

**§ 60.45Da**

**§ 60.45Da Alternative standards for combined nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO).**

(a) The owner or operator of an affected facility that commenced construction, reconstruction, or modification after May 3, 2011 as alternate to meeting the applicable NO<sub>x</sub> emissions limits specified in § 60.44Da may elect to meet the applicable standards for combined NO<sub>x</sub> and CO specified in paragraph (b) of this section.

(b) On and after the date on which the initial performance test is completed or required to be completed under § 60.8 no owner or operator of an affected facility that commenced construction, reconstruction, or modification after May 3, 2011, shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO<sub>x</sub> (expressed as NO<sub>2</sub>) plus CO in excess of the applicable emissions limit specified in paragraphs (b)(1) through (3) of this section as determined on a 30-boiler operating day rolling average basis.

(1) For an affected facility which commenced construction or reconstruction, any gases that contain NO<sub>x</sub> plus CO in excess of either:

- (i) 140 ng/J (1.1 lb/MWh) gross energy output; or
- (ii) 150 ng/J (1.2 lb/MWh) net energy output.

(2) For an affected facility which commenced construction or reconstruction and that burns 75 percent or more coal refuse (by heat input) on a 12-month rolling average basis, any gases that contain NO<sub>x</sub> plus CO in excess of either:

- (i) 160 ng/J (1.3 lb/MWh) gross energy output; or
- (ii) 170 ng/J (1.4 lb/MWh) net energy output.

(3) For an affected facility which commenced modification, any gases that contain NO<sub>x</sub> plus CO in excess of 190 ng/J (1.5 lb/MWh) gross energy output.

[77 FR 9453, Feb. 16, 2012]

**§ 60.46Da [Reserved]**

**§ 60.47Da Commercial demonstration permit.**

(a) An owner or operator of an affected facility proposing to dem-

onstrate an emerging technology may apply to the Administrator for a commercial demonstration permit. The Administrator will issue a commercial demonstration permit in accordance with paragraph (e) of this section. Commercial demonstration permits may be issued only by the Administrator, and this authority will not be delegated.

(b) An owner or operator of an affected facility that combusts solid solvent refined coal (SRC-I) and who is issued a commercial demonstration permit by the Administrator is not subject to the SO<sub>2</sub> emission reduction requirements under § 60.43Da(c) but must, as a minimum, reduce SO<sub>2</sub> emissions to 20 percent of the potential combustion concentration (80 percent reduction) for each 24-hour period of steam generator operation and to less than 520 ng/J (1.20 lb/MMBtu) heat input on a 30-day rolling average basis.

(c) An owner or operator of an affected facility that uses fluidized bed combustion (atmospheric or pressurized) and who is issued a commercial demonstration permit by the Administrator is not subject to the SO<sub>2</sub> emission reduction requirements under § 60.43Da(a) but must, as a minimum, reduce SO<sub>2</sub> emissions to 15 percent of the potential combustion concentration (85 percent reduction) on a 30-day rolling average basis and to less than 520 ng/J (1.20 lb/MMBtu) heat input on a 30-day rolling average basis.

(d) The owner or operator of an affected facility that combusts coal-derived liquid fuel and who is issued a commercial demonstration permit by the Administrator is not subject to the applicable NO<sub>x</sub> emission limitation and percent reduction under § 60.44Da(a) but must, as a minimum, reduce emissions to less than 300 ng/J (0.70 lb/MMBtu) heat input on a 30-day rolling average basis.

(e) Commercial demonstration permits may not exceed the following equivalent MW electrical generation capacity for any one technology category, and the total equivalent MW electrical generation capacity for all commercial demonstration plants may not exceed 15,000 MW.

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Technology	Pollutant	Equivalent electrical capacity (MW electrical output)
Solid solvent refined coal (SCR I) .....	SO <sub>2</sub> .....	6,000–10,000
Fluidized bed combustion (atmospheric) .....	SO <sub>2</sub> .....	400–3,000
Fluidized bed combustion (pressurized) .....	SO <sub>2</sub> .....	400–1,200
Coal liquification .....	NO <sub>x</sub> .....	750–10,000
Total allowable for all technologies .....	.....	15,000

(f) An owner or operator of an affected facility that uses a pressurized fluidized bed or a multi-pollutant emissions controls system who is issued a commercial demonstration permit by the Administrator is not subject to the total PM emission reduction requirements under §60.42Da but must, as a minimum, reduce PM emissions to less than 6.4 ng/J (0.015 lb/MMBtu) heat input.

(g) An owner or operator of an affected facility that uses a pressurized fluidized bed or a multi-pollutant emissions controls system who is issued a commercial demonstration permit by the Administrator is not subject to the SO<sub>2</sub> standards or emission reduction requirements under §60.43Da but must, as a minimum, reduce SO<sub>2</sub> emissions to 5 percent of the potential combustion concentration (95 percent reduction) or to less than 180 ng/J (1.4 lb/MWh) gross

energy output on a 30-boiler operating day rolling average basis.

(h) An owner or operator of an affected facility that uses a pressurized fluidized bed or a multi-pollutant emissions control system or advanced combustion controls who is issued a commercial demonstration permit by the Administrator is not subject to the NO<sub>x</sub> standards or emission reduction requirements under §60.44Da but must, as a minimum, reduce NO<sub>x</sub> emissions to less than 130 ng/J (1.0 lb/MWh) or the combined NO<sub>x</sub> plus CO emissions to less than 180 ng/J (1.4 lb/MWh) gross energy output on a 30-boiler operating day rolling average basis.

(i) Commercial demonstration permits may not exceed the following equivalent MW electrical generation capacity for any one technology category listed in the following table.

Technology	Pollutant	Equivalent electrical capacity (MW electrical output)
Multi-pollutant Emission Control .....	SO <sub>2</sub> .....	1,000
Multi-pollutant Emission Control .....	NO <sub>x</sub> .....	1,000
Multi-pollutant Emission Control .....	PM .....	1,000
Pressurized Fluidized Bed Combustion .....	SO <sub>2</sub> .....	1,000
Pressurized Fluidized Bed Combustion .....	NO <sub>x</sub> .....	1,000
Pressurized Fluidized Bed Combustion .....	PM .....	1,000
Advanced Combustion Controls .....	NO <sub>x</sub> .....	1,000

[72 FR 32722, June 13, 2007, as amended at 77 FR 9450, Feb. 16, 2012]

**§ 60.48Da Compliance provisions.**

(a) For affected facilities for which construction, modification, or reconstruction commenced before May 4, 2011, the applicable PM emissions limit and opacity standard under § 60.42Da, SO<sub>2</sub> emissions limit under §60.43Da, and NO<sub>x</sub> emissions limit under §60.44Da apply at all times except during periods of startup, shutdown, or malfunction. For affected facilities for which construction, modification, or reconstruction commenced after May 3, 2011,

the applicable SO<sub>2</sub> emissions limit under §60.43Da, NO<sub>x</sub> emissions limit under §60.44Da, and NO<sub>x</sub> plus CO emissions limit under §60.45Da apply at all times. The applicable PM emissions limit and opacity standard under §60.42Da apply at all times except during periods of startup and shutdown.

(b) After the initial performance test required under §60.8, compliance with the applicable SO<sub>2</sub> emissions limit and percentage reduction requirements under §60.43Da, NO<sub>x</sub> emissions limit under §60.44Da, and NO<sub>x</sub> plus CO emissions limit under §60.45Da is based on