Allowance Allocation under the Final Rule TSD

U.S Environmental Protection Agency

Office of Air and Radiation

March 2023

Allowance Allocation to Existing and New Units under the Final Federal Good Neighbor Plan

This Technical Support Document (TSD) provides information that supports EPA's determination of unit-level allocations for existing and new units under the final Rule. Section VI.B.4 of the preamble discusses state emissions budgets, and section VI.B.9 discusses how quantities of allowances equal to the state emissions budgets are apportioned (i.e., allocated) among existing and new units under the Federal Implementation Plan (FIP) program structure. This TSD provides additional information in support of unit-level allocations and elaborates on the data and methodology used to arrive at the allocations. The TSD is organized as follows:

1) Overview
2) "Existing" and "New" Units
3) New Unit Set-Asides
4) Allocation Methodology for Existing Units
    a. Data and Calculations
    b. States with State-approved Allocation Methodologies
    c. Prorated Allocations to Existing Units for the 2023 Control Period
    d. NODA Process for Allocations from 2026 Onwards
5) Allocation Methodology for New Units

EPA anticipates that some states may choose to submit State Implementation Plans (SIPs) under which the states would determine revised unit-level allocations to existing units that would replace the default allocations defined under the FIP. Section VI.D of the preamble explains when and how states may replace the FIP allocations for vintage year 2024 or later through specific SIP procedures.

1. Overview

As discussed in preamble section VI.B, each state's emissions budget for each "control period" (i.e., the May-September ozone season) is comprised of the emissions that EPA estimates would remain in that control period after the state has implemented control stringency measures required to eliminate its significant contribution to nonattainment and interference with maintenance of the relevant National Ambient Air Quality Standards (NAAQS) in downwind states during the control period. EPA finalized the rule with an interstate allowance trading program. Emission allowances are used in the implementation of this program. Specifically, EPA creates one allowance for each ton of emissions allowed in each control period under each state's emission budget. Each allowance has a "vintage" year, which is the year of the control period for which the allowance is issued. Covered sources are required to submit one such allowance for each ton of the relevant pollutant emitted during the control period (and additional allowances when emissions exceed certain thresholds, as explained further in preamble sections VI.B.1, VI.B.5, and VI.B.7). To implement the programs, allowances are initially allocated among covered sources within a state.

As discussed in the preamble, under the FIP, EPA allocates allowances to sources in each state equal to that state's total emissions budget for each control period. The state emissions budgets, described in preamble section VI.B.4, are determined through application for each control period of the control stringency measures identified in the multi-factor analysis outlined in section V of the preamble. Unit-level allowance allocations are not determined until after state emissions budgets are determined, and the methodology used to determine states' emissions budgets is independent of and not affected by the methodology used to determine unit-level allowance allocations.

As discussed in section VI.B.9 of the preamble, under the FIPs, EPA will distribute allowances equal to each state's emissions budget for each control period to units located in the state. However, the emissions budget will first be divided into two different portions listed below (note, amounts vary by state):

1) New unit set-aside (NUSA)
2) Existing unit portion of budget (including Indian country existing units)

The portion of the state emissions budget for each control period not set aside for potential allocation to new units (91% to 95% of the total budget, depending on the state and control period) will be distributed among the "existing" units in the state (and Indian country within the state's borders) for that control period in advance of the control period for which the allowances are issued. The remaining amount will be held back and will be distributed among the "new" units in the state (and Indian country within the state's borders) for that control period after the end of the control period but before the compliance deadline for the control period. If any of the NUSA allowances are not allocated to qualifying "new" units, the allowances will be allocated to "existing" units in proportion to the allocations from the portion of the budget initially allocated to "existing" units so that the allowances will be available for compliance in the control period.

This TSD details how the units eligible to receive allocations as existing units and new units are determined for each control period, how the quantities of allowances set aside for potential allocations to new units are determined, and how the amounts of allocations to existing and new units are calculated. In the final rule, EPA has determined illustrative allocations to existing units for the 2023 control period[1] and final allocations to existing units for the 2024 and 2025 control periods. An appendix to this document shows each affected EGU's illustrative allocation under the finalized FIP for the 2023 control period and final allocations for the 2024 and 2025 control periods along with the underlying data and calculations used to derive the allocations. Allocations to existing units for control periods in 2026 and later years will be determined in the year before each control period using the methodology described in this TSD and codified in the revised trading program regulations at 40 CFR 97.1011(b).

2) "Existing" and "New" Units

Under this final rule, the determination of whether a unit is eligible to receive allocations as an "existing" unit or as a "new" unit varies across control periods. For the control periods in 2023 through 2025, a unit in a covered state meeting the CSAPR applicability criteria is treated as eligible to receive an allocation as an existing unit if the unit's emissions were considered in the process for determining the state's emissions budget for the respective control period in the final rule. Thus, if the unit was subject to requirements to report emissions and heat input under 40 CFR part 75 for the entire ozone season from May 1, 2021, through September 30, 2021, and reported any heat input greater than zero during that period, the unit is generally treated as eligible to receive an allocation as an existing unit for the control periods in 2023 through 2025.[2] However, there are two exceptions. First, if a unit has already officially retired or has scheduled retirement prior to the first day of a given control period (e.g., May 1, 2023, in

[1] As discussed below, final allocations for the 2023 control period will be determined based on the final prorated 2023 state emissions budgets as expeditiously as possible after the rule's effective date is known.

[2] In order to be subject to requirements to report heat input for the entire 2021 ozone season, a unit's deadline for certification of part 75 monitoring systems would have to be no later than May 1, 2021, which in turn generally means that the unit would have to have commenced commercial operation at least 180 days earlier, or no later than November 2, 2020. Under the CSAPR trading program regulations, units are not subject to allowance holding requirements until their monitor certification deadlines.

the case of the 2023 control period) with sufficient certainty to be reflected as a retired unit in the emissions budget-setting process for that control period, then the unit is treated as ineligible to receive an allocation as an existing unit for that control period.[3] Second, if a unit subject to part 75 reporting requirements for the entire 2021 ozone season reported zero heat input for the 2021 ozone season but reported heat input greater than zero for the 2022 ozone season, then in the absence of other information indicating that the unit either has already retired or is scheduled to retire, the unit is treated as eligible to receive an allocation as an existing unit for the control periods in 2023 through 2025.

The Group 3 trading program continues to use the existing applicability criteria in 40 CFR 97.1004 of the regulations without change, as discussed in section VI.B.3 of the preamble. Because the same applicability criteria are used in all the CSAPR trading programs, in states that are already covered by a CSAPR trading program, the inventory of units subject to this rule should be the same inventory of units currently reporting under other CSAPR trading programs (although some units that were considered new units under other CSAPR programs will be considered existing units under this rule). EPA has generally relied on data already reported under the Group 3 trading program, other CSAPR trading programs, and the Acid Rain Program (which has similar but not identical applicability criteria) to determine which units in a state are likely to also be covered under this rule. In states not currently subject to any CSAPR trading program, EPA has identified a small number of units that potentially meet the CSAPR applicability criteria and that have not been reporting to EPA under the Acid Rain Program, as listed in preamble Table VI.B.3-1. While these units commenced commercial operation before 2021, they have not previously reported NO_X emissions and heat input data to EPA under 40 CFR part 75 and consequently will not be treated as "existing" units for purposes of allocations under this rule for the 2023-2025 control periods.

For the control periods in 2026 and thereafter, a unit in a covered state meeting the CSAPR applicability criteria will be treated as eligible to receive an allocation as an existing unit for a given control period if the unit's emissions are considered in the process for determining the dynamic emissions budget for the state and control period.[4] Thus, if the unit was subject to requirements to report heat input under 40 CFR part 75 for the entire ozone season two years before the control period for which allowances are being allocated and reported any heat input greater than zero during that ozone season, the unit will be treated as eligible to receive an allocation as an existing unit for that control period.

For all control periods, a unit in a covered state meeting the CSAPR applicability criteria will be treated as eligible to receive an allocation as a "new" unit if the unit reported emissions subject to allowance holding requirements for the control period and was not treated as eligible to receive an allocation for that control period as an existing unit. Units eligible to receive allocations as new units include not only units that commenced operation too recently to be considered in the process of setting a state's emissions budget for the control period but also units that were treated as ineligible to receive allocations as existing units because of a scheduled retirement but that actually operate during the control period for which allowances are being allocated. A unit that was treated as eligible to receive an allocation as an existing unit for a given control period and that received an allocation of zero allowances is not eligible to receive an allocation as a new unit for that control period.

[3] This exception was also used in the process of identifying units eligible to receive allocations as existing units in the Revised CSAPR Update.

[4] These criteria for determining whether a unit in a given state is eligible to receive an allocation as an existing unit apply even if, during a control period from 2026 through 2029, the state's emissions budget for the control period is the preset emissions budget determined for the state and control period in this final rule rather than the dynamic emissions budget calculated for the state in the year before the control period.

The approach to determining which units will be treated as "existing" or "new" for purposes of allocations is discussed further in preamble section VI.B.9. EPA notes that the approach described here for determining whether a unit is considered "existing" or "new" for purposes of allowance allocations under this final rule applies only to the Group 3 trading program, not to any other CSAPR trading program. A unit may be considered an "existing" unit for purposes of allocations under one CSAPR trading program for a given control period and a "new" unit for purposes of allocations under another CSAPR trading program for the same control period.

3) **New Unit Set Asides**

The new unit set-aside for ozone season NO_X for each state for each control period is calculated as a percentage of the state's total emissions budget for the control period. This percentage is the sum of a "base" percentage that all states receive for "potential" new units and, for the 2023 to 2025 control periods only, a state-specific percentage reflecting emissions from "planned" units, but not less than a total of 5%. For purposes of this document, the "potential" units on which the new source set-aside base percentage relies are those units that are projected new builds in future years. In other words, they are units that do not show up in the modeling input but do show up in the modeling output. "Planned" units, on which the state-specific percentage of the new source set-aside is based for the 2023 to 2025 control periods, are those units that are already identified in the modeling input because they are specific plants that are already built or are under construction, but that commence commercial operation on or after November 2, 2020. Because the location of these "planned" units is already known and identified in the modeling input, the portion of the new unit set-aside corresponding to these units is state-specific.

In the final rule, EPA has determined to use the same base percentage of the new unit set-aside of 2% established in the original Cross State Air Pollution Rule finalized in 2011, the CSAPR Update Rule finalized in 2016, and the Revised CSAPR Update finalized in 2021. EPA identified the 2% value as a reasonable set-aside for potential new units as it reflected the high end of state-level emissions from projected – or potential – new units. EPA determined that this 2% level was reasonable for this final rule as well.

The "state-specific" percentage for the 2023 to 2025 control periods represents the share of each state budget that EPA projects to be emitted from "planned" units in 2025. As discussed previously, determining the state-specific percentage is necessary given the new unit definition used in the finalized rule. EPA is determining a state-specific percentage for projected emissions from "planned" units because unlike the location of new capacity that the model projects to be built, the location of planned units is already known[5].

After calculating a "state-specific" percentage for planned new units for the 2023 to 2025 control periods and adding the 2% for potential new units, a floor of 5% was applied for every state. By applying this floor, EPA chose a conservative envelope that would provide a pool of new unit set-aside allowances large enough to cover emissions from "potential" new units as well as any units that operate during the control period but that did not receive allocations as "existing" units for the control period because they were treated as having ceased operations. EPA chose this basis in order to preserve a reasonable amount of allowances for new unit allocations in every state, as new units may not be sited in the same locations that EPA's modeling assumes for analytical purposes.

Under the existing CSAPR Update trading program, EPA has already approved a SIP revision for one state – New York – that reflects a state preference to set aside 5% of the budget for the NUSA rather than the amount that EPA would have allocated under the CSAPR Update FIP. For purposes of this final rule for the 2023 to 2025 control periods, EPA intends to replicate individual states' allocation

[5] A description and list of these planned units is under "New Units" in Section B and Appendix A of the Ozone Transport Policy Analysis Final Rule TSD, respectively.

preferences to the extent practicable where those preferences are known from prior SIP revisions. Accordingly, for New York EPA finalized to set aside 5% of each budget for new units in the same manner as for other states.

For control periods in 2026 and later years, EPA will allocate a total of 5% of each state emissions budget to a new unit set-aside for the state, with no additional amount for planned new units. The purpose of this change to the NUSA percentages is to coordinate with the dynamic budget-setting process that would also become effective as of the 2026 control period. By the 2026 control period, all units that commence commercial operation before issuance of a final rule in this rulemaking will be considered "existing" units for purposes of budget-setting and allocations, and units commencing commercial operation after issuance of the final rule generally will be considered "existing" units for all but their first two full control periods of operation (and possibly a preceding partial control period). Given that new units would not be relying on the new unit set-asides as a permanent source of allowances, as is the case for "new" units under the other CSAPR trading programs, EPA believes set-asides that do not include any increment for "planned" new units will be sufficient.

The base and state-specific percentages were added for each state to determine the size of that state's finalized new-unit set asides for the 2023 to 2025 control periods, which are shown in Tables 1A to 1C below.

Table 1A: 2023 Budgets and New Unit Set-Asides (NUSAs) Before Prorating

State	State emission budgets (tons)	Portion set aside for new units (%)	NUSA for new units (tons)
Alabama	6,379	5	319
Arkansas	8,927	5	446
Illinois	7,474	5	374
Indiana	12,440	5	622
Kentucky	13,601	5	680
Louisiana	9,363	5	468
Maryland	1,206	5	60
Michigan	10,727	5	536
Minnesota	5,504	5	275
Mississippi	6,210	5	311
Missouri	12,598	5	630
Nevada	2,368	9	213
New Jersey	773	5	39
New York	3,912	5	196
Ohio	9,110	6	547
Oklahoma	10,271	5	514
Pennsylvania	8,138	5	407
Texas	40,134	5	2,007
Utah	15,755	5	788
Virginia	3,143	5	157
West Virginia	13,791	5	690
Wisconsin	6,295	5	315

Table 1B: 2024 Budgets and New Unit Set-Asides (NUSAs)

State	State emission budgets (tons)	Portion set aside for new units (%)	NUSA for new units (tons)
Alabama	6,489	5	324
Arkansas	8,927	5	446
Illinois	7,325	5	366
Indiana	11,413	5	571
Kentucky	12,999	5	650
Louisiana	9,363	5	468
Maryland	1,206	5	60
Michigan	10,275	5	514
Minnesota	4,058	5	203
Mississippi	5,058	5	253
Missouri	11,116	5	556
Nevada	2,589	9	233
New Jersey	773	5	39
New York	3,912	5	196
Ohio	7,929	6	476
Oklahoma	9,384	5	469
Pennsylvania	8,138	5	407
Texas	40,134	5	2,007
Utah	15,917	5	796
Virginia	2,756	5	138
West Virginia	11,958	5	598
Wisconsin	6,295	5	315

Table 1C: 2025 Budgets and New Unit Set-Asides (NUSAs)

State	State emission budgets (tons)	Portion set aside for new units (%)	NUSA for new units (tons)
Alabama	6,489	5	324
Arkansas	8,927	5	446
Illinois	7,325	5	366
Indiana	11,413	5	571
Kentucky	12,472	5	624
Louisiana	9,107	5	455
Maryland	1,206	5	60
Michigan	10,275	5	514

Minnesota	4,058	5	203
Mississippi	5,037	5	252
Missouri	11,116	5	556
Nevada	2,545	9	229
New Jersey	773	5	39
New York	3,912	5	196
Ohio	7,929	6	476
Oklahoma	9,376	5	469
Pennsylvania	8,138	5	407
Texas	38,542	5	1,927
Utah	15,917	5	796
Virginia	2,756	5	138
West Virginia	11,958	5	598
Wisconsin	5,988	5	299

4) Allocation Methodology for Existing Units

The allocation methodology for existing units bases each unit's allocation on the unit's historical heat input but limits any unit's allocation to its historical maximum emissions or, for some units, as discussed below, the unit's "maximum controlled baseline." Implementation of this methodology involves identifying potentially covered units, collecting the appropriate data for each unit, and performing the calculations. The criteria for identifying units eligible to receive allocations as existing units for each control period are described in section 2 above. This section describes the process of collecting reported data for each eligible unit and calculating allocations from the data.

EPA notes that this procedure will be used to determine default allocations and that states would generally have the ability to replace the default allocations with state-determined allocations starting with the 2024 control period. However, a state would not have the ability to replace the default allocations for any units in areas of Indian country within the state's borders not subject to the state's SIP authority. For any such area of Indian country, EPA will establish an "Indian country existing unit set-aside" containing the default allocations of allowances determined using the procedure below. The state could replace the default allocations for other units (assuming the total of the state-determined allocations for those units does not exceed the total of the default allocations for those units), but the state could not replace the default allocations for the units covered by an Indian country existing unit set-aside. See Section VI.B.9.a of the preamble for further discussion of the Indian country existing unit set-asides.

a) Data and Calculations

For the existing units identified through the process in section 2 above, allocations for each control period are calculated using heat input and NO_X emissions reported under either the CSAPR trading programs or the Acid Rain Program for a 5-year historical baseline period. To calculate allocations for the control periods in 2023 through 2025 in this final rule, EPA is using data reported for the control periods from 2017 through 2021. For the control periods in 2026 and thereafter, EPA will use data reported for the most recent 5-year historical period available at the time of the calculations (e.g., to calculate allocations for the 2026 control period in early 2025, EPA will use reported data from 2020 through 2024). In each control period, the quantity of allowances allocated to existing units in a state

using this methodology will be the portion of the state's emissions budget remaining after subtraction of the new unit set-aside for the control period.

Allocations under this approach for each existing unit are determined by applying the following steps.

1. For each unit in the list of existing units, ozone season heat input values for the appropriate 5-year baseline period (e.g., 2017-2021 data for allocations for a control period in 2023 through 2025, or 2020-2024 data for allocations for the 2026 control period) are identified using data reported to EPA. For a baseline year for which a unit does not report heat input data (e.g., for a baseline year before the year when a unit started operating) or reports heat input of zero, the unit is assigned a zero value. (Step 2 explains how such zero values are treated in the calculations.) The allocation method uses a five-year baseline period in order to improve representativeness of a unit's normal operating conditions over time.
2. For each unit, the three highest, non-zero ozone season heat input values within the five-year baseline period are selected and averaged. Selecting the three highest, non-zero ozone season heat input values within the five-year baseline period reduces the likelihood that any particular single year's operations (which might be negatively affected by outages or other unusual events[6]) determine a unit's allocation. If a unit does not have three non-zero heat input values during the five-year baseline period, EPA averages only those years for which the unit does have non-zero heat input values. For example, if a unit has only reported non-zero heat input data for two of the five baseline years and the reported heat input values are 2 and 4 million British thermal units (MMBtus) respectively, then the unit's average heat input used in the allocation process is (2+4)/2 = 3.
3. Each unit is assigned a baseline heat input value calculated as described in step 2 above. This baseline heat input value is referred to in the data tables in the rulemaking docket as the "three-year average heat input."
4. The three-year average heat inputs of all eligible existing units in a state are summed to obtain that state's total "three-year average heat input."
5. Each unit's three-year average heat input is divided by the state's total three-year average heat input to determine that unit's share of the state's total three-year average heat input.
6. Each unit's share of the state's total three-year average heat input is multiplied by the existing-unit portion of the state emissions budget (i.e., the state budget less the state's new unit set-aside) to determine that unit's tentative heat input-based allocation.
7. For each unit in the list of existing units, total ozone season NO_X emissions amounts for the same 5-year baseline period as in step 1 are identified using data reported to EPA. (Note that a five-year historical emissions baseline period is used in this rulemaking, matching the five-year historical heat input baseline period, unlike in previous rulemakings where EPA used an eight-year historical emissions baseline period).
8. For each unit, the maximum ozone season NO_X emissions value from the five-year baseline period for the unit is identified. These values are referred to as the "maximum total NO_X emissions value" for each unit. Additionally, starting in 2024 for coal-fired units with existing SCR controls, and starting in 2027 for other coal-fired units of 100 MW or larger (except circulating fluidized bed units), a "maximum controlled baseline" is calculated for each such unit by multiplying the unit's maximum ozone season heat input from the baseline period identified at

[6] For example, data from 2020 could be anomalously low due to the COVID pandemic. However, using the three highest years of data means that for units where this is the case, these data will not be considered.

step 1 times a NO_X emissions rate of 0.08 lb/mmBtu. The lower of the unit's "maximum total NO_X emissions value" or, where applicable, the unit's "maximum controlled baseline" is the unit's tentative allocation cap.

9. If a unit has a tentative heat-input based allocation (as determined in step 6) that exceeds its tentative allocation cap (as determined in step 8), then its allocation generally equals the lesser of the two for that unit.
10. The difference (if positive) under step 9 between a unit's historical heat-input-based allocation and its tentative allocation cap will be reapportioned on the same basis as described in steps 1 through 6 among all units in the state whose tentative heat-input-based allocations do not exceed their tentative allocation caps. Steps 7, 8, and 9 are repeated with each revised allocation distribution until the entire existing-unit portion of the state budget is allocated. (If all units in a state reach their tentative allocation caps, then any remaining allowances are allocated to all the units in proportion to their baseline heat input values.) The resulting allocation values are rounded to the nearest whole number using conventional rounding. (If the sum of the rounded allocation values for all existing units in a given state does not equal the total amount of allowances being allocated among those units, the largest rounded allocation values for the individual units in the state are each adjusted upward or downward by one allowance as necessary to make the sum of the adjusted allocation values equal the total amount of allowances being allocated. This step is repeated if necessary.) The table below provides an example application of the steps 1-10 in a hypothetical state.

Source data can be found at https://campd.epa.gov/

Table 2: Demonstration of Allocations Using Finalized Allocation Methodology in a Three-Unit State With a 80 Ton State Budget

	Steps 1-6	**Steps 7-9**		**Step 10**
	Historical Heat-input-based Tentative Allocation	**Maximum Total NO_X Emissions**	**Maximum Controlled Baseline**	**Allocation**
Unit A	20	16	30	16
Unit B	30	50	25	25
Unit C	30	50	N/A	39

Where can I find these data?

The illustrative unit level allocations for the 2023 control period and the final unit-level allocations for the 2024 and 2025 control periods can be found in the separate file titled "Unit-level allocations and underlying data for the final rule" published as an Excel file and available on EPA's website, in the docket, and available as an appendix to this document. The file contains eight worksheets. The first worksheet, titled "State Summary" provides summary details. The second, titled "GNP Allocations", identifies each unit and its 2023 to 2025 allocations under the trading program. It also shows, for 2023, an example of calculations of the prorated allocations for the 2023 control period based on an illustrative assumption concerning the number of days between May 1, 2023 and the rule's effective date. The third worksheet, titled "Underlying Data for FIP", shows all the data and calculations that are enumerated above. Each of the ten steps is color coded and displayed in sequential order moving from left to right across the spreadsheet. The formulas to derive any calculated values are explained directly beneath the column headers. The fourth, fifth, and sixth worksheets show data and calculations described in section

4b (States with state-approved allocation methodologies) for states where state-approved allocation methodologies from SIP submittals were used in place of EPA's default allocation methodology described above. The seventh worksheet, titled "Retired Units", lists those units for which EPA has not received official notification of retirement but which EPA nevertheless believes were retired units as of January 1, 2021 as well as units with scheduled future retirements known with sufficient certainty prior to May 1, 2023 to be taken into account in the budget-setting process; EPA is not determining allocations for these units as existing units for control periods following the year of retirement or scheduled retirement.[7] If the units resume operation, they would have to comply with the program (they would initially qualify for NUSA allocations; due to dynamic budgeting, they would again be existing units in approximately two years). The eighth worksheet lists units which commenced commercial operation on or after November 2, 2020 and are considered new units. Finally, to allow identification of units that would receive allocations from an Indian country existing unit set-aside if a state chose to submit a SIP as discussed in preamble sections VI.D.2 and VI.D.3, a flag indicating units that are currently understood as not being subject to a state's SIP authority is included in the third through sixth worksheets.

Consent Decrees

EPA's consent decrees with fossil fuel-fired power plants were examined to evaluate if these impact unit level allocations. (https://www.epa.gov/enforcement/coal-fired-power-plant-enforcement)

Tonnage limits in the consent decrees were evaluated first. There are no ozone season tonnage limits in these consent decrees, only annual tonnage limits. The annual tonnage limits were each checked and in all cases are above the unit-level allocations of ozone season allowances under this rule. In other words, no ozone season unit-level allocation exceeds an annual limitation established in the consent decrees. Therefore, tonnage limits in the consent decrees are not relevant to the ozone season unit level allocation process in the final rule. EPA also looked at NO_x emission rate limits in these consent decrees; this information can be found in a separate file entitled "Impact of coal consent decrees for the final rule". When the emission rate limits are applied with an assumption of average heat input, EPA found that collectively, across all units with emission rate limits under the consent decrees, the amount of allowances allocated to the units could exceed the estimated emissions allowed under the units' rate limits by a total of 209, 33, and 33 tons in 2023, 2024, and 2025, respectively. This analysis included 42 units with consent decree NO_x emission rate limits that are considered existing units in the final rule. Moreover, EPA determined that if maximum allowable heat inputs were assumed instead of average heat inputs, no unit would have an allowance allocation exceeding its emission rate limit in any program year. Therefore, EPA concluded that the emission rate limits in the consent decrees would affect very few allowances in the final trading program, if any. Any effort to reallocate the allowances potentially made unusable by emission rate limits would require EPA to make assumptions about individual units' future utilization and heat input. Because this would require the use of unit-level projections whose application in setting unit-level allocations would be difficult to support, and because few allowances are potentially at risk, EPA has chosen not to adjust allocations to reflect emission rate limits defined in the consent decrees. EPA again notes that states may substitute their own state-determined allowance allocations for EPA's default allowance allocations for control periods starting in 2024 through SIP revisions.

b) States with State-approved Allocation Methodologies

[7] The spreadsheet generally does not list units for which, at the time the spreadsheet was prepared, EPA had already received official notifications that the units were retired before January 1, 2021. However, as discussed above, these units are likewise ineligible to receive allocations as existing units for the trading program established in this action.

In the Revised CSAPR Update, for any state where EPA had already approved a SIP revision addressing the allocation of CSAPR ozone season NO_X allowances among the units in the state, if the SIP's allocation provisions could be applied to an updated budget, EPA used the allocation methodology in the approved SIP revision to govern the allocation of allowances among that state's units under the final rule. In this rule, EPA is following the same approach to make allocations to existing units for the 2023 to 2025 control periods. For control periods in 2026 and later years, EPA will use the standard FIP allocation provisions to determine the default allocations for units in these states. However, EPA notes that any state would have the opportunity to substitute state-determined allocations for the default allocations through an approved SIP revision starting with the 2024 control period, if desired.

Three of the states that are covered by the final rule – Alabama, Indiana, and New York – have approved SIP revisions with state methodologies for allocating allowances. *See* 83 FR 64472 (Dec. 17, 2018) (Indiana); 84 FR 38878 (Aug. 8, 2019) (New York). The allocation methodologies used for existing units in these states are described below.

Alabama

1) In step 8, instead of the standard baseline period of 2017 through 2021, ozone season NO_X values for the baseline period of 2014 through 2021 are identified using data reported to EPA. Also, the state's methodology does not call for calculation of a maximum controlled baseline.
2) Except as noted, the standard unit level allocation methodology and standard NUSA methodology are utilized.

Indiana

1) In step 1, instead of the standard baseline period of 2017 through 2021, ozone season heat input values for the baseline period of 2014 through 2021 are identified using data reported to EPA; and in step 8, instead of the standard baseline period of 2017 through 2021, ozone season NO_X values for the baseline period of 2014 through 2021 are identified using data reported to EPA. Also, the state's methodology does not call for calculation of a maximum controlled baseline.
2) In step 2, the standard methodology is used to average the three highest, non-zero ozone season heat input values within this longer eight-year baseline period.
3) Except as noted, the standard unit level allocation methodology and standard NUSA methodology are utilized.

New York

1) A preliminary allocation for each unit is computed as the average of the unit's ozone season NO_X emissions for the years 2019 to 2021, with zero data years included in the averages as zeroes.
2) All preliminary unit allocations at the end of step 1) are summed. If the sum is no more than 85% of the state budget, proceed to step 4). If the sum exceeds 85% of the state budget, first do step 3).
3) Apply an equivalent ratio to all preliminary unit allocations from step 1) to reduce the sum of all unit allocations to 85% of the state budget.
4) The preliminary unit allocation value is rounded to the nearest whole number using conventional rounding.
5) The total portion of the state budget set aside for new units is 5%.
6) The difference between the sum of all unit allocations and the total NUSA portion is allocated to NYSERDA. By definition this must be at least 10% of the state budget, though it could be higher.

c) Prorated Allocations to Existing Units for the 2023 Control Period

While the illustrative state emissions budgets calculated in the final rule for the 2023 control period have been computed on the basis of data for the full 2023 ozone season, EPA anticipates that the effective date of this final rule will fall after May 1, 2023. To ensure that the enhanced control stringency represented by

the new budgets will not take effect until after the final rule's effective date, EPA will determine prorated state emissions budgets and unit-level allowance allocations for the 2023 control period. For the portion of the 2023 control period occurring between May 1, 2023 and the rule's effective date, the budgets for each state covered by the rule will equal the budgets that would have applied to the state for the 2023 control period in the absence of this rule (i.e., the current Group 3 budget for states in the Group 3 trading program before this final rule, the current Group 2 budget for states in the Group 2 trading program before this final rule, and zero for states not in either the Group 3 or the Group 2 trading program) prorated by the number of days from May 1, 2023 through the day before the final rule's effective date. For the portion of the 2023 control period occurring from the rule's effective date through September 30, 2023, the budgets for each state will equal the 2023 full-season budgets determined under this rule, prorated by the number of days from the final rule's effective date through September 30, 2023. This is discussed in detail in section VI.B.12.a of the preamble. The new unit set-aside for each state will be calculated by multiplying the state's prorated budget times the 2023 NUSA percentage identified for the state in section 3 of this document, and the remaining allowances issued for each state will be allocated among the state's existing units using the methodology described in section 4 of this document.

EPA will post an updated version of the "Unit-level allocations and underlying data for the final rule" spreadsheet referenced above showing the calculations of unit-level allocations of the prorated allowances and will provide public notice of the updated spreadsheet's availability.

d) NODA Process for Allocations from 2026 Onwards

Unit-level allocations for control periods in 2026 and later years will be calculated in the year before each control period using the methodology described in this document and set forth in the revised Group 3 trading program regulations at 40 CFR 97.1010(c) and 97.1011. After EPA performs the preliminary computations for each such control period, the Agency will issue a NODA with the preliminary unit-level allocations for each control period and will give stakeholders an opportunity to submit any objections to the data or preliminary computations. EPA will then make any necessary adjustments to the data and calculations and will issue another NODA with the final unit-level allocations for each control period.

5) Allocation Methodology for New Units

New units will receive allowance allocations from the new unit set-aside accounts described in section 3 above. EPA will allocate allowances from the new unit set-asides after the end of each control period but before the allowance transfer deadline for the control period (i.e., the date when each unit must hold allowances at least equal to its emissions during the control period). Allowances generally will be allocated among the eligible units in proportion to the units' respective emissions during the control period, up to the amounts of those emissions. However, for any unit to which a "maximum controlled baseline" would apply for a given control period if the unit was eligible to receive allocations as an existing unit for that control period (see step 8 in section 4a above), the unit's allocation from the NUSA will be limited to the unit's heat input for the control period times an emissions rate of 0.08 lb/MMBtu, rounded to the nearest ton.

For each control period, any allowances remaining in a state's new unit set-aside after allocations are made to new units in accordance with the regulations will be distributed to the existing units in that state in proportion to the existing units' original allocations. This ensures that total allocations to units in the state will be equal to the state budget in that year.

Appendix

"Unit-level allocations and underlying data for the final rule" available in accompanying excel file

“Impact of coal consent decrees for the final rule” available in accompanying excel file