter Street, Boston, MA 02108, Attn: Sue Ann Richardson.

10. What are the reporting fees and timelines?

As of April 1, 2020, reporting under AQ 31 Optional Reporting Form and Spreadsheet for municipal Retail Sellers of Electricity is not subject to 310 CMR 4.00 and therefore is not subject to fees and review timelines established under that regulation.

11. What is the annual compliance fee?

As of April 1, 2020 there is no annual compliance fee for this program.



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12. What are the regulations that apply to these submittals? Where can I get copies?

The applicable regulations include, but are not limited to:

Massachusetts Air Quality Regulations, 310 CMR 7.00. The specific requirement for retail electricity sellers to report greenhouse gas emissions for calendar year 2018 and later is at 310 CMR 7.75(9).

The state regulations may be purchased at:

State Bookstore (in State House)
Room 116
Boston, MA 02133
617-727-2834

State House West Bookstore
436 Dwight Street, Room 102
Springfield, MA 01103
413-784-1376

An unofficial copy of these regulations may also be obtained at <https://www.mass.gov/regulations/310-CMR-700-air-pollution-control>.



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**AQ 31 Optional Greenhouse Gas Emissions
Reporting Form and Spreadsheet for Municipal
Retail Sellers of Electricity
Submittal Completeness Check List**

- All applicable questions on Form AQ 31 have been answered.
- The retail seller's responsible official has signed the Certification Statement (Part E of Form AQ 31).
- All applicable boxes on the AQ 31 Spreadsheet have been completed and the others have been left blank.
- The AQ 31 Spreadsheet has been included in the submittal.
- For municipal retail sellers whose Annual Return to DPU has not been posted on the DPU webpage: A copy of the "Purchased Power" pages (54 & 55), "Generating Station Statistics (Large Stations)" pages (58 & 59) and/or the "Generating Station Statistics (Small Stations)" page 66, and the "Electric Energy Account" page 57 of the Annual Return to DPU has been included with the submittal, as appropriate.
- All applicable attachments required in Parts B and C have been included in the submittal.
- If submitting a hardcopy, one original (to submit) and one copy (for your records) have been made of all of the required hardcopy materials.
- Electronic copies have been made of AQ 31 Form and Spreadsheet and any supporting materials in Word or Adobe format (for non-spreadsheets) and spreadsheet format (to show calculations).

To submit the AQ 31 Form and Spreadsheet:

- Submit electronic copies of signed AQ 31 Form, the AQ 31 Spreadsheet, and any supporting materials in Word or Adobe format (for non-spreadsheets) and spreadsheet format (to show calculations) to MassDEP by email to: sue.ann.richardson@mass.gov.
- You are not required to submit a hardcopy of the AQ 31 Form and Spreadsheet or supporting documents, but if you choose to do so, submit one hardcopy of all materials to:

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