§ 74.44 Reduced utilization for combustion sources.

(a) Calculation of utilization—(1) Annual utilization. (i) Except as provided in paragraph (a)(1)(ii) of this section, annual utilization for the calendar year shall be calculated as follows:

\[
\text{Annual Utilization} = \text{Actual heat input} + \text{Reduction from improved efficiency}
\]

where,

(A) “Actual heat input” shall be the actual annual heat input (in mmBtu) of the opt-in source for the calendar year determined in accordance with appendix F of part 75 of this chapter.

(B) “Reduction from improved efficiency” shall be the sum of the following four elements: Reduction from demand side measures that improve the efficiency of electricity consumption; reduction from demand side measures that improve the efficiency of steam consumption; reduction from improvements in the heat rate at the opt-in source; and reduction from improvement in the efficiency of steam production at the opt-in source. Qualified demand side measures applicable to the calculation of utilization for opt-in sources are listed in appendix A, section 1 of part 73 of this chapter.

(C) “Reduction from demand side measures that improve the efficiency of electricity consumption” shall be a good faith estimate of the expected kilowatt hour savings during the calendar year for such measures and the corresponding reduction in heat input (in mmBtu) resulting from those measures. The demand side measures shall be implemented at the opt-in source, in the residence or facility to which the opt-in source delivers electricity for consumption or in the residence or facility of a customer to whom the opt-in source’s utility system sells electricity. The verified amount of such reduction shall be submitted in accordance with paragraph (c)(2) of this section.

(D) “Reduction from demand side measures that improve the efficiency of steam consumption” shall be a good faith estimate of the expected steam savings (in mmBtu) from such measures during the calendar year and the corresponding reduction in heat input (in mmBtu) at the opt-in source as a result of those measures. The demand side measures shall be implemented at the opt-in source or in the facility to which the opt-in source delivers steam for consumption. The verified amount of such reduction shall be submitted in accordance with paragraph (c)(2) of this section.

(E) “Reduction from improvements in heat rate” shall be a good faith estimate of the expected reduction in heat rate during the calendar year and the corresponding reduction in heat input (in mmBtu) at the opt-in source as a result of all improved unit efficiency measures at the opt-in source and may include supply-side measures listed in appendix A, section 2.1 of part 73 of this chapter. The verified amount of such reduction shall be submitted in accordance with paragraph (c)(2) of this section.

(F) “Reduction from improvement in the efficiency of steam production” shall be a good faith estimate of the expected improvement in the efficiency of steam production at the opt-in source during the calendar year and the corresponding reduction in heat input (in mmBtu) at the opt-in source as a result of all improved steam production efficiency measures. In order to claim improvements in the efficiency of steam production, the designated representative of the opt-in source must demonstrate to the satisfaction of the Administrator that the heat rate of the opt-in source has not increased. The verified amount of such reduction shall be submitted in accordance with paragraph (c)(2) of this section.

(G) Notwithstanding paragraph (a)(1)(i)(B) of this section, where two or more opt-in sources and Phase I units, include in their annual compliance certification reports their good faith estimate of kilowatt hour savings or steam savings from the same specific measures:
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(1) The designated representatives of all such opt-in sources and Phase I units shall submit with their annual compliance certification reports a certification signed by all such designated representatives. The certification shall apportion the total kilowatt hour savings or steam savings among such opt-in sources and Phase I units.

\[ \text{Annual Utilization} = \frac{\text{Actual heat input for the remaining calendar quarters} + \text{Reduction from improved efficiency for the remaining calendar quarters}}{2} \]

where “actual heat input” and “reduction from improved efficiency” are defined as set forth in paragraph (a)(1)(i) of this section but are restricted to data or estimates for the “remaining calendar quarters,” which are the calendar quarters that begin on or after the date the opt-in permit becomes effective.

(2) Average utilization. Average utilization for the calendar year shall be defined as the average of the annual utilization calculated as follows:

\( \text{(A) Average utilization for the first year} = \frac{\text{annual utilization}_{\text{year 1}}}{2} \)

\( \text{(B) Average utilization for the second year} = \frac{\text{annual utilization}_{\text{year 1}} + \text{annual utilization}_{\text{year 2}}}{2} \)

where, “reviced annual utilization\(_{\text{year 1}}\)” is as submitted for the year under paragraph (c)(2)(i)(B) of this section and adjusted under paragraph (c)(2)(ii) of this section; “annual utilization\(_{\text{year 1}}\)” is as calculated under paragraph (a)(1)(i) of this section.

(i) For the first two calendar years after the effective date of an opt-in permit taking effect on January 1, average utilization will be calculated as follows:

(A) Average utilization for the first year = annual utilization\(_{\text{year 1}}\)

(B) Average utilization for the second year

\( = \frac{\text{annual utilization}_{\text{year 1}} + \text{annual utilization}_{\text{year 2}}}{2} \)

where,

\( \text{annual utilization}_{\text{year 1}} \) is as calculated under paragraph (a)(1)(ii) of this section.

(ii) For the first three calendar years after the effective date of the opt-in permit taking effect on a date other than January 1, average utilization will be calculated as follows:

(A) Average utilization for the first year after opt-in = annual utilization\(_{\text{year 1}}\)

where,
\[
\frac{\text{revised annual utilization}_{\text{year 1}} + \text{annual utilization}_{\text{year 2}}}{\text{Number of months in year 1 and year 2 for which the opt-in permit is effective}} \times 12
\]

“\text{revised annual utilization}_{\text{year 1}}” is as submitted for the year under paragraph (c)(2)(i)(B) of this section and adjusted under paragraph (c)(2)(iii) of this section; and

“\text{annual utilization}_{\text{year 2}}” is as calculated under paragraph (a)(1)(ii) of this section.

(C) Average utilization for the third year after opt-in

\[
\frac{\text{revised annual utilization}_{\text{year 1}} + \text{revised annual utilization}_{\text{year 2}} + \text{annual utilization}_{\text{year 3}}}{\text{Number of months in year 1, year 2, and year 3 for which the opt-in permit is effective}} \times 12
\]

where,

“\text{revised annual utilization}_{\text{year 1}}” is as submitted for the year under paragraph (c)(2)(i)(B) of this section and adjusted under paragraph (c)(2)(iii) of this section; and

“\text{revised annual utilization}_{\text{year 2}}” is as submitted for the year under paragraph (c)(2)(i)(B) of this section and adjusted under paragraph (c)(2)(iii) of this section; and

“\text{annual utilization}_{\text{year 3}}” is as calculated under paragraph (a)(1)(ii) of this section.

(iii) Except as provided in paragraphs (a)(2)(i) and (a)(2)(ii) of this section, average utilization shall be the sum of annual utilization for the calendar year and the revised annual utilization, submitted under paragraph (c)(2)(i)(B) of this section and adjusted by the Administrator under paragraph (c)(2)(iii) of this section, for the two immediately preceding calendar years divided by 3.

(b) Determination of reduced utilization and calculation of allowances—(1) Determination of reduced utilization. For a year during which its opt-in permit is effective, an opt-in source has reduced utilization if the opt-in source’s average utilization for the calendar year, as calculated under paragraph (a) of this section, is less than its baseline.

(2) Calculation of allowances deducted for reduced utilization. If the Administrator determines that an opt-in source has reduced utilization for a calendar year during which the opt-in source’s opt-in permit is in effect, the Administrator will deduct allowances, as calculated under paragraph (b)(2)(i) of this section, from the compliance sub-account of the opt-in source’s Allowance Tracking System account.

(i) Allowances deducted for reduced utilization =

Number of allowances allocated for the calendar year \times \left[1 - \left(\frac{\text{average utilization}_{\text{calendar year}}}{\text{baseline}}\right)\right]
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(ii) The allowances deducted shall have the same or an earlier compliance use date as those allocated under subpart C of this part for the calendar year for which the opt-in source has reduced utilization.

(c) Compliance—(1) Opt-in Utilization Report. The designated representative for each opt-in source shall submit an opt-in utilization report for the calendar year, as part of its annual compliance certification report under §74.43, that shall include the following elements in a format prescribed by the Administrator:

(i) The name, authorized account representative identification number, and telephone number of the designated representative of the opt-in source;

(ii) The account identification number in the Allowance Tracking System of the source that includes the opt-in source;

(iii) The opt-in source’s annual utilization for the calendar year, as defined under paragraph (a)(1) of this section, and the revised annual utilization, submitted under paragraph (c)(2)(i)(B) of this section and adjusted under paragraph (c)(2)(iii) of this section, for the two immediately preceding calendar years;

(iv) The opt-in source’s average utilization for the calendar year, as defined under paragraph (a)(2) of this section;

(v) The difference between the opt-in source’s average utilization and its baseline;

(vi) The number of allowances that shall be deducted, if any, using the formula in paragraph (b)(2)(i) of this section and the supporting calculations;

(2) Confirmation report. (i) If the annual compliance certification report for an opt-in source includes estimates of any reduction in heat input resulting from improved efficiency as defined under paragraph (a)(1)(i) of this section, the designated representative shall submit, by July 1 of the year in which the annual compliance certification report was submitted, a confirmation report, concerning the calendar year covered by the annual compliance certification report. The Administrator may grant, for good cause shown, an extension of the time to file the confirmation report. The confirmation report shall include the following elements in a format prescribed by the Administrator:

(A) Verified reduction in heat input. Any verified kwh savings or any verified steam savings from demand side measures that improve the efficiency of electricity or steam consumption, any verified reduction in the heat rate at the opt-in source, or any verified improvement in the efficiency of steam production at the opt-in source achieved and the verified corresponding reduction in heat input for the calendar year that resulted.

(B) Revised annual utilization. The opt-in source’s annual utilization for the calendar year as provided under paragraph (c)(1)(i)(A) of this section, recalculated using the verified reduction in heat input for the calendar year under paragraph (c)(2)(i)(A) of this section.

(C) Revised average utilization. The opt-in source’s average utilization as provided under paragraph (c)(1)(i)(v) of this section, recalculated using the verified reduction in heat input for the calendar year under paragraph (c)(2)(i)(A) of this section.

(D) Recalculation of reduced utilization. The difference between the opt-in source’s recalculated average utilization and its baseline.

(E) Allowance adjustment. The number of allowances that should be credited or deducted using the formulas in paragraphs (c)(2)(iii)(C) and (D) of this section and the supporting calculations; and the number of adjusted allowances remaining using the formula in paragraph (c)(2)(iii)(E) of this section and the supporting calculations.

(ii) Documentation. (A) For all figures under paragraphs (c)(2)(i)(A) of this section, the opt-in source must provide as part of the confirmation report, documentation (which may follow the EPA Conservation Verification Protocol) verifying the figures to the satisfaction of the Administrator.

(B) Notwithstanding paragraph (c)(2)(i)(A) of this section, where two or more opt-in sources, or two or more opt-in sources and Phase I units include in the confirmation report under paragraph (c)(2) of this section or §72.91(b) of this chapter the verified kilowatt hour savings or steam savings defined under paragraph (c)(2)(i)(A) of
this section, for the calendar year, from the same specific measures:

(1) The designated representatives of all such opt-in sources and Phase I units shall submit with their confirmation reports a certification signed by all such designated representatives. The certification shall apportion the total kilowatt hour savings or steam savings as defined under paragraph (c)(2)(i)(A) of this section for the calendar year among such opt-in sources and Phase I units.

(2) Each designated representative shall include in the opt-in source's confirmation report only its share of the verified reduction in heat input as defined under paragraph (c)(2)(i)(A) of this section for the calendar year under the certification under paragraph (c)(2)(ii)(B)(1) of this section.

(iii) Determination of reduced utilization based on confirmation report. (A) If an opt-in source must submit a confirmation report as specified under paragraph (c)(2) of this section, the Administrator, upon such submittal, will adjust his or her determination of reduced utilization for the calendar year for the opt-in source. Such adjustment will include the recalculation of both annual utilization and average utilization, using verified reduction in heat input as defined under paragraph (c)(2)(i)(A) of this section for the calendar year instead of the previously estimated values.

(B) Estimates confirmed. If the total, included in the confirmation report, of the amounts of verified reduction in the opt-in source’s heat input equals the total estimated in the opt-in source’s annual compliance certification report for the calendar year, then the designated representative shall include in the confirmation report a statement indicating that is true.

(C) Underestimate. If the total, included in the confirmation report, of the amounts of verified reduction in the opt-in source’s heat input is greater than the total estimated in the opt-in source’s annual compliance certification report for the calendar year, then the designated representative shall include in the confirmation report the number of allowances to be credited to the compliance account of the source that includes the opt-in source calculated using the following formula:

\[
\text{Allowances credited for the calendar year in which the reduced utilization occurred} = \frac{\text{Number of allowances allocated for the calendar year} \times \left( \frac{\text{Average Utilization}_{\text{verified}} - \text{Average Utilization}_{\text{Estimate}}}{\text{Baseline}} \right)}{\text{Average Utilization}_{\text{verified}}} - \text{Average Utilization}_{\text{Estimate}}
\]

where,

Average Utilization_{period} = the average utilization of the opt-in source as defined under paragraph (a)(2) of this section, calculated using the estimated reduction in the opt-in source’s heat input under (a)(1) of this section, and submitted in the annual compliance certification report for the calendar year.

Average Utilization_{verified} = the average utilization of the opt-in source as defined under paragraph (a)(2) of this section, calculated using the verified reduction in the opt-in source’s heat input as submitted under paragraph (c)(2)(i)(A) of this section by the designated representative in the confirmation report.

(D) Overestimate. If the total of the amounts of verified reduction in the opt-in source’s heat input included in the confirmation report is less than the total estimated in the opt-in source’s annual compliance certification report for the calendar year, then the designated representative shall include in the confirmation report the number of allowances to be deducted from the compliance account of the source that includes the opt-in source, which equals the absolute value of the result of the formula for allowances credited under paragraph (c)(2)(iii)(C) of this section.

(E) Adjusted allowances remaining. Unless paragraph (c)(2)(iii)(B) of this section applies, the designated representative shall include in the confirmation report the adjusted amount of allowances that would have been held in the
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compliance account of the source that includes the opt-in source if the deductions made under §73.35(b) of this chapter had been based on the verified, rather than the estimated, reduction in the opt-in source’s heat input, calculated as follows:

\[
\text{Adjusted amount of allowances} = \text{Allowances held after deduction} - \text{Excess emissions} + \text{Allowances credited} - \text{Allowances deducted}
\]

where:

“Allowances held after deduction” shall be the amount of allowances held in the compliance account of the source that includes the opt-in source after deduction of allowances was made under §73.35(b) of this chapter based on the annual compliance certification report.

“Excess emissions” shall be the amount (if any) of excess emissions determined under §73.35(d) for the calendar year based on the annual compliance certification report. “Allowances credited” shall be the amount of allowances calculated under paragraph (c)(2)(iii)(C) of this section.

“Allowances deducted” shall be the amount of allowances calculated under paragraph (c)(2)(iii)(D) of this section.

(1) If the result of the formula for “adjusted amount of allowances” is negative, the absolute value of the result constitutes excess emissions of sulfur dioxide. If the result is positive, there are no excess emissions of sulfur dioxide.

(2) If the amount of excess emissions of sulfur dioxide calculated under “adjusted amount of allowances” differs from the amount of excess emissions of sulfur dioxide determined under §73.35 of this chapter based on the annual compliance certification report, then the designated representative shall include in the confirmation report a demonstration of:

(i) The number of allowances that should be deducted to offset any increase in excess emissions or returned to the account for any decrease in excess emissions; and

(ii) The amount of the excess emissions penalty (excluding interest) that should be paid or returned to the account for the change in excess emissions.

(3) The Administrator will deduct immediately from the compliance account of the source that includes the opt-in source the amount of allowances that he or she determines is necessary to offset any increase in excess emissions or will return immediately to the compliance account of the source that includes the opt-in source the amount of allowances that he or she determines is necessary to account for any decrease in excess emissions.

(4) The designated representative may identify the serial numbers of the allowances to be deducted or returned. In the absence of such identification, the deduction will be on a first-in, first-out basis under §73.35(c)(2) of this chapter and the identification of allowances returned will be at the Administrator’s discretion.

(5) If the designated representative of an opt-in source fails to submit on a timely basis a confirmation report, in accordance with paragraph (c)(2) of this section, with regard to the estimate of reductions in heat input as defined under paragraph (c)(2)(i)(A) of this section, then the Administrator will reject such estimate and correct it to equal zero in the opt-in source’s annual compliance certification report that includes that estimate. The Administrator will deduct immediately, on a first-in, first-out basis under §73.35(c)(2) of this chapter, the amount of allowances that he or she determines is necessary to offset any increase in excess emissions of sulfur dioxide that results from the correction and will require the owners and operators of the opt-in source to pay an excess emission penalty in accordance with part 77 of this chapter.

(F) If the opt-in source is governed by an approved thermal energy plan under §74.47 and if the opt-in source must
submit a confirmation report as specified under paragraph (c)(2) of this section, the adjusted amount of allowances that should remain in the compliance account of the source that includes the opt-in source shall be calculated as follows:

Adjusted amount of allowances = \[
\text{Allowances allocated or acquired} - \text{tons emitted} - \begin{cases} 
\text{all allowances transferred to all replacement units} \\
\text{all allowances deducted for reduced utilization}
\end{cases}
\]

where,

"Allowances allocated or acquired" shall be the number of allowances held in the compliance account of the source that includes the opt-in source at the allowance transfer deadline plus the number of allowances transferred for the previous calendar year to all replacement units under an approved thermal energy plan in accordance with §74.47(a)(6).

"Tons emitted" shall be the total tons of sulfur dioxide emitted by the opt-in source during the calendar year, as reported in accordance with subpart F of this part for combustion sources.

"Allowances transferred to all replacement units" shall be the sum of allowances transferred to all replacement units under an approved thermal energy plan in accordance with §74.47 and adjusted by the Administrator in accordance with §74.47(d)(2).

"Allowances deducted for reduced utilization" shall be the total number of allowances deducted for reduced utilization as calculated in accordance with this section including any adjustments required under paragraph (c)(iii)(E) of this section.

§ 74.45 Reduced utilization for process sources. [Reserved]

§ 74.46 Opt-in source permanent shutdown, reconstruction, or change in affected status.

(a) Notification. (1) When an opt-in source has permanently shutdown during the calendar year, the designated representative shall notify the Administrator of the date of shutdown, within 30 days of such shutdown.

(2) When an opt-in source has undergone a modification that qualifies as a reconstruction as defined in §60.15 of this chapter, the designated representative shall notify the Administrator of the date of completion of the reconstruction, within 30 days of such completion.

(3) When an opt-in source becomes an affected unit under §72.6 of this chapter, the designated representative shall notify the Administrator of such change in the opt-in source's affected status within 30 days of such change.

(b) Administrator's action. (1) The Administrator will terminate the opt-in source's opt-in permit and deduct allowances as provided below in the following circumstances:

(i) When an opt-in source has permanently shutdown. The Administrator shall deduct allowances equal in number to and with the same or earlier compliance use date as those allocated to the opt-in source under §74.40 for the calendar year in which the shut down occurs and for all future years following the year in which the shut down occurs; or

(ii) When an opt-in source has undergone a modification that qualifies as a reconstruction as defined in §60.15 of this chapter. The Administrator shall deduct allowances equal in number to and with the same or earlier compliance use date as those allocated to the opt-in source under §74.40 for the calendar year in which the reconstruction is completed and all future years following the year in which the reconstruction is completed; or

(iii) When an opt-in source becomes an affected unit under §72.6 of this chapter. The Administrator shall deduct allowances equal in number to and with the same or earlier compliance use date as those allocated to the