

In addition to this flexibility, there may be a need for additional flexibility in using the basic design parameters that are spelled out in today's rule. For instance with boilers, maximum steam production rate is often used by the industry, and it may make sense in some cases to set the design parameters based on those values rather than on maximum heat input. Likewise, a crude oil distillation tower may have several capacities that are a function of the type of crude that is to be processed, and so a refiner may need to have a set of basic design parameters for its crude towers. These situations can be addressed by the source proposing alternative parameters or sets of parameters to their reviewing authority.

Also, there should be flexibility in how the basic design parameters are demonstrated when the owner or operator chooses not to rely on the design information for its process unit. For example, in order to establish the heat input value that the process unit has demonstrated it is capable of achieving, an electric generating unit should have the flexibility to reference available credible information, such as results of historic maximum capability tests or engineering calculations. Results from tests performed by electric utilities in the context of providing assurances to generation dispatch systems and regional or national power pools may be used to establish the process unit's maximum heat input. A review of such data or other available operational data or design information can reveal the heat input that the process unit is capable of achieving in its "pre-activity" configuration, and this can be compared to a "post-activity" heat input value. Plant operators, where the specified basic design parameters are inappropriate for the process, can propose what the measure of performance will be for these process units, including the use of permit limits on amount of production, to their reviewing authority. For process units having multiple end products and raw materials, the owner or operator should consider the primary product or primary raw material when selecting a basic design parameter.

Many pieces of equipment are purchased based on their capacity or output. Consequently, for both utilities and non-utilities, we have modified the proposed basic design parameters to include output-based alternatives in today's final rule. For utilities, the owner or operator can select maximum hourly electric output rate and maximum steam flow rate as its basic design parameters, as an alternative to using input-based measures of

maximum hourly fuel consumption rate and maximum hourly heat input. (We are clarifying from the proposal that the correct parameter is maximum hourly heat input, not maximum heat input.) Owners or operators may set different design parameters for different fuel types (such as coal or oil) or a combustion device that can accommodate multiple fuel types: for coal-fired units, owners or operators should consider that the fuel consumption rate will vary depending on the quality of the coal for a given heat input. When establishing fuel consumption specifications in terms of weight or volume, the minimum fuel quality based on BTU content should be used for coal-fired units.

Regardless of whether the source selects a basic design parameter(s) specified for non-utilities in today's rule or gets approval from their reviewing authority to use an alternative parameter(s) for any type of source, we have not specified a fixed averaging time period for the circumstance because we want the owner or operator to have the flexibility to select an averaging time that best accommodates their operation. In most cases, we believe that long term averaging periods (e.g., a 12-month fixed period) will not be appropriate.

Thus, an equipment replacement that improves a process unit's efficiency and thereby enables the unit to return to its design parameters can qualify as RMRR even if current actual emissions increase as a result. For example, if boiler tubes or refractories are replaced on a boiler process unit, and these activities are beneath the capital cost threshold and are within the unit's basic design parameters, then they would qualify as RMRR under the ERP even if this improves the unit's efficiency.

The manufacturer's design parameters of a process unit are always acceptable if an owner or operator chooses to rely on them. In the rare cases where a facility does not have established design parameters, we believe that a reasonable look back period should be used for establishing the pre-activity values for basic design parameters, rather than taking the condition of the process unit immediately before the activity. We have therefore established a 5-year look back period, consistent with that for the NSPS hourly emissions increase test, for these situations.

We were urged by some commenters to incorporate a *de minimis* increase level in the basic design parameters that would allow activities to qualify for the ERP even though the activities would result in a minor change to the relevant basic design parameters. They argued

that some effects resulting from the replacement may not be apparent before the equipment has been replaced. They argued that allowing for small changes in basic design parameters would add greater certainty to the ERP because unforeseen small changes would not cause an activity to lose the exclusion after the fact. While we sympathize with the commenter's concern, we do not see a ready solution to this problem under the RMRR exclusion. In fact, we are not persuaded that those types of changes can be readily justified under the ERP because it is hard to see how an activity that causes basic design parameters to change is not "a change" under NSR.

In sum, we continue to believe that an identical or functionally equivalent replacement should not qualify for the ERP if the activity causes the process unit to exceed its specified basic design parameters. Without such a requirement, significant alteration of a process unit's fundamental design could be accomplished under the guise of the ERP. Such an outcome obviously does not square with the idea that identical or functionally equivalent replacements are not "changes" under the major NSR program. Our final rule is different from the proposal, however, in that it provides greater flexibility in defining basic design parameters for process units. We were persuaded by commenters who expressed concerns that the proposed approaches did not adequately encompass all affected operations and industry sectors.

F. What Collection of Equipment Should Be Considered in Applying the Equipment Replacement Provision and How Should It Be Defined?

In the proposal, we raised the issue of what collection of equipment should be considered in applying the threshold under the ERP. We proposed the term "process unit" as the appropriate collection to accommodate the intended coverage of activities under the ERP. The purpose of this term is, to the extent possible, to align implementation of the ERP with generally accepted and practical understandings of what constitutes a discrete production process. The general definition that we proposed was based closely on the definition of process unit contained in 40 CFR 63.41 and read as follows:

Process unit means any collection of structures and/or equipment that processes, assembles, applies, blends, or otherwise uses material inputs to produce or store a completed product. A single facility may contain more than one process unit.

To help illustrate these concepts, we further proposed five industry-specific