ILLINOIS POLLUTION CONTROL BOARD
December 21, 2006

IN THE MATTER OF:	)	
	)	
PROPOSED NEW 35 ILL. ADM. CODE 225	)	R06-25
CONTROL OF EMISSIONS FROM LARGE	)	(Rulemaking - Air)
COMBUSTION SOURCES (MERCURY)	)	

Adopted Rule. Final Order.

OPINION AND ORDER OF THE BOARD (by G.T. Girard, A.S. Moore):

The Board today proceeds to final notice with a proposal to reduce emissions of mercury from coal-fired electrical generating units in the State. The Board will file the adopted rule with the Secretary of State pursuant to the Administrative Procedures Act (APA) (5 ILCS 100/5 *et seq*. (2004)) for publication in the *Illinois Register*. The proposal the Board adopts today includes a mercury emissions standard of 0.0080 lb/GWh or a 90% reduction from input mercury, a temporary technology based standard (TTBS), and a multi-pollutant control system (MPS). The following discussion describes the procedural background, summarizes the Board second-notice opinion and order, summarizes the rule language adopted today, and addresses the Board's adoption of the rule.

PROCEDURAL BACKGROUND

On March 14, 2006, the Illinois Environmental Protection Agency (Agency) filed a proposal for rulemaking to limit mercury emissions from large coal-fired electrical generating units (EGU). The proposal was filed pursuant to Sections 9.10, 27, and 28.5 of the Act (415 ILCS 5/9.10, 27, and 28 (2004)). On March 16, 2006, the Board accepted the proposal for first notice under the "fast-track" rulemaking provisions of Section 28.5 of the Act (415 ILCS 5/28.5 (2004)), without commenting on the merits of the proposal.

On April 20, 2006, the Board ruled, in response to various motions, that the Board has the authority under Section 28.5 of the Act (415 ILCS 5/28.5 (2004)) to reject a proposal filed by the Agency pursuant to Section 28.5, if the Board finds that the proposal does not meet the statutory requirements. The Board further found that the proposal met the statutory requirements of Section 28.5 of the Act because failure to adopt a mercury emissions standard could result in the USEPA enforcing the federal CAMR. The Board reasoned that the USEPA enforcing CAMR would constitute a "sanction" as that term is used in Section 28.5 of the Act (415 ILCS 5/28.5 (2004)).

While the Board was considering the motions to remove the proposal from the fast-track procedures, Dynegy Midwest Generation, Inc. (Dynegy), Kincaid, and Midwest Generation, L.L.C. (Midwest Generation) (collectively plaintiffs) filed a complaint in the Sangamon County Circuit Court on April 3, 2006. That case is Dynegy Midwest Generation, Inc., Kincaid Generation, L.L.C., and Midwest Generation, L.L.C. v. PCB and IEPA, No 2006-CH-213. In

that complaint, plaintiffs sought declaratory relief from the court that the use of the fast-track procedures was inappropriate for this rulemaking, that the schedule set by the Board and the hearing officer could not proceed, and that Section 28.5 was unconstitutional. The plaintiffs also asked for injunctive relief. On April 17, 2006, the plaintiffs filed a motion seeking a preliminary injunction against the Board and the Agency. The Sangamon County Circuit Court heard argument on the motion on April 27, 2006, and entered an order granting a preliminary injunction on May 1, 2006. On May 8, 2006, after Dynegy and Ameren filed joint statements with the Board in this rulemaking docket, the Board filed a motion to dismiss the circuit court case, which is still pending.

On May 4, 2006, the Board decided to proceed with the Agency's March 14, 2006 proposal pursuant to Section 27 of the Act (415 ILCS 5/27 (2004)). The Board acknowledged the order of the court, and stated the Board's intent to abide by the court's decision. The Board canceled the hearings scheduled to begin on May 8, 2006, and rescinded the schedules set forth by both the Board and the hearing officer in their respective March 16, 2006 orders. The Board also re-first noticed the proposed rule under the APA (5 ILCS 100/5 *et seq*. (2004)). At the same time, the Board filed a notice of withdrawal of the original first notice that appeared in the *Illinois Register* on March 31, 2006 (30 *Ill. Reg.* 5957). The Board cited only Section 27 of the Act (415 ILCS 5/27 (2004)) as authority for the proposed rule in the new first notice. The new first notice was published in the *Illinois Register* on May 19, 2006 (30 *Ill. Reg.* 9281).

On May 23, 2006, the Agency filed a motion to amend the proposal. On June 15, 2006, the Board accepted the amendment, which was published in the *Illinois Register* on July 28, 2006 (30 *Ill. Reg.* 12706).

The Board began hearings in this proceeding on June 12, 2006, in Springfield before Board Hearing Officer Marie Tipsord. The Springfield hearings continued day-to-day through and including June 23, 2006. After the close of the Springfield hearings, Dynegy and Midwest Generation filed a motion to strike Dr. Gerald Keeler's testimony at the Springfield hearing. On July 20, 2006, the Board denied that motion finding that the rules of evidence in rulemakings before the Board differ from those in a contested case before the Board. In a rulemaking, "[a]ll information that is relevant and not repetitious or privileged will be admitted by the hearing officer." 35 Ill. Adm. Code 102.426. Thus, the Board found that Dr. Keeler's testimony was admissible in this rulemaking proceeding.

The Board began a second set of hearings on August 14, 2006, in Chicago. The Chicago hearings continued day-to-day through and including August 23, 2006.[1] During the hearing, a request for additional hearings was made on the record. The hearing officer directed that the request be filed with the Board and on August 24, 2006, Midwest Generation filed a motion to schedule additional hearings. By hearing officer order, response time was shortened to allow responses without undue delay in the proceeding. The Board received responses from Ameren Energy Generation Company, Amerenenergy Resources Generating Company, and Electric

[1] The transcript pages for the Springfield hearing are not consecutively numbered and therefore will be cited with date and a.m. or p.m. The Chicago hearing transcripts will be cited as "CTr. at".

Energy, Inc. (Ameren), the Agency, and Environmental Law and Policy Center, in opposition to the motion. Kincaid responded in support of the motion. On September 7, 2006, the Board denied the request for additional hearings.

In accordance with Section 27(b) of the Act, the Board requested, in letters dated March 16, 2006 and May 10, 2006, that Department of Commerce and Economic Opportunity (DCEO) conduct an economic impact study for this rulemaking. On June 26, 2006, DCEO responded that DCEO does not have the resources to perform economic impact studies on this rulemaking. The Board received a second response letter on June 29, 2006, which also indicated that DCEO would not perform an economic impact study. During the Chicago hearings, the Board specifically sought comment on the decision of DCEO (*see* CTr. at 6-7).

Pursuant to the hearing officer's order, the deadline for filing comments to ensure that the comments were considered by the Board before proceeding was September 20, 2006. Between the close of hearing and September 20, 2006, the Board received 7286. Also on September 20, 2006, Midwest Generation filed a motion to correct transcript. The Board did not receive any responses to the motion. The Board grants that motion.

On September 25, 2006, Ameren filed a motion for leave to file *instanter* supplemental post-hearing comments. The Board did not receive any responses to the motion. The Board grants that motion and accepts the comment.

On November 2, 2006, the Board adopted the proposal for second notice. On December 12, 2006, the Joint Committee on Administrative Rules voted a certificate of no objection.

SUMMARY OF THE BOARD'S SECOND NOTICE OPINION AN ORDER

The Board's second-notice was a 90-page opinion and substantively discussed the issues raised in this proceeding. *See* Proposed New 35 Ill. Adm. Code 225 Control of Emissions from Large Combustion Sources (Mercury), R06-25 (Nov. 2, 2006). The Board will not repeat that discussion here; rather the Board summarizes the opinion in the following paragraphs. The Board received over 7,000 public comments, held 18 days of hearings, and entered over 100 exhibits into the record in this proceeding. After carefully reviewing the entirety of the record, the Board found that the proposal as amended at second notice is technically feasible and economically reasonable. Further, the Board found that the Board had authority to include the MPS in the proposal for second notice. In making these determinations the Board examined several issues that will be summarized in the following paragraphs.

Technical Feasibility

The Board considered arguments that the proposal's preferred control technology will not achieve the standard established in the rule. The Board disagreed and found that the use of halogenated activated carbon injection (HCI) has been demonstrated to achieve the established standards. Further, the Board found that the size of the specific collection area (SCA) does not impact mercury reduction with the use of HCI. The Board found that the duration of the testing

used to demonstrate the feasibility of HCI is sufficient and that an absolute emissions limit is appropriate.

The Board considered arguments that the measurement of mercury removal cannot be accomplished to the level required to prove compliance with the standards. The Board noted that the measurement requirements in the proposal are substantially identical to the measurement requirements for the Clean Air Mercury Rule (CAMR) developed by the United States Environmental Protection Agency (USEPA). Many of the issues concerning the measurement requirements relate to the underlying federal requirements, so the Board deferred to the USEPA's decision to adopt the requirements. In addition, the Board found that the testimony offered in opposition to the measurement requirements is not persuasive. Therefore the Board found that the measurement of mercury removal can be accomplished to the level required to prove compliance with the standards.

The Board next considered the issue of flexibility in the proposal, including averaging, the TTBS, and the MPS option. The Board found that averaging, both on a systemwide and a 12-month rolling basis, adds flexibility to the proposal that helps establish technical feasibility of the proposal. The Board also found that the TTBS adds flexibility for compliance and the addition of the TTBS does not lead to the conclusion that the underlying standard is not technically feasible. Finally, the Board found that the MPS offers yet another alternative for achieving compliance and will result in additional removal of pollutants not regulated in this proceeding.

Economic Reasonableness

In reviewing the economic reasonableness of the proposal, the Board included arguments on deposition, modeling, health effects, and fish advisories, because the parties attacked the economics of the proposal using these areas. The first issue considered by the Board was whether deposition of mercury and modeling of deposition supports the emissions standards in the proposal. The Board found that they do. The Board found that relying on studies not specific to Illinois is legitimate and something the Board has done in the past. Further, the Board found that the modeling method relied upon by the Agency's witnesses is an appropriate method and supports the proposal. The Board found that the record indicates lowering mercury emissions in Illinois will impact the amount of mercury deposited in Illinois waters. Therefore, the Board found that the deposition and modeling evidence in the record support the adoption of the proposed mercury emissions standards.

The Board next considered arguments concerning whether the reduction of mercury emissions will result in health benefits to Illinois citizens. The Board found that the evidence in the record indicates that health benefits can be expected. Therefore, the Board found that the expected health benefits support the adoption of the proposed mercury emissions standards.

The Board considered arguments that reduction of mercury emissions will not impact fish advisories in Illinois. The Board disagreed and found that reduction of mercury emissions may lead to delistings from the Special Mercury Advisory. Therefore, the Board found that the potential delistings support the adoption of the proposed mercury emissions standards.

The Board considered arguments that the cost of compliance does not justify the adoption of the mercury emissions standards. The Board found that the incremental cost differences between compliance with CAMR and with the proposal, along with the significant reduction of mercury emissions, cause this proposal to be economically reasonable. Therefore, the Board found that the record supports a finding that the rule is economically reasonable.

Legal Issues

The Board considered arguments challenging the Board's authority to add the MPS to the rulemaking at second notice. The Board found that the MPS is a logical outgrowth of the proposal and as such is not contrary to either Illinois or federal administrative law. The Board has found the MPS to be economically reasonable and technically feasible; and therefore, the addition of the MPS does not violate Section 27 of the Act (415 ILCS 5/27 (2004)). Further the Board found that the MPS does not violate Section 10 of the Act (415 ILCS 5/10 (2004)) because of the voluntary nature of the MPS. The Board also found that adding the MPS to the rule does not violate the Supremacy Clause or the Commerce Clause of the United States Constitution. Finally, the Board found that the proposal does not violate the Due Process Clause of the United States Constitution.

Kincaid

The Board addressed concerns from Kincaid that due to the utility's unique nature in Illinois, the proposal is not technically feasible or economically reasonable for Kincaid. The Board agreed that Kincaid is uniquely situated and suggests that Kincaid pursue other regulatory relief.

Federal Requirements

The Board considered arguments that the proposal, with the TTBS and the MPS, will not be able to meet the requirements established by CAMR. The Board found that the proposal, with the TTBS and the MPS, can meet the federal requirements.

SUMMARY OF RULE LANGUAGE

The following section summarizes the rule adopted by the Board in today's order.

Subpart A

Section 225.100 is the standard severability clause in the rule. Sections 225.120 and 225.130 set forth abbreviations, acronyms, and definitions used in Part 225 and incorporates definitions found in 35 Ill. Adm. Code 211. Section 225.140 is the incorporation by reference section and incorporates several sections of the *Code of Federal Regulations* by reference. Specifically, this section incorporates 40 C.F.R. 60.17, 60.45a, 60.49a(k)(l) and (p), 60.4170 through 60.4176. These sections of 40 C.F.R. Part 60 address Standards of Performance for New Stationary Sources. Subsection (b) incorporates by reference 40 C.F.R. Part 75. Under CAMR,

state plans must require that EGUs comply with the monitoring, recordkeeping, and reporting provisions of 40 C.F.R. Part 75, which addresses continuous emission monitoring. Subsection (c) incorporates by reference standard test methods that are to be utilized under Part 225.

Subpart B

Section 225.200 sets forth the purpose of Subpart B, which is to control mercury emissions from coal-fired electric generating units in Illinois. Section 225.202 sets forth the methods for mercury measurement to establish compliance with Part 225.

Section 225.205(a) provides that Subpart B applies to all stationary coal-fired boilers and stationary coal-fired combustion turbines serving a generator with nameplate capacity of more than 25 MWe and producing electricity for sale. Section 225.205(b) includes language that determines when Subpart B applies to a cogeneration unit. Specifically, Subpart B applies to a cogeneration unit serving a generator with nameplate capacity of more than 25 MWe and supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale. The language provides that "if a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity, but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to subsection (a) of this Section starting on the day which the unit first no longer qualifies as a cogeneration unit."

Section 225.210 requires that to comply with Subpart B an owner or operator of a source with one or more EGUs must apply for a Clean Air Act Permit Program (CAAPP) permit that addresses the applicable requirements of Subpart B. Section 225.210(b) specifically requires the owner or operator to comply with the monitoring requirements of Section 225.240 through 225.290 of Subpart B. Emissions measurements recorded and reported in accordance with Section 225.240 through 225.290 of Subpart B will determine compliance with mercury requirements under Section 225.230 or 225.237. Section 225.210(c) requires compliance with the mercury emissions reduction requirements set forth in Sections 225.230 or 225.237. Section 225.210(d) sets forth the recordkeeping and reporting requirements for owners or operators of EGUs under Subpart B. The owners or operators must keep the following records: emission monitoring information, copies of all reports, compliance certifications, all documents necessary to demonstrate compliance with Subpart B, copies of all documents from the permit application and any other submission under Subpart B. The owner or operator must keep the records for five years, unless the Agency extends this period for cause in writing prior to the end of five years.

Section 225.210(e) governs liability and sets forth that the owner or operator of each source must meet the requirements of Subpart B and that any provision of Subpart B that applies to a source will also apply to the owner and operator of the source and to the owner and operator of each EGU at the source. Section 225.210(f) includes language that limits the effect of Subpart B on other provisions of State and federal law. No provision of Subpart B can be construed to exempt or exclude the owner and operator of a source or EGU from compliance with any provision of an approved State Implementation Plan, a permit, the Act or the CAA.

Section 225.220 addresses CAAPP permit requirements and provides in subsection (a) that each source submit a CAAPP permit application that addresses all applicable requirements of this Subpart. Subsection (a) also establishes a timeline for the submission of permit applications. In subsections (b) and (c), the content and information required in the permit application and permit are set forth. Section 225.220(c) requires that each permit issued by the Agency and subject to Subpart B address all applicable requirements of this Subpart and contain federally enforceable conditions.

Section 225.230 sets forth emissions standards for EGUs at existing sources. Section 225.230(a) provides that beginning July 1, 2009, the EGU must comply with one of the following standards on a rolling 12-month basis: "(1) an emission standard of 0.0080 lb/GWh gross electrical output; or (2) a minimum 90% reduction of input mercury." Section 225.230(b) provides that as an alternative to compliance with subsection (a) an EGU may demonstrate that the actual emissions of mercury are less than the allowable emissions from the EGU on a rolling 12-month basis. Subsection (b) also includes the equations necessary for compliance and provides that if an EGU does not comply with Section 225.265 of this Subpart to determine mercury input, the allowable emissions will be calculated based on the electrical output of the EGU.

Section 225.230(c) provides that for two EGUs that share a common stack, and where mercury monitors are in the common stack, compliance with applicable emission standards must be determined as if the two EGUs were a single EGU, as provided for by 40 C.F.R. Part 75, Subpart I. Section 225.230(d) requires that a source with multiple EGUs may alternatively comply with subsection (a) by demonstrating that the actual emissions of mercury are less than the allowable emissions of mercury from all EGUs at the source on a rolling 12-month basis. Subsection (d) further provides formulas for determining the maximum allowable emissions of mercury from all the EGUs at a source. If a source that relies on subsection (d) fails to meet the requirements of subsection (d) in a given 12-month period, all EGUs at the source in such reliance will be considered out of compliance with the applicable standards of Subpart B for the entire last month of that period.

Section 225.232(a) provides that through December 31, 2013, as an alternative to compliance with Section 225.230(a), an EGU may comply with emissions standards through an averaging demonstration. The EGU must show that actual mercury emissions from the EGU and other EGUs covered by the demonstration are less than the allowable emissions from all such EGUs on a rolling 12-month basis.

Section 225.232(b) proposes that each EGU covered by the demonstration must "comply with one of the following emission standards on a source-wide basis for the period covered by the demonstration: (1) An emission standard of 0.020 lb/GWh gross electrical output; or (2) A minimum 75% reduction of input mercury." Section 225.232(c) provides that the equations set forth in Section 225.230(a)(2), (a)(3), or (d) (2) determine compliance with emissions standards under this section. The owner or operator must apply the equations that address all EGUs at the sources covered by the demonstration, rather than the equations that address only EGUs at one source.

Section 225.232(d) provides that owners or operators of multiple existing sources with EGUs may only participate in averaging demonstrations with existing sources they own or operate. However, the owners or operators of specifically enumerated single sources with EGUs may participate in demonstrations with each other. The language requires that participants that are single existing sources with EGUs be authorized through federally enforceable permit conditions for each participating source. Under Section 225.232(e), "a source may be included in only one [d]emonstration during each rolling 12-month period." Section 225.232(f) requires that EGUs using the demonstration to comply with "Subpart B must complete the determination of compliance for each 12-month rolling period no later than 60 days following the end of the period."

Section 225.232(g) provides that if a source applies the demonstration to comply with Subpart B and fails, the compliance status of such source will be determined under Section 225.230, as if the demonstration did not apply. Section 225.232(h) includes that if one source of two participating in a demonstration does not maintain the required records, data, and reports for the EGUs at the source or does not submit copies of such documents to the Agency upon request, this will be deemed a failure to demonstrate compliance and both participating sources will be subject to Section 225.230 to determine compliance.

Section 225.233 sets forth the Multi-Pollutant Standards (MPS) provisions of the rule. Section 225.233(a) provides that an owner/operator may use this section as an alternative to compliance with the emission standards at Section 225.230(a). In order to establish alternative compliance under this section, the EGU must have commenced operation before December 31, 2004 and must submit a CAAPP permit modification to the Agency stating the owner/operator's intent to comply under this section. Section 732.233(b) requires the owner/operator to notify the Agency of the intention to proceed under Section 732.233 by December 31, 2007. The notice must identify the EGUs, who owns the EGUs, the base emission rates for the EGUs, a summary of current control devices installed and operating on the EGUs, and the EGUs scheduled for permanent shut down.

Section 225.233(c) delineates the control technology requirements for emissions of mercury including the installation of halogenated activated carbon injection (HCI) system and rates of injection. Subsection (d) specifies the mercury emission standards that must be complied with under the MPS. Subsection (e) establishes the NO_x and SO_2 emissions standards that the EGUs must comply with for compliance with the MPS. Section 225.233(f) prohibits the selling or trading of NO_x and SO_2 allowances allocated to an EGU that are necessary to achieve compliance with the MPS. Subsection (g) requires an owner/operator to obtain construction permit for new or modified control equipment for control of mercury, NO_x and SO_2.

Section 225.234 sets forth the temporary technology-based standard (TTBS) that an owner/operator may use as an alternative to compliance with the mercury emission standards at Section 225.230. Section 225.234(a) provides that a source must have commenced commercial operation before December 31, 2008 to use the TTBS provisions of Section 225.234. For an EGU to be eligible, subsection (b) requires that the EGUs must be equipped and operated with control systems which include HCI and either a cold side electrostatic precipitator (ESP) or a

fabric filter. Subsection (b) further provides that the TTBS is limited to only 25% of the total rated MW capacity of all EGUs for the owner or operators of more than one existing with EGUs.

Section 225.234(c) requires that the EGU must be maintained an operated to comply with the criteria for eligibility of Section 225.234. The owner/operator must also comply with monitoring, reporting and notification requirements delineated in subsection (c). Section 225.234(d) provides that the owner/operator who seeks to operate an EGU under Section 225.234 must submit an application to the Agency in a specified timeframe and include specific information set forth in this subsection. Subsection (e) allows for the testing and evaluation of alternative controls under Section 225.234.

Section 225.235(a) provides that the standards do not apply to an EGU that will be permanently shut down. To comply with this section, an owner or operator who will not be constructing a new EGU to replace the existing unit must notify the Agency no later than June 30, 2009, that it is planning to permanently shut down by December 31, 2010. Otherwise, if the owner or operator plans to construct a new EGU to specifically replace the existing unit, the existing unit must shut down by December 31, 2011, for this section to apply. The existing EGU must be permanently shut down by the specified dates, unless the owner or operator demonstrates to the Agency, prior to such date, that factors beyond the owner or operator's reasonable control have interfered with the shut down plan, in which case an extension may be given. In these circumstances, an operator or owner that will not replace the existing EGU may receive an extension requiring the permanent shut down of the unit by December 31, 2011. If the owner or operator of an existing EGU is constructing a new EGU, the deadline for permanent shut down of the existing EGU may be extended to June 30, 2013, so long as after December 31, 2012, the existing EGU only operates as a "back-up unit to address periods when the new generating units are not in service."

Along with the notification, the EGU must submit a description of actions that have been taken to shut down the EGU and a description of actions that will be taken to complete the shut down. To rely on this section, an owner or operator must have applied for a construction permit or be pursuing a federally enforceable agreement that requires the permanent shut down of the EGU, and by June 30, 2009, must have applied for revisions to the operating permit that terminate the authorization to operate the unit. To rely on this section, an owner or operator must have obtained a construction permit or have entered into a federally enforceable agreement and obtained revised operating permits in accordance with this section, by June 30, 2010.

Section 225.235(b) provides that any EGU not required to comply with Section 225.230 pursuant to this section, "shall not be included when determining whether any other EGUs at the source or other sources are in compliance with Section 225.230 of this Subpart."

Section 225.235(c) provides that if an owner or operator relies on this section in lieu of compliance with Section 225.230(a) and fails to permanently shut down by the required date, the EGU will be considered a new EGU and therefore subject to the emissions standards in Section 225.237(a) of Subpart B.

Section 225.237(a)(1) provides that a source that has not commenced commercial operations before January 1, 2009, is a new source and must "comply with one of the following emissions standards for each EGU on a rolling 12-month basis: (1) An emission standard of 0.0080 lbs/GWh gross electrical output; or (2) A minimum 90% reduction of input mercury." Subsection (a)(2) allows that the equations in Section 225.230(a)(2), (a)(3), or (b)(2) of Subpart B may be used to demonstrate compliance.

Section 225.237(b) provides that the commencement date of the initial 12-month rolling period for which a new EGU must comply with subsection (a)(1) of this Section is the same date that the initial performance test for the mercury emissions standard under 40 C.F.R. 60.45 commences. The required continuous emissions monitoring system for mercury emissions must be certified prior to this date. "Thereafter, compliance shall be demonstrated on a rolling-12-month basis in terms of calendar months."

Section 225.238 contains the criteria for a new source to use a TTBS for compliance with the mercury emission standards.

Section 225.240 requires that an EGU must comply with monitoring, recordkeeping and reporting requirements in this section and those of Sections 225.250 through 225.290 of Subpart B and Subpart I of 40 C.F.R. Part 75. If an EGU shares a common stack with units that are not EGUs and emissions are not monitored in the duct to the common stack from each EGU then emissions monitoring must comply with 40 C.F.R. 75.82(b)(2) and this Section, "including monitoring the duct to the common stack from each unit that is not an EGU." However, if the EGU counts the combined emissions measured at the common stack as the mass emissions of mercury, for the EGU's recordkeeping and compliance purposes, then the aforementioned measures for EGUs that share a common stack with units that are not EGUs are not required.

Section 225.240(a) sets forth requirements for installation, certification and data accounting. This subsection requires the owner or operator to install all required monitoring systems and successfully complete all required certification tests, in accordance with this Section and Sections 225.250 through 225.290 of Subpart B and 40 C.F.R. 75.21 and 75.82, and record, report, and quality-assure the data from such monitoring systems.

Section 225.240(a)(4) provides that to qualify to use the low mass emissions excepted monitoring methodology, the EGU must meet the requirements set forth in this subsection, and demonstrate eligibility through initial emissions testing, which must be conducted before the dates set forth in subsections 225.240(a)(4)(A) and (B). For an EGU to be eligible to use the excepted emissions monitoring methodology, the EGU may not emit more than 464 ounces (29 pounds) of mercury per year pursuant to 40 C.F.R. 75.81(b), must demonstrate that the EGU is eligible to use the methodology by performing emissions testing in accordance with 40 C.F.R. 75.81(c), must comply with other applicable requirements of 40 C.F.R. 75.81(b) through (f), and must submit to the Agency a copy of any information that is required to be submitted to the USEPA under these provisions.

Section 225.240(a)(4) further requires that if an EGU commenced commercial operations before July 1, 2008, initial emissions testing must be conducted before "January 1, 2009, or 45

days prior to relying on the low mass emissions excepted methodology, whichever date is later," to demonstrate eligibility of an EGU for the low mass emissions excepted methodology. If the EGU commenced commercial operation on or after July 1, 2008, initial emissions testing shall be conducted "at least 45 days prior to the applicable date specified under subsection (b)(2) of this Section or 45 days prior to relying on the low mass emissions methodology, whichever date is later."

Section 225.240(b) requires EGU to meet the emissions monitoring system certification and other emissions monitoring requirements of subsections (a)(1) and (a)(2) of this Section on or before the dates specified in subsections (b)(1), (2), and (3). The owner or operator must record, report, and quality-assure the emissions monitoring systems required under subsection (a)(1) of this Section on and after the specified dates. Under subsection (b)(1) an EGU that commences commercial operation before July 1, 2008, is required to comply with emissions monitoring certification on or before January 1, 2009. Subsection (b)(2) provides that an EGU that commences commercial operation after July 1, 2008, is required to comply with monitoring system certification by 90 unit operating days or 180 calendar days after commercial operations commence, whichever occurs first.

Section 225.240(b)(3) proposes that an EGU that completes construction of a "new stack or flue or installation of add-on mercury emissions controls, a flue gas desulfurization system (FGD), a selective catalytic reduction system, a fabric filter, or a compact hybrid particulate collector system is complete after the applicable" deadline is required to recertify the continuous emissions monitoring system within 90 unit operating days or 180 calendar days after the date on which emissions first exit the new system, stack, flue, device or filter, whichever is first.

Section 225.240(c) requires that if an EGU does not meet the applicable deadline for certification of any required emissions monitoring system, the owner or operator is required to determine, record, and report maximum potential values and, where appropriate, minimum potential values for mercury concentration, stack gas flow rate, stack gas moisture content, and any other parameters required to determine mercury mass emissions in keeping with 40 C.F.R. 75.80(g) for each system. Under subsection (c)(2), if an EGU required to be recertified pursuant to subsection (b)(3) of this Section fails to meet the deadline for recertification of any emissions monitoring system, the owner or operator is required to "determine, record, and report substitute data using the applicable missing data procedures in 40 C.F.R. 75.80(f), in lieu of the maximum potential (or, as appropriate, minimum potential) values, for a parameter if the owner or operator demonstrates that there is a continuity between the data streams for that parameter before and after the construction or installation under subsection (b)(3) of this Section."

Section 225.240(d) provides that an EGU may not use "any alternative emissions monitoring system, alternative reference method for measuring emission, or any other alternative to the emissions monitoring and measurement requirements of this Section and Sections 225.250 through 225.290 of this Subpart," unless the USEPA promulgates the alternative and the Agency approves it in writing or if such alternative is approved in writing by the Agency and the USEPA.

Section 225.240(d)(3) provides that an owner or operator may not disrupt "the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording mercury mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this Section, Sections 225.250 through 225.290 of this Subpart, and Subpart I of 40 C.F.R. Part 75." Under subsection (d)(4), an EGU must not discharge mercury emissions without accounting for all such emissions pursuant to "applicable provisions of this Section, Section 225.250 through 225.290 and Subpart 1 of 40 C.F.R. Part 75." An EGU must not retire or permanently discontinue use of the continuous emissions monitoring system or a component thereof, other than in the limited circumstances enumerated in this subsection.

Section 225.240(e) provides that an EGU in long-term cold storage must comply with applicable provisions of 40 C.F.R. Part 75 for monitoring, recordkeeping, and reporting for such units.

Section 225.250(a) includes provisions for initial certification and recertification procedures for a continuous emissions monitoring system or excepted monitoring system (sorbent trap monitoring system) under 40 C.F.R. 75.15.

Section 225.250(b) proposes that a monitoring system will be exempt from the initial certification requirements of this Section if the following provisions are met: the monitoring system has been previously certified pursuant to 40 C.F.R. Part 75, and "the applicable quality assurance and quality control requirements of 40 C.F.R. 75.21 and Appendix B to 40 C.F.R. Part 75 are fully met." However, a monitoring system required by section 225.240 that is exempt from initial certification requirements must never-the-less comply with the recertification provisions of this section.

Section 225.250(c) sets forth that the applicable certification and recertification requirements in 40 C.F.R. 75.81(c) through (f) will apply to an EGU qualified to use the mercury low mass emissions excepted methodology under 40 C.F.R. 75.81(b).

Section 225.250(d), within 45 days of completing all initial certification and recertification tests required under this section, the owner or operator is required to submit an application to the Agency including the information required by 40 C.F.R. 75.63.

Section 225.260(a) provides that the missing data procedures in Subparts D and I of 40 C.F.R. Part 75, where applicable, will be applied to substitute data whenever any emissions monitoring system fails to meet quality assurance and quality control requirements or data validation requirements of 40 C.F.R. Part 75.

Section 225.260(b) sets forth that the Agency will issue a notice of disapproval of the certification status of a monitoring system if an audit and review of the initial certification or recertification reveal that the monitoring system should not have been certified or recertified because of the following reasons. The Agency will issue the notice of disapproval if the monitoring system did not meet a particular performance specification or failed to meet other

requirements under Section 225.250 of Subpart B or failed to meet applicable provisions of 40 C.F.R. Part 75, both at the time of initial certification or recertification application and submission and at the time of the audit. Such notice of disapproval acts to revoke prospectively the certification status of the monitoring system. The initial certification and recertification procedures in Section 225.250 apply to each disapproved monitoring system.

Section 225.261 provides that an EGU that uses a mercury concentration monitoring system and a flow monitoring system to monitor and report, will also monitor and report heat input rate at the EGU level using the procedures set forth in 40 C.F.R. Part 75.

Under Section 225.263, if an EGU complies with this Subpart, by means of either Section 225.230(a)(1) or 225.230(b) or (d) or 225.232, the owner or operator "shall monitor gross electrical output of the associated generator(s) in MWh on an hourly basis."

Section 225.265 provides that if the EGU complies by means of Section 225.230(a)(2) or uses input mercury levels and complies by means of Section 225.230(b) or (d) or Section 225.232, the owner or operator must "[p]erform daily sampling of the coal combusted in the EGU for mercury content." The owner or operator "shall collect a minimum of one 2-lb. grab sample per day of operation from the belt feeders anywhere between the crusher house or breaker building and the boiler." The sample should be taken in a manner so that it will be representative of the mercury content of coal burned that day. The owner or operator is required to analyze the grab sample using the following tests: to determine heat content, "ASTM D5865-04, Standard Test Method for Gross Calorific Value of Coal and Coke, or equivalent approved in writing by the Agency"; to determine moisture content, "ASTM D3173-03, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, or equivalent approved in writing by the Agency"; and to measure the mercury content, "ASTM D6414-01, Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Acid Extractor or Wet Oxidation/Cold Vapor Atomic Absorption, ASTM D3684-01, Standard Test Method for Total Mercury in Coal by the Oxygen Bomb Combustion/Atomic Absorption Method, or equivalent approved in writing by the Agency".

A source with multiple EGUs may take one sample per crusher house or breaker building, rather than one sample per EGU, if the EGUs share the crusher house or breaker building. For such a source the owner or operator must determine the mercury content in terms of lbs/trillion Btu using the data analyzed.

If an EGU is required to comply with Section 225.265, the owner or operator must conduct sampling and analysis pursuant to this Section at least 30 days before the start of the month for which this requirement applies if the EGU is in daily service, and if the EGU is not in daily service, on the day that the EGU resumes operation.

Section 225.270 requires that for a source with one or more EGUs, the owner or operator must submit written notification to the Agency pursuant to 40 C.F.R. 75.61 for each EGU or group of EGUs monitored at a common stack and each non-EGU monitored under 40 C.F.R. 75.82(b)(2)(ii).

Under Section 225.290(a)(1), the owner or operator of an EGU and its designated representative must comply with applicable recordkeeping and reporting requirements of 40 C.F.R. 75.84 and those of this section. In Section 225.290(a)(2), if the EGU is subject to emissions standards, the owner or operator must keep records for each month identifying the emissions standard with which the EGU is complying or from which the owner or operator is calculating allowable emissions. Such an EGU must also maintain records of the daily mercury content of coal used and the daily and monthly input mercury in the file required under 40 C.F.R. 75.84(a), if the EGU complies with this Subpart "by means of Section 225.230(a)(2) or 225.237(a)(1)(B) or us[es] input mercury levels to determine the allowable emissions of the EGU." An EGU must maintain records of the daily and monthly gross electrical output in the file required under 40 C.F.R. 75.84(a), if such EGU complies "with this Subpart by means of Section 225.230(a)(1) or 225.237(a)(1)(A) or using electrical output to determine the allowable emissions of the EGU."

In Section 225.290(a)(3), the owner or operator must maintain records of monthly emissions of mercury from each EGU. For an EGU that complies by means of section 225.230(b) or (d) of this Subpart, the owner or operator must additionally maintain records of the monthly allowable emissions of mercury from the EGU. In Section 225.290(a)(4), an EGU that is participating in an averaging demonstration pursuant to Section 225.232 must keep records of the other sources and other EGUs covered by the demonstration and within 60 days of the end of each month, calculate and record the actual and allowable mercury emissions for the month and the 12-month rolling period. Section 225.290(a)(5) specifies the quality assurance records that a source must maintain. Section 225.290(a)(6) provides that an EGU must maintain an electronic copy of all electronic submittals to the USEPA pursuant to 40 C.F.R. 75.84(f). Section 225.290(a)(7) provides that an EGU must retain all records required by this Section on site, unless otherwise provided for in the CAAPP permit, and that the EGU will provide copies of any record to the Agency upon request.

Section 225.290(b) proposes that the owner or operator will submit quarterly reports and sets forth the information that must be included in such reports. Under Section 225.290(c) the owner or operator will be required to submit a compliance certification in support of each quarterly report and sets forth the contents of such certification. Section 225.290(d) requires that the owner or operator submit an Annual Certification of Compliance to the Agency no later than May 1 of each year. Subsection (d) also sets forth the contents of such Certification of Compliance and provides that the Certification of Compliance shall address compliance for the previous calendar year. Section 225.290(e) requires that the owner or operator promptly notify the Agency of deviations of requirements of Subpart B, for each EGU. Section 225.290(f) requires that within 45 days of completing a quality assurance relative accuracy test audit (RATA) the EGU shall submit the RATA report to the Agency for affected EGUs.

In Section 225.295, the mercury emissions allocation to the state under CAMR must not be allocated to any EGU or other source of mercury emissions. The Agency must hold all allowances allocated to the state by USEPA and the Agency shall instruct USEPA to permanently retire all such allowances at the end of each calendar year.

DISCUSSION

The Board carefully considered the entire record in this proceeding before proceeding to second notice. On December 12, 2006, JCAR voted a certification of no objection to the rule. JCAR suggested several nonsubstantive changes to the rule, which the Board has made in the order. Based on the record in this proceeding the Board finds that the rule is technically feasible and economically reasonable. The Board also finds that the rule allows flexibility to achieve compliance and will provide health benefits for the citizens of Illinois. Therefore, the Board finds that the record supports adoption of this rule and the Board today adopts the rule.

CONCLUSION

The Board finds that the proposal is technically feasible and economically reasonable. The Board also finds that the rule allows flexibility to achieve compliance and will provide health benefits for the citizens of Illinois. Therefore, the Board adopts the proposal for final notice and the rule will be submitted to the Secretary of State for publication in the *Illinois Register*.

ORDER

The Board directs the Clerk to cause the filing of the following rule with the Secretary of State for publication as an adopted rule in the *Illinois Register*.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 225
CONTROL OF EMISSIONS FROM LARGE COMBUSTION SOURCES

SUBPART A: GENERAL PROVISIONS

Section
225.100 Severability
225.120 Abbreviations and Acronyms
225.130 Definitions
225.140 Incorporations by Reference

SUBPART B: CONTROL OF MERCURY EMISSIONS FROM COAL-FIRED ELECTRIC GENERATING UNITS

Section
225.200 Purpose
225.202 Measurement Methods
225.205 Applicability
225.210 Compliance Requirements

AUTHORITY: Implementing and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/27].

SOURCE: Adopted at 30 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 225.100 Severability

If any Section, subsection or clause of this Part is found invalid, such finding must not affect the validity of this Part as a whole or any Section, subsection or clause not found invalid.

Section 225.120 Abbreviations and Acronyms

Unless otherwise specified within this Part, the abbreviations used in this Part must be the same as those found in 35 Ill. Adm. Code 211. The following abbreviations and acronyms are used in this Part:

Act	Environmental Protection Act [415 ILCS 5]
Btu	British thermal unit
CAA	Clean Air Act [42 USC 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CEMS	continuous emission monitoring system
CO_2	carbon dioxide
EGU	electric generating unit
GWh	gigawatt hour
hr	hour
lb	pound

MPS	Multi-Pollutant Standard
MW	megawatt
MWe	megawatt electrical
MWh	megawatt hour
NO_x	nitrogen oxides
O_2	oxygen
RATA	relative accuracy test audit
SO_2	sulfur dioxide
TTBS	Temporary Technology Based Standard
USEPA	United States Environmental Protection Agency

Section 225.130 Definitions

The following definitions apply for the purposes of this Part. Unless otherwise defined in this Section or a different meaning for a term is clear from its context, the terms used in this Part have the meanings specified in 35 Ill. Adm. Code 211.

"Agency" means the Illinois Environmental Protection Agency. [415 ILCS 5/3.105]

"Averaging demonstration" means, with regard to Subpart B of this Part, a demonstration of compliance that is based on the combined performance of EGUs at two or more sources.

"Base Emission Rate" means, for a group of EGUs subject to emission standards for NOx and SO_2 pursuant to Section 225.233, the average emission rate of NOx or SO_2 from the EGUs, in pounds per million Btu heat input, for calendar years 2003 through 2005 (or, for seasonal NOx, the 2003 through 2005 ozone seasons), as determined from the data collected and quality assured by the USEPA, pursuant to the 40 CFR 72 and 96 federal Acid Rain and NOx Budget Trading Programs, for the emissions and heat input of that group of EGUs.

"Board" means the Illinois Pollution Control Board. [415 ILCS 5/3.130]

"Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

"Bottoming-cycle cogeneration unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

"Coal" means any solid fuel classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials (ASTM) Standard Specification for Classification of Coals by Rank D388-77, 90, 91, 95, 98a, or 99 (Reapproved 2004).

“Coal-derived fuel” means any fuel (whether in a solid, liquid or gaseous state) produced by the mechanical, thermal, or chemical processing of coal.

“Coal-fired” means combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during a specified year.

“Cogeneration unit” means a stationary, fossil fuel-fired boiler or a stationary, fossil fuel-fired combustion turbine of which both of the following conditions are true:

> It uses equipment to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and
>
> It produces either of the following during the 12-month period beginning on the date the unit first produces electricity and during any subsequent calendar year after that in which the unit first produces electricity:
>
> > For a topping-cycle cogeneration unit, both of the following:
> >
> > > Useful thermal energy not less than five percent of total energy output; and
> > >
> > > Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input if useful thermal energy produced is less than 15 percent of total energy output; or
> >
> > For a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input.

“Combustion turbine” means:

> An enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and
>
> If the enclosed device under the above paragraph of this definition is combined cycle, any associated heat recovery steam generator and steam turbine.

“Commence commercial operation” means, for the purposes of Subpart B of this Part, with regard to an EGU that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation.

Such date must remain the unit's date of commencement of operation even if the EGU is subsequently modified, reconstructed or repowered.

“Designated representative” means, for the purposes of Subpart B of this Part, the same as defined in 40 CFR 60.4102.

“Flue” means a conduit or duct through which gases or other matter is exhausted to the atmosphere.

“Gross electrical output” means the total electrical output from an EGU before making any deductions for energy output used in any way related to the production of energy. For an EGU generating only electricity, the gross electrical output is the output from the turbine/generator set.

“Input mercury” means the mass of mercury that is contained in the coal combusted within an EGU.

“Nameplate capacity” means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady-state basis and during continuous operation (when not restricted by seasonal or other deratings) as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady-state basis and during continuous operation (when not restricted by seasonal or other deratings), such increased maximum amount as specified by the person conducting the physical change.

“Output-based emission standard” means, for the purposes of Subpart B of this Part, a maximum allowable rate of emissions of mercury per unit of gross electrical output from an EGU.

“Repowered” means, for the purposes of an EGU, replacement of a coal-fired boiler with one of the following coal-fired technologies at the same source as the coal-fired boiler:

Atmospheric or pressurized fluidized bed combustion;

Integrated gasification combined cycle;

Magnetohydrodynamics;

Direct and indirect coal-fired turbines;

Integrated gasification fuel cells; or

As determined by the USEPA in consultation with the United States Department of Energy, a derivative of one or more of the technologies under this definition

and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.

"Rolling 12-month basis" means, for the purposes of Subpart B of this Part, a determination made on a monthly basis from the relevant data for a particular calendar month and the preceding 11 calendar months (total of 12 months of data), with two exceptions. For determinations involving one EGU, calendar months in which the EGU does not operate (zero EGU operating hours) must not be included in the determination, and must be replaced by a preceding month or months in which the EGU does operate, so that the determination is still based on 12 months of data. For determinations involving two or more EGUs, calendar months in which none of the EGUs covered by the determination operates (zero EGU operating hours) must not be included in the determination, and must be replaced by preceding months in which at least one of the EGUs covered by the determination does operate, so that the determination is still based on 12 months of data.

Section 225.140 Incorporations by Reference

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions.

a) 40 CFR 60, 60.17, 60.45a, 60.49a(k)(1) and (p), 60.50a(h), and 60.4170 through 60.4176 (2005).

b) 40 CFR 75 (2005).

c) ASTM. The following methods from the American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken PA 19428-2959, (610) 832-9585:

1) ASTM D388-77 (approved February 25, 1977), D388-90 (approved March 30, 1990), D388-91a (approved April 15, 1991), D388-95 (approved January 15, 1995), D388-98a (approved September 10, 1998), or D388-99 (approved September 10, 1999, reapproved in 2004), Classification of Coals by Rank.

2) ASTM D3173-03, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke (Approved April 10, 2003).

3) ASTM D3684-01, Standard Test Method for Total Mercury in Coal by the Oxygen Bomb Combustion/Atomic Absorption Method (Approved October 10, 2001).

4) ASTM D5865-04, Standard Test Method for Gross Calorific Value of Coal and Coke (Approved April 1, 2004).

5) ASTM D6414-01, Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Acid Extraction or Wet Oxidation/Cold Vapor Atomic Absorption (Approved October 10, 2001).

6) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method) (Approved April 10, 2002).

SUBPART B: CONTROL OF MERCURY EMISSIONS FROM COAL-FIRED ELECTRIC GENERATING UNITS

Section 225.200 Purpose

The purpose of this Subpart B is to control the emissions of mercury from coal-fired EGU operating in Illinois.

Section 225.202 Measurement Methods

Measurement of mercury must be according to the following:

a) Continuous emission monitoring pursuant to 40 CFR 75 (2005).

b) ASTM D3173-03, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke (Approved April 10, 2003), incorporated by reference in Section 225.140.

c) ASTM D3684-01, Standard Test Method for Total Mercury in Coal by the Oxygen Bomb Combustion/Atomic Absorption Method (Approved October 10, 2001), incorporated by reference in Section 225.140.

d) ASTM D5865-04, Standard Test Method for Gross Calorific Value of Coal and Coke (Approved April 1, 2004), incorporated by reference in Section 225.140.

e) ASTM D6414-01, Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Acid Extraction or Wet Oxidation/Cold Vapor Atomic Absorption (Approved October 10, 2001), incorporated by reference in Section 225.140.

f) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources

(Ontario Hydro Method) (Approved April 10, 2002), incorporated by reference in Section 225.140.

Section 225.205 Applicability

The following stationary coal-fired boilers and stationary coal-fired combustion turbines are EGUs and are subject to this Subpart B:

a) Except as provided in subsection (b) of this Section, a unit serving, at any time since the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

b) For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit serving at any time a generator with nameplate capacity of more than 25 MWe and supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit must be subject to subsection (a) of this Section starting on the day on which the unit first no longer qualifies as a cogeneration unit.

Section 225.210 Compliance Requirements

a) Permit Requirements.

The owner or operator of each source with one or more EGUs subject to this Subpart B at the source must apply for a CAAPP permit that addresses the applicable requirements of this Subpart B.

b) Monitoring Requirements.

1) The owner or operator of each source and each EGU at the source must comply with the monitoring requirements of Sections 225.240 through 225.290 of this Subpart B.

2) The compliance of each EGU with the mercury requirements of Sections 225.230 and 225.237 of this Subpart B must be determined by the emissions measurements recorded and reported in accordance with Sections 225.240 through 225.290 of this Subpart B.

c) Mercury Emission Reduction Requirements

The owner or operator of any EGU subject to this Subpart B must comply with applicable requirements for control of mercury emissions of Section 225.230 or Section 225.237 of this Subpart B.

d) Recordkeeping and Reporting Requirements

Unless otherwise provided, the owner or operator of a source with one or more EGUs at the source must keep on site at the source each of the documents listed in subsections (d)(1) through (d)(3) of this Section for a period of five years from the date the document is created. This period may be extended, in writing by the Agency, for cause, at any time prior to the end of five years.

1) All emissions monitoring information gathered in accordance with Sections 225.240 through 225.290.

2) Copies of all reports, compliance certifications, and other submissions and all records made or required or documents necessary to demonstrate compliance with the requirements of this Subpart B.

3) Copies of all documents used to complete a permit application and any other submission under this Subpart B.

e) Liability.

1) The owner or operator of each source with one or more EGUs must meet the requirements of this Subpart B.

2) Any provision of this Subpart B that applies to a source must also apply to the owner and operator of such source and to the owner or operator of each EGU at the source.

3) Any provision of this Subpart B that applies to an EGU must also apply to the owner or operator of such EGU.

f) Effect on Other Authorities. No provision of this Subpart B may be construed as exempting or excluding the owner or operator of a source or EGU from compliance with any other provision of an approved State Implementation Plan, a permit, the Act, or the CAA.

Section 225.220 Clean Air Act Permit Program (CAAPP) Permit Requirements

a) Application Requirements.

1) Each source with one or more EGUs subject to the requirements of this Subpart B is required to submit a CAAPP permit application that

addresses all applicable requirements of this Subpart B, applicable to each EGU at the source.

2) For any EGU that commenced commercial operation:

A) on or before December 31, 2008, the owner or operator of such EGUs must submit an initial permit application or application for CAAPP permit modification that meets the requirements of this Section on or before December 31, 2008.

B) after December 31, 2008, the owner or operator of any such EGU must submit an initial CAAPP permit application or application for CAAPP modification that meets the requirements of this Section not later than 180 days before initial startup of the EGU, unless the construction permit issued for the EGU addresses the requirements of this Subpart B.

b) Contents of Permit Applications.

In addition to other information required for a complete application for CAAPP permit or CAAPP permit modification, the application must include the following information:

1) The ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the U.S. Department of Energy, Energy Information Administration, if applicable.

2) Identification of each EGU at the source.

3) The intended approach to the monitoring requirements of Sections 225.240 through 225.290 of this Subpart B.

4) The intended approach to the mercury emission reduction requirements of Section 225.230 or 225.237 of this Subpart B, as applicable.

c) Permit Contents.

1) Each CAAPP permit issued by the Agency for a source with one or more EGUs subject to the requirements of this Subpart B must contain federally enforceable conditions addressing all applicable requirements of this Subpart B, which conditions must be a complete and segregable portion of the source's entire CAAPP permit.

2) In addition to conditions related to the applicable requirements of this Subpart B, each such CAAPP permit must also contain the information specified under subsection (b) of this Section.

Section 225.230 Emission Standards for EGUs at Existing Sources

a) Emission Standards.

1) Beginning July 1, 2009, the owner or operator of a source with one or more EGUs subject to this Subpart B that commenced commercial operation on or before December 31, 2008, must comply with one of the following standards for each EGU on a rolling 12-month basis:

A) An emission standard of 0.0080 lb mercury/GWh gross electrical output; or

B) A minimum 90-percent reduction of input mercury.

2) For an EGU complying with subsection (a)(1)(A) of this Section, the actual mercury emission rate of the EGU for each 12-month rolling period, as monitored in accordance with this Subpart B and calculated as follows, must not exceed the applicable emission standard:

$$ER = \sum_{i=1}^{12} E_i \div \sum_{i=1}^{12} O_i$$

Where:

ER = Actual mercury emissions rate of the EGU for the particular 12-month rolling period, expressed in lb/GWh.

E_i = Actual mercury emissions of the EGU, in lbs, in an individual month in the 12-month rolling period, as determined in accordance with the emissions monitoring provisions of this Subpart B.

O_i = Gross electrical output of the EGU, in GWh, in an individual month in the 12-month rolling period, as determined in accordance with Section 225.263 of this Subpart B.

3) For an EGU complying with subsection (a)(1)(B) of this Section, the actual control efficiency for mercury emissions achieved by the EGU for each 12-month rolling period, as monitored in accordance with this Subpart B and calculated as follows, must meet or exceed the applicable efficiency requirement:

$$CE = 100 \times \{1 - (\sum_{i=1}^{12} E_i \div \sum_{i=1}^{12} I_i)\}$$

Where:

CE = Actual control efficiency for mercury emissions of the EGU for the particular 12-month rolling period, expressed as a percent.

E_i = Actual mercury emissions of the EGU, in lbs, in an individual month in the 12-month rolling period, as determined in accordance with the emissions monitoring provisions of this Subpart B.

I_i = Amount of mercury in the fuel fired in the EGU, in lbs, in an individual month in the 12-month rolling period, as determined in accordance with Section 225.265 of this Subpart B.

b) Alternative Emission Standards for Single EGUs.

1) As an alternative to compliance with the emission standards in subsection (a) of this Section, the owner or operator of the EGU may comply with the emission standards of this Subpart B by demonstrating that the actual emissions of mercury from the EGU are less than the allowable emissions of mercury from the EGU on a rolling 12-month basis.

2) For the purpose of demonstrating compliance with the alternative emission standards of this subsection (b), for each rolling 12-month period, the actual emissions of mercury from the EGU, as monitored in accordance with this Subpart B, must not exceed the allowable emissions of mercury from the EGU, as further provided by the following formulas:

$$E_{12} \leq A_{12}$$

$$E_{12} = \sum_{i=1}^{12} E_i$$

$$A_{12} = \sum_{i=1}^{12} A_i$$

Where:

E_{12} = Actual mercury emissions of the EGU for the particular 12-month rolling period.

A_{12} = Allowable mercury emissions of the EGU for the particular 12-month rolling period.

E_i = Actual mercury emissions of the EGU in an individual month in the 12-month rolling period.

A_i = Allowable mercury emissions of the EGU in an individual month in the 12-month rolling period, based on either the input mercury to the unit ($A_{Input\ i}$) or the electrical output from the EGU ($A_{Output\ i}$), as selected by the owner or operator of the EGU for that given month.

$A_{Input\ i}$ = Allowable mercury emissions of the EGU in an individual month based on the input mercury to the EGU, calculated as 10.0 percent (or 0.100) of the input mercury to the EGU.

$A_{Output\ i}$ = Allowable mercury emissions of the EGU in a particular month based on the electrical output from the EGU, calculated as the product of the output based mercury limit, i.e., 0.0080 lb/GWh, and the electrical output from the EGU, in GWh.

3) If the owner or operator of an EGU does not conduct the necessary sampling, analysis, and recordkeeping, in accordance with Section 225.265 of this Subpart B, to determine the mercury input to the EGU, the allowable emissions of the EGU must be calculated based on the electrical output of the EGU.

c) If two or more EGUs are served by common stack(s) and the owner or operator conducts monitoring for mercury emissions in the common stack(s), as provided for by 40 CFR 75, Subpart I, such that the mercury emissions of each EGU are not determined separately, compliance of the EGUs with the applicable emission standards of this Subpart B must be determined as if the EGUs were a single EGU.

d) Alternative Emission Standards for Multiple EGUs.

1) As an alternative to compliance with the emission standards of subsection (a) of this Section, the owner or operator of a source with multiple EGUs may comply with the emission standards of this Subpart B by demonstrating that the actual emissions of mercury from all EGUs at the source are less than the allowable emissions of mercury from all EGUs at the source on a rolling 12-month basis.

2) For the purposes of the alternative emission standard of subsection (d)(1) of this Section, for each rolling 12-month period, the actual emissions of mercury from all the EGUs at the source, as monitored in accordance with this Subpart B, must not exceed the sum of the allowable emissions of mercury from all the EGUs at the source, as further provided by the following formulas:

$$E_S \leq A_S$$

$$E_S = \sum_{i=1}^{n} E_i$$

$$A_S = \sum_{i=1}^{n} A_i$$

Where:

E_S = Sum of the actual mercury emissions of the EGUs at the source.

A_S = Sum of the allowable mercury emissions of the EGUs at the source.
E_i = Actual mercury emissions of an individual EGU at the source, as determined in accordance with subsection (b)(2) of this Section.
A_i = Allowable mercury emissions of an individual EGU at the source, as determined in accordance with subsection (b)(2) of this Section.
n = Number of EGUs covered by the demonstration.

3) If an owner or operator of a source with two or more EGUs that is relying on this subsection (d) to demonstrate compliance fails to meet the requirements of this subsection (d) in a given 12-month rolling period, all EGUs at such source covered by the compliance demonstration are considered out of compliance with the applicable emission standards of this Subpart B for the entire last month of that period.

Section 225.232 Averaging Demonstrations for Existing Sources

a) Through December 31, 2013, as an alternative to compliance with the emission standards of Section 225.230(a) of this Subpart B, the owner or operator of an EGU may comply with the emission standards of this Subpart B by means of an Averaging Demonstration (Demonstration) that demonstrates that the actual emissions of mercury from the EGU and other EGUs at the source and other EGUs at other sources covered by the Demonstration are less than the allowable emissions of mercury from all EGUs covered by the Demonstration on a rolling 12-month basis.

b) The EGUs at each source covered by a Demonstration must also comply with one of the following emission standards on a source-wide basis for the period covered by the Demonstration:

1) An emission standard of 0.020 lb mercury/GWh gross electrical output; or

2) A minimum 75 percent reduction of input mercury.

c) For the purpose of this Section, compliance must be demonstrated using the equations in Section 225.230(a)(2), (a)(3), or (d)(2), as applicable, addressing all EGUs at the sources covered by the Demonstration, rather than by using only the EGUs at one source.

d) Limitations on Demonstrations.

1) The owners or operators of more than one existing source with EGUs can only participate in Demonstrations that include other existing sources that they own or operate.

2) Single Existing Source Demonstrations

A) The owner or operator of only a single existing source with EGUs (i.e., City, Water, Light & Power, City of Springfield, ID 167120AAO; Kincaid Generating Station, ID 021814AAB; and Southern Illinois Power Cooperative/Marion Generating Station, ID 199856AAC) can only participate in Demonstrations with other such owners or operators of a single existing source of EGUs.

B) Participation in Demonstrations under this Section by the owner or operator of only a single existing source with EGUs must be authorized through federally enforceable permit conditions for each such source participating in the Demonstration.

e) A source may be included in only one Demonstration during each rolling 12-month period.

f) The owner or operator of EGUs using Demonstrations to show compliance with this Subpart B must complete the determination of compliance for each 12-month rolling period no later than 60 days following the end of the period.

g) If averaging is used to demonstrate compliance with this Subpart B, the effect of a failure to demonstrate compliance will be that the compliance status of each source must be determined under Section 225.230 of this Subpart B as if the sources were not covered by a Demonstration.

h) For purposes of this Section, if the owner or operator of any source that participates in a Demonstration with an owner or operator of a source that does not maintain the required records, data, and reports for the EGUs at the source, or that does not submit copies of such records, data, or reports to the Agency upon request, then the effect of this failure will be deemed to be a failure to demonstrate compliance and the compliance status of each source must be determined under Section 225.230 of this Subpart B as if the sources were not covered by a Demonstration.

Section 225.233 Multi-Pollutant Standards (MPS)

a) General.

1) As an alternative to compliance with the emissions standards of Section 225.230(a), the owner of eligible EGUs may elect for those EGUs to demonstrate compliance pursuant to this Section, which establishes control requirements and standards for emissions of NO_x and SO_2, as well as for emissions of mercury.

2) For the purpose of this Section, the following requirements apply:

A) An eligible EGU is an EGU that is located in Illinois and which commenced commercial operation on or before December 31, 2004; and

B) Ownership of an eligible EGU is determined based on direct ownership, by the holding of a majority interest in a company that owns the EGU or EGUs, or by the common ownership of the company that owns the EGU, whether through a parent-subsidiary relationship, as a sister corporation, or as an affiliated corporation with the same parent corporation, provided that the owner has the right or authority to submit a CAAPP application on behalf of the EGU.

3) The owner of one or more EGUs electing to demonstrate compliance with this Subpart B pursuant to this Section must submit an application for a CAAPP permit modification to the Agency, as provided in Section 225.220, that includes the information specified in subsection (b) of this Section and which clearly states the owner's election to demonstrate compliance pursuant to this Section 225.233.

A) If the owner of one or more EGUs elects to demonstrate compliance with this Subpart pursuant to this Section, then all EGUs it owns in Illinois as of July 1, 2006, as defined in subsection (a)(2)(B) of this Section, must be thereafter subject to the standards and control requirements of this Section, except as provided in subsection (a)(3)(B). Such EGUs must be referred to as a Multi-Pollutant Standard (MPS) Group.

B) Notwithstanding the foregoing, the owner may exclude from an MPS Group any EGU scheduled for permanent shutdown that the owner so designates in its CAAPP application required to be submitted pursuant to subsection (a)(3) of this Section, with compliance for such units to be achieved by means of Section 225.235.

4) When an EGU is subject to the requirements of this Section, the requirements apply to all owners or operators of the EGU, and to the designated representative for the EGU.

b) Notice of Intent.

The owner of one or more EGUs that intends to comply with this Subpart B by means of this Section must notify the Agency of its intention by December 31, 2007. The following information must accompany the notification:

1) The identification of each EGU that will be complying with this Subpart B by means of the multi-pollutant standards contained in this Section, with evidence that the owner has identified all EGUs that it owned in Illinois as of July 1, 2006 and which commenced commercial operation on or before December 31, 2004;

2) If an EGU identified in subsection (b)(1) of this Section is also owned or operated by a person different than the owner submitting the notice of intent, a demonstration that the submitter has the right to commit the EGU or authorization from the responsible official for the EGU accepting the application;

3) The Base Emission Rates for the EGUs, with copies of supporting data and calculations;

4) A summary of the current control devices installed and operating on each EGU and identification of the additional control devices that will likely be needed for the each EGU to comply with emission control requirements of this Section, including identification of each EGU in the MPS group that will be addressed by subsection (c)(1)(B) of this Section, with information showing that the eligibility criteria for this subsection (b) are satisfied; and

5) Identification of each EGU that is scheduled for permanent shut down, as provided by Section 225.235, which will not be part of the MPS Group and which will not be demonstrating compliance with this Subpart B pursuant to this Section.

c) Control Technology Requirements for Emissions of Mercury.

1) Requirements for EGUs in an MPS Group.

A) For each EGU in an MPS Group other than an EGU that is addressed by subsection (c)(1)(B) of this Section for the period beginning July 1, 2009 (or December 31, 2009 for an EGU for which an SO_2 scrubber or fabric filter is being installed to be in operation by December 31, 2009), and ending on December 31, 2014 (or such earlier date that the EGU is subject to the mercury emission standard in subsection (d)(1) of this Section), the owner or operator of the EGU must install, to the extent not already installed, and properly operate and maintain one of the following emission control devices:

i) A Halogenated Activated Carbon Injection System, complying with the sorbent injection requirements of subsection (c)(2) of this Section, except as may be otherwise provided by subsection (c)(4) of this Section, and

followed by a Cold-Side Electrostatic Precipitator or Fabric Filter; or

ii) If the boiler fires bituminous coal, a Selective Catalytic Reduction (SCR) System and an SO_2 Scrubber.

B) An owner of an EGU in an MPS Group has two options under this subsection (c). For an MPS Group that contains EGUs smaller than 90 gross MW in capacity, the owner may designate any such EGUs to be not subject to subsection (c)(1)(A) of this Section. Or, for an MPS Group that contains EGUs with gross MW capacity of less than 115 MW, the owner may designate any such EGUs to be not subject to subsection (c)(1)(A) of this Section, provided that the aggregate gross MW capacity of the designated EGUs does not exceed 4% of the total gross MW capacity of the MPS Group. For any EGU subject to one of these two options, unless the EGU is subject to the emission standards in subsection (d)(2) of this Section, beginning on January 1, 2013, and continuing until such date that the owner or operator of the EGU commits to comply with the mercury emission standard in subsection (d)(2) of this Section, the owner or operator of the EGU must install and properly operate and maintain a Halogenated Activated Carbon Injection System that complies with the sorbent injection requirements of subsection (c)(2) of this Section, except as may be otherwise provided by subsection (c)(4) of this Section, and followed by either a Cold-Side Electrostatic Precipitator or Fabric Filter. The use of a properly installed, operated, and maintained Halogenated Activated Carbon Injection System that meets the sorbent injection requirements of subsection (c)(2) of this Section is defined as the "principal control technique."

2) For each EGU for which injection of halogenated activated carbon is required by subsection (c)(1) of this Section, the owner or operator of the EGU must inject halogenated activated carbon in an optimum manner, which, except as provided in subsection (c)(4) of this Section, is defined as all of the following:

A) The use of an injection system designed for effective absorption of mercury, considering the configuration of the EGU and its ductwork;

B) The injection of halogenated activated carbon manufactured by Alstom, Norit, or Sorbent Technologies, or the injection of any other halogenated activated carbon or sorbent that the owner or operator of the EGU has demonstrated to have similar or better effectiveness for control of mercury emissions; and

C) The injection of sorbent at the following minimum rates, as applicable:

i) For an EGU firing subbituminous coal, 5.0 lbs per million actual cubic feet or, for any cyclone-fired EGU that will install a scrubber and baghouse by December 31, 2012, and which already meets an emission rate of 0.020 lb mercury/GWh gross electrical output or at least 75 percent reduction of input mercury, 2.5 lbs per million actual cubic feet;

ii) For an EGU firing bituminous coal, 10.0 lbs per million actual cubic feet or for any cyclone-fired EGU that will install a scrubber and baghouse by December 31, 2012, and which already meets an emission rate of 0.020 lb mercury/GWh gross electrical output or at least 75 percent reduction of input mercury, 5.0 lbs per million actual cubic feet;

iii) For an EGU firing a blend of subbituminous and bituminous coal, a rate that is the weighted average of the above rates, based on the blend of coal being fired; or

iv) A rate or rates set lower by the Agency, in writing, than the rate specified in any of subsections (c)(2)(C)(i), (c)(2)(C)(ii), or (c)(2)(C)(iii) of this Section on a unit-specific basis, provided that the owner or operator of the EGU has demonstrated that such rate or rates are needed so that carbon injection will not increase particulate matter emissions or opacity so as to threaten noncompliance with applicable requirements for particulate matter or opacity.

D) For the purposes of subsection (c)(2)(C) of this Section, the flue gas flow rate must be determined for the point of sorbent injection; provided that this flow rate may be assumed to be identical to the stack flow rate if the gas temperatures at the point of injection and the stack are normally within 100^{o} F, or the flue gas flow rate may otherwise be calculated from the stack flow rate, corrected for the difference in gas temperatures.

3) The owner or operator of an EGU that seeks to operate an EGU with an activated carbon injection rate or rates that are set on a unit-specific basis pursuant to subsection (c)(2)(C)(iv) of this Section must submit an application to the Agency proposing such rate or rates, and must meet the

requirements of subsections (c)(3)(A) and (c)(3)(B) of this Section, subject to the limitations of subsections (c)(3)(C) and (c)(3)(D) of this Section:

A) The application must be submitted as an application for a new or revised federally enforceable operating permit for the EGU, and it must include a summary of relevant mercury emission data for the EGU, the unit-specific injection rate or rates that are proposed, and detailed information to support the proposed injection rate or rates; and

B) This application must be submitted no later than the date that activated carbon must first be injected. For example, the owner or operator of an EGU that must inject activated carbon pursuant to subsection (c)(1)(A) of this subsection must apply for unit-specific injection rate or rates by July 1, 2009. Thereafter, the owner or operator of the EGU may supplement its application; and

C) Any decision of the Agency denying a permit or granting a permit with conditions that set a lower injection rate or rates may be appealed to the Board pursuant to Section 39 of the Act; and

D) The owner or operator of an EGU may operate at the injection rate or rates proposed in its application until a final decision is made on the application, including a final decision on any appeal to the Board.

4) During any evaluation of the effectiveness of a listed sorbent, an alternative sorbent, or other technique to control mercury emissions, the owner or operator of an EGU need not comply with the requirements of subsection (c)(2) of this Section for any system needed to carry out the evaluation, as further provided as follows:

A) The owner or operator of the EGU must conduct the evaluation in accordance with a formal evaluation program submitted to the Agency at least 30 days prior to commencement of the evaluation;

B) The duration and scope of the evaluation may not exceed the duration and scope reasonably needed to complete the desired evaluation of the alternative control technique, as initially addressed by the owner or operator in a support document submitted with the evaluation program;

C) The owner or operator of the EGU must submit a report to the Agency no later than 30 days after the conclusion of the evaluation that describes the evaluation conducted and which provides the results of the evaluation; and

D) If the evaluation of the alternative control technique shows less effective control of mercury emissions from the EGU than was achieved with the principal control technique, the owner or operator of the EGU must resume use of the principal control technique. If the evaluation of the alternative control technique shows comparable effectiveness to the principal control technique, the owner or operator of the EGU may either continue to use the alternative control technique in a manner that is at least as effective as the principal control technique, or it may resume use of the principal control technique. If the evaluation of the alternative control technique shows more effective control of mercury emissions than the control technique, the owner or operator of the EGU must continue to use the alternative control technique in a manner that is more effective than the principal control technique, so long as it continues to be subject to this subsection (c).

5) In addition to complying with the applicable recordkeeping and monitoring requirements in Sections 225.240 through 225.290, the owner or operator of an EGU that elects to comply with this Subpart B by means of this Section must also comply with the following additional requirements:

A) For the first 36 months that injection of sorbent is required, it must maintain records of the usage of sorbent, the exhaust gas flow rate from the EGU, and the sorbent feed rate, in pounds per million actual cubic feet of exhaust gas at the injection point, on a weekly average;

B) After the first 36 months that injection of sorbent is required, it must monitor activated sorbent feed rate to the EGU, flue gas temperature at the point of sorbent injection, and exhaust gas flow rate from the EGU, automatically recording this data and the sorbent carbon feed rate, in pounds per million actual cubic feet of exhaust gas at the injection point, on an hourly average; and

C) If a blend of bituminous and subbituminous coal is fired in the EGU, it must keep records of the amount of each type of coal burned and the required injection rate for injection of activated carbon, on a weekly basis.

6) In addition to complying with the applicable reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU that elects to comply with this Subpart B by means of this Section must also submit quarterly reports for the recordkeeping and monitoring conducted pursuant to subsection (c)(5) of this Section.

d) Emission Standards for Mercury.

1) For each EGU in an MPS Group that is not addressed by subsection (c)(1)(B) of this Section, beginning January 1, 2015 (or such earlier date when the owner or operator of the EGU notifies the Agency that it will comply with these standards) and continuing thereafter, the owner or operator of the EGU must comply with one of the following standards on a rolling 12-month basis:

A) An emission standard of 0.0080 lb mercury/GWh gross electrical output; or

B) A minimum 90-percent reduction of input mercury.

2) For each EGU in an MPS Group that has been addressed under subsection (c)(1)(B) of this Section, beginning on the date when the owner or operator of the EGU notifies the Agency that it will comply with these standards and continuing thereafter, the owner or operator of the EGU must comply with one of the following standards on a rolling 12-month basis:

A) An emission standard of 0.0080 lb mercury/GWh gross electrical output; or

B) A minimum 90-percent reduction of input mercury.

3) Compliance with the mercury emission standard or reduction requirement of this subsection (d) must be calculated in accordance with Section 225.230(a) or (d).

e) Emission Standards for NO_x and SO_2.

1) NO_x Emission Standards.

A) Beginning in calendar year 2012 and continuing in each calendar thereafter, for the EGUs in each MPS Group, the owner and operator of the EGUs must comply with an overall NOx annual emission rate of no more than 0.11 lb/million Btu or an emission rate equivalent to 52 percent of the Base Annual Rate of NO_x emissions, whichever is more stringent.

B) Beginning in the 2012 ozone season and continuing in each ozone season thereafter, for the EGUs in each MPS Group, the owner and operator of the EGUs must comply with an overall NO_x seasonal emission rate of no more than 0.11 lb/million Btu or an emission

rate equivalent to 80 percent of the Base Seasonal Rate of NO_x emissions, whichever is more stringent.

2) SO_2 Emission Standards.

A) Beginning in calendar year 2013 and continuing in calendar year 2014, for the EGUs in each MPS Group, the owner and operator of the EGUs must comply with an overall SO_2 annual emission rate of 0.33 lbs/million Btu or a rate equivalent to 44 percent of the Base Rate of SO_2 emissions, whichever is more stringent.

B) Beginning in calendar year 2015 and continuing in each calendar year thereafter, for the EGUs in each MPS Grouping, the owner and operator of the EGUs must comply with an overall annual emission rate for SO_2 of 0.25 lbs/million Btu or a rate equivalent to 35 percent of the Base Rate of SO_2 emissions, whichever is more stringent.

3) Compliance with the NO_x and SO_2 emission standards must be demonstrated in accordance with Sections 225.310, 225.410, and 225.510. The owner or operator of EGUs must complete the demonstration of compliance before March 1 of the following year for annual standards and before November 1 for seasonal standards, by which date a compliance report must be submitted to the Agency.

f) Requirements for NO_x and SO_2 Allowances.

1) The owner or operator of EGUs in an MPS Group must not sell or trade to any person or otherwise exchange with or give to any person NO_x allowances allocated to the EGUs in the MPS Group for vintage years 2012 and beyond that would otherwise be available for sale, trade, or exchange as a result of actions taken to comply with the standards in subsection (e) of this Section. Such allowances that are not retired for compliance must be surrendered to the Agency on an annual basis, beginning in calendar year 2013. This provision does not apply to the use, sale, exchange, gift, or trade of allowances among the EGUs in an MPS Group.

2) The owners or operators of EGUs in an MPS Group must not sell or trade to any person or otherwise exchange with or give to any person SO_2 allowances allocated to the EGUs in the MPS Group for vintage years 2013 and beyond that would otherwise be available for sale or trade as a result of actions taken to comply with the standards in subsection (e) of this Section. Such allowances that are not retired for compliance, or otherwise surrendered pursuant to a consent decree to which the State of Illinois is a party, must be surrendered to the Agency on an annual basis,

beginning in calendar year 2014. This provision does not apply to the use, sale, exchange, gift, or trade of allowances among the EGUs in an MPS Group.

3) The provisions of this subsection (f) do not restrict or inhibit the sale or trading of allowances that become available from one or more EGUs in a MPS Group as a result of holding allowances that represent over-compliance with the NO_x or SO_2 standard in subsection (e) of this Section, once such a standard becomes effective, whether such over-compliance results from control equipment, fuel changes, changes in the method of operation, unit shut downs, or other reasons.

4) For purposes of this subsection (f), NO_x and SO_2 allowances mean allowances necessary for compliance with Sections 225.310, 225.410, or 225.510, 40 CFR 72, or subparts AA and AAAA of 40 CFR 96. This Section does not prohibit the owner or operator of EGUs in an MPS Group from purchasing or otherwise obtaining allowances from other sources as allowed by law for purposes of complying with federal or state requirements, except as specifically set forth in this Section.

5) Before March 1, 2010, and continuing each year thereafter, the owner or operator of EGUs in an MPS Group must submit a report to the Agency that demonstrates compliance with the requirements of this subsection (f) for the previous calendar year, and which includes identification of any allowances that have been surrendered to the USEPA or to the Agency and any allowances that were sold, gifted, used, exchanged, or traded because they became available due to over-compliance. All allowances that are required to be surrendered must be surrendered by August 31, unless USEPA has not yet deducted the allowances from the previous year. A final report must be submitted to the Agency by August 31 of each year, verifying that the actions described in the initial report have taken place or, if such actions have not taken place, an explanation of all changes that have occurred and the reasons for such changes. If USEPA has not deducted the allowances from the previous year by August 31, the final report must be due, and all allowances required to be surrendered must be surrendered, within 30 days after such deduction occurs.

g) Notwithstanding 35 Ill. Adm. Code 201.146(hhh), until an EGU has complied with the applicable emission standards of subsections (d) and (e) of this Section for 12 months, the owner or operator of the EGU must obtain a construction permit for any new or modified air pollution control equipment that it proposes to construct for control of emissions of mercury, NO_x, or SO_2.

Section 225.234 Temporary Technology-Based Standard for EGUs at Existing Sources

a) General.

1) At a source with EGUs that commenced commercial operation on or before December 31, 2008, for an EGU that meets the eligibility criteria in subsection (b) of this Section, the owner or operator of the EGU may temporarily comply with the requirements of this Section through June 30, 2015, as an alternative to compliance with the mercury emission standards in Section 225.230, as provided in subsections (c), (d), and (e) of this Section.

2) An EGU that is complying with the emission control requirements of this Subpart B by operating pursuant to this Section may not be included in a compliance demonstration involving other EGUs during the period that is operating pursuant to this Section.

3) The owner or operator of an EGU that is complying with this Subpart B by means of the temporary alternative emission standards of this Section is not excused from any of the applicable monitoring, recordkeeping, and reporting requirements set forth in Sections 225.240 through 225.290

b) Eligibility.

To be eligible to operate an EGU pursuant to this Section, the following criteria must be met for the EGU:

1) The EGU is equipped and operated with the air pollution control equipment or systems that include injection of halogenated activated carbon and either a cold-side electrostatic precipitator or a fabric filter.

2) The owner or operator of the EGU is injecting halogenated activated carbon in an optimum manner for control of mercury emissions, which must include injection of Alstrom, Norit, Sorbent Technologies, or other halogenated activated carbon that the owner or operator of the EGU has demonstrated to have similar or better effectiveness for control of mercury emissions, at least at the following rates set forth in subsections (b)(2)(A) through (b)(2)(D) of this Section, unless other provisions for injection of halogenated activated carbon are established in a federally enforceable operating permit issued for the EGU, using an injection system designed for effective absorption of mercury, considering the configuration of the EGU and its ductwork. For the purposes of this subsection (b)(2), the flue gas flow rate must be determined for the point of sorbent injection (provided, however, that this flow rate may be assumed to be identical to the stack flow rate if the gas temperatures at the point of injection and the stack are normally within 100º F) or may otherwise be calculated from the stack flow rate, corrected for the difference in gas temperatures.

A) For an EGU firing subbituminous coal, 5.0 lbs per million actual cubic feet.

B) For an EGU firing bituminous coal, 10.0 lbs per million actual cubic feet.

C) For an EGU firing a blend of subbituminous and bituminous coal, a rate that is the weighted average of the above rates, based on the blend of coal being fired.

D) A rate or rates set on a unit-specific basis that are lower than the rate specified above to the extent that the owner or operator of the EGU demonstrates that such rate or rates are needed so that carbon injection would not increase particulate matter emissions or opacity so as to threaten compliance with applicable regulatory requirements for particulate matter or opacity.

3) The total capacity of the EGUs that operate pursuant to this Section does not exceed the applicable of the following values:

A) For the owner or operator of more than one existing source with EGUs, 25 percent of the total rated capacity, in MW, of all the EGUs at the existing sources that it owns or operates, other than any EGUs operating pursuant to Section 225.235 of this Subpart B.

B) For the owner or operator of only a single existing source with EGUs (i.e., City, Water, Light & Power, City of Springfield, ID 167120AAO; Kincaid Generating Station, ID 021814AAB; and Southern Illinois Power Cooperative/Marion Generating Station, ID 199856AAC), 25 percent of the total rated capacity, in MW, of the all the EGUs at the existing sources, other than any EGUs operating pursuant to Section 225.235.

c) Compliance Requirements.

1) Emission Control Requirements.

The owner or operator of an EGU that is operating pursuant to this Section must continue to maintain and operate the EGU to comply with the criteria for eligibility for operation pursuant to this Section, except during an evaluation of the current sorbent, alternative sorbents or other techniques to control mercury emissions, as provided by subsection (e) of this Section.

2) Monitoring and Recordkeeping Requirements.

In addition to complying with all applicable reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU operating pursuant to this Section must also:

A) Through December 31, 2012, it must maintain records of the usage of activated carbon, the exhaust gas flow rate from the EGU, and the activated carbon feed rate, in pounds per million actual cubic feet of exhaust gas at the injection point, on a weekly average.

B) Beginning January 1, 2013, it must monitor activated carbon feed rate to the EGU, flue gas temperature at the point of sorbent injection, and exhaust gas flow rate from the EGU, automatically recording this data and the activated carbon feed rate, in pounds per million actual cubic feet of exhaust gas at the injection point, on an hourly average.

C) If a blend of bituminous and subbituminous coal is fired in the EGU, it must maintain records of the amount of each type of coal burned and the required injection rate for injection of halogenated activated carbon, on a weekly basis.

3) Notification and Reporting Requirements.

In addition to complying with all applicable reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU operating pursuant to this Section must also submit the following notifications and reports to the Agency:

A) Written notification prior to the month in which any of the following events will occur:

i) The EGU will no longer be eligible to operate under this Section due to a change in operation;

ii) The type of coal fired in the EGU will change; the mercury emission standard with which the owner or operator is attempting to comply for the EGU will change; or

iii) Operation under this Section will be terminated.

B) Quarterly reports for the recordkeeping and monitoring conducted pursuant to subsection (c)(2) of this Section.

C) Annual reports detailing activities conducted for the EGU to further improve control of mercury emissions, including the

measures taken during the past year and activities planned for the current year.

d) Applications to Operate under the Technology-Based Standard

1) Application Deadlines.

A) The owner or operator of an EGU that is seeking to operate the EGU pursuant to this Section must submit an application to the Agency no later than three months prior to the date on which compliance with Section 225.230 of this Subpart B would otherwise have to be demonstrated. For example, the owner or operator of an EGU that is applying to operate the EGU pursuant to this Section on June 30, 2010, when compliance with applicable mercury emission standards must be first demonstrated, must apply by March 31, 2010 to operate under this Section.

B) Unless the Agency finds that the EGU is not eligible to operate pursuant to this Section or that the application for operation pursuant to this Section does not meet the requirements of subsection (d)(2) of this Section, the owner or operator of the EGU is authorized to operate the EGU pursuant to this Section beginning 60 days after receipt of the application by the Agency.

C) The owner or operator of an EGU operating pursuant to this Section must reapply to operate pursuant to this Section:

i) If it operated the EGU pursuant to this Section 225.234 during the period of June 2010 through December 2012 and it seeks to operate the EGU pursuant to this Section 225.234 during the period from January 2013 through June 2015.

ii) If it is planning a physical change to or a change in the method of operation of the EGU, control equipment or practices for injection of activated carbon that is expected to reduce the level of control of mercury emissions.

2) Contents of Application. An application to operate an EGU pursuant to this Section 225.234 must be submitted as an application for a new or revised federally enforceable operating permit for the EGU, and it must include the following documents and information:

A) A formal request to operate pursuant to this Section showing that the EGU is eligible to operate pursuant to this Section and

describing the reason for the request, the measures that have been taken for control of mercury emissions, and factors preventing more effective control of mercury emissions from the EGU.

B) The applicable mercury emission standard in Section 225.230(a) with which the owner or operator of the EGU is attempting to comply and a summary of relevant mercury emission data for the EGU.

C) If a unit-specific rate or rates for carbon injection are proposed pursuant to subsection (b)(2) of this Section, detailed information to support the proposed injection rates.

D) An action plan describing the measures that will be taken while operating under this Section to improve control of mercury emissions. This plan must address measures such as evaluation of alternative forms or sources of activated carbon, changes to the injection system, changes to operation of the unit that affect the effectiveness of mercury absorption and collection, changes to the particulate matter control device to improve performance, and changes to other emission control devices. For each measure contained in the plan, the plan must provide a detailed description of the specific actions that are planned, the reason that the measure is being pursued and the range of improvement in control of mercury that is expected, and the factors that affect the timing for carrying out the measure, together with the current schedule for the measure.

e) Evaluation of Alternative Control Techniques for Mercury Emissions.

1) During an evaluation of the effectiveness of the current sorbent, alternative sorbent, or other technique to control mercury emissions, the owner or operator of an EGU operating pursuant to this Section need not comply with the eligibility criteria for operation pursuant to this Section as needed to carry out an evaluation of the practicality and effectiveness of such technique, subject to the following limitations:

A) The owner or operator of the EGU must conduct the evaluation in accordance with a formal evaluation program that it has submitted to the Agency at least 30 days prior to beginning the evaluation.

B) The duration and scope of the formal evaluation program must not exceed the duration and scope reasonably needed to complete the desired evaluation of the alternative control technique, as initially addressed by the owner or owner in a support document that it has

submitted with the formal evaluation program pursuant to subsection (e)(1)(A) of this Section.

C) Notwithstanding 35 Ill. Adm. Code 201.146(hhh), the owner or operator of the EGU must obtain a construction permit for any new or modified air pollution control equipment to be constructed as part of the evaluation of the alternative control technique.

D) The owner or operator of the EGU must submit a report to the Agency, no later than 90 days after the conclusion of the formal evaluation program describing the evaluation that was conducted, and providing the results of the formal evaluation program.

2) If the evaluation of the alternative control technique shows less effective control of mercury emissions from the EGU than achieved with the prior control technique, the owner or operator of the EGU must resume use of the prior control technique. If the evaluation of the alternative control technique shows comparable control effectiveness, the owner or operator of the EGU may either continue to use the alternative control technique in an optimum manner or resume use of the prior control technique. If the evaluation of the alternative control technique shows more effective control of mercury emissions, the owner or operator of the EGU must continue to use the alternative control technique in an optimum manner, if it continues to operate pursuant to this Section.

Section 225.235 Units Scheduled for Permanent Shut Down

a) The emission standards of Section 225.230(a) are not applicable to an EGU that will be permanently shut down as described in this Section.:

1) The owner or operator of an EGU that relies on this Section must complete the following actions before June 30, 2009:

A) Have notified the Agency that it is planning to permanently shut down the EGU by the applicable date specified in subsection (a)(3) or (4) of this Section. This notification must include a description of the actions that have already been taken to allow the shut down of the EGU and a description of the future actions that must be accomplished to complete the shut down of the EGU, with the anticipated schedule for those actions and the anticipated date of permanent shut down of the unit.

B) Have applied for a construction permit or be actively pursuing a federally enforceable agreement that requires the EGU to be permanently shut down in accordance with this Section.

C) Have applied for revisions to the operating permits for the EGU to include provisions that terminate the authorization to operate the unit in accordance with this Section.

2) The owner or operator of an EGU that relies on this Section must, before June 30, 2010, complete the following actions:

A) Have obtained a construction permit or entered into a federally enforceable agreement as described in subsection (a)(1)(B) of this Section; or

B) Have obtained revised operating permits in accordance with subsection (a)(1)(C) of this Section.

3) The plan for permanent shut down of the EGU must provide for the EGU to be permanently shut down by no later than the applicable date specified below:

A) If the owner or operator of the EGU is not constructing a new EGU or other generating unit to specifically replace the existing EGU, by December 31, 2010.

B) If the owner or operator of the EGU is constructing a new EGU or other generating unit to specifically replace the existing EGU, by December 31, 2011.

4) The owner or operator of the EGU must permanently shut down the EGU by the date specified in subsection (a)(3) of this Section, unless the owner or operator submits a demonstration to the Agency before the specified date showing that circumstances beyond its reasonable control (such as protracted delays in construction activity, unanticipated outage of another EGU, or protracted shakedown of a replacement unit) have occurred that interfere with the plan for permanent shut down of the EGU, in which case the Agency may accept the demonstration as substantiated and extend the date for shut down of the EGU as follows:

A) If the owner or operator of the EGU is not constructing a new EGU or other generating unit to specifically replace the existing EGU, for up to one year, i.e., permanent shut down of the EGU to occur by no later than December 31, 2011; or

B) If the owner or operator of the EGU is constructing a new EGU or other generating unit to specifically replace the existing EGU, for up to 18 months, i.e., permanent shutdown of the EGU to occur by no later than June 30, 2013; provided, however, that after

December 31, 2012, the existing EGU must only operate as a back-up unit to address periods when the new generating units are not in service.

b) Notwithstanding Sections 225.230 and 225.232, any EGU that is not required to comply with Section 225.230 pursuant to this Section must not be included when determining whether any other EGUs at the source or other sources are in compliance with Section 225.230.

c) If an EGU, for which the owner or operator of the source has relied upon this Section in lieu of complying with Section 225.230(a) is not permanently shut down as required by this Section, the EGU must be considered to be a new EGU subject to the emission standards in Section 225.237(a) beginning in the month after the EGU was required to be permanently shut down, in addition to any other penalties that may be imposed for failure to permanently shut down the EGU in accordance with this Section.

Section 225.237 Emission Standards for New Sources with EGUs

a) Standards.

1) The owner or operator of a source with one or more EGUs, but that previously had not had any EGUs that commenced commercial operation before January 1, 2009, must comply with one of the following emission standards for each EGU on a rolling 12-month basis:

A) An emission standard of 0.0080 lb mercury/GWh gross electrical output; or

B) A minimum 90 percent reduction of input mercury.

2) For this purpose, compliance may be demonstrated using the equations in Section 225.230(a)(2), (a)(3), or (b)(2).

b) The initial 12-month rolling period for which compliance with the emission standards of subsection (a)(1) of this Section must be demonstrated for a new EGU will commence on the date that the initial performance test for the mercury emission standard under 40 CFR 60.45a also commences. The CEMS required by this Subpart B for mercury emissions from the EGU must be certified prior to this date. Thereafter, compliance must be demonstrated on a rolling 12-month basis based on calendar months.

Section 225.238 Temporary Technology-Based Standard for New Sources with EGUs

a) General.

1) At a source with EGUs that previously had not had any EGUs that commenced commercial operation before January 1, 2009, for an EGU that meets the eligibility criteria in subsection (b) of this Section, as an alternative to compliance with the mercury emission standards in Section 225.237, the owner or operator of the EGU may temporarily comply with the requirements of this Section, through December 31, 2018, as further provided in subsections (c), (d), and (e) of this Section.

2) An EGU that is complying with the emission control requirements of this Subpart B by operating pursuant to this Section may not be included in a compliance demonstration involving other EGUs at the source during the period that the temporary technology-based standard is in effect.

3) The owner or operator of an EGU that is complying with this Subpart B pursuant to this Section is not excused from applicable monitoring, recordkeeping, and reporting requirements of Sections 225.240 through 225.290.

b) Eligibility. To be eligible to operate an EGU pursuant to this Section, the following criteria must be met for the EGU:

1) The EGU is subject to Best Available Control Technology (BACT) for emissions of sulfur dioxide, nitrogen oxides, and particulate matter, and the EGU is equipped and operated with the air pollution control equipment or systems specified below, as applicable to the category of EGU:

A) For coal-fired boilers, injection of sorbent or other mercury control technique (e.g., reagent) approved by the Agency.

B) For an EGU firing fuel gas produced by coal gasification, processing of the raw fuel gas prior to combustion for removal of mercury with a system using a sorbent or other mercury control technique approved by the Agency.

2) For an EGU for which injection of a sorbent or other mercury control technique is required pursuant to subsection (b)(1) of this Section, the owner or operator of the EGU is injecting sorbent or other mercury control technique in an optimum manner for control of mercury emissions, which must include injection of Alstrom, Norit, Sorbent Technologies, or other sorbent or other mercury control technique that the owner or operator of the EGU demonstrates to have similar or better effectiveness for control of mercury emissions, at least at the rate set forth in the appropriate of subsections (b)(2)(A) through (b)(2)(C) of this Section, unless other provisions for injection of sorbent or other mercury control technique are established in a federally enforceable operating permit issued for the EGU,

with an injection system designed for effective absorption of mercury. For the purposes of this subsection (b)(2), the flue gas flow rate must be determined for the point of sorbent injection or other mercury control technique (provided, however, that this flow rate may be assumed to be identical to the stack flow rate if the gas temperatures at the point of injection and the stack are normally within 100º F) , or the flow rate may otherwise be calculated from the stack flow rate, corrected for the difference in gas temperatures.

A) For an EGU firing subbituminous coal, 5.0 pounds per million actual cubic feet.

B) For an EGU firing bituminous coal, 10.0 pounds per million actual cubic feet.

C) For an EGU firing a blend of subbituminous and bituminous coal, a rate that is the weighted average of the above rates, based on the blend of coal being fired.

D) A rate or rates set on a unit-specific basis that are lower than the rate specified in subsections (b)(2)(A), (B), and (C) of this Section, to the extent that the owner or operator of the EGU demonstrates that such rate or rates are needed so that sorbent injection or other mercury control technique would not increase particulate matter emissions or opacity so as to threaten compliance with applicable regulatory requirements for particulate matter or opacity or cause a safety issue.

c) Compliance Requirements .

1) Emission Control Requirements. The owner or operator of an EGU that is operating pursuant to this Section must continue to maintain and operate the EGU to comply with the criteria for eligibility for operation under this Section, except during an evaluation of the current sorbent, alternative sorbents, or other techniques to control mercury emissions, as provided by subsection (e) of this Section.

2) Monitoring and Recordkeeping Requirements. In addition to complying with all applicable reporting requirements in Sections 225.240 through 225.290, the owner or operator of a new EGU operating pursuant to this Section must also:

A) Monitor sorbent feed rate to the EGU, flue gas temperature at the point of sorbent injection or other mercury control technique, and exhaust gas flow rate from the EGU, automatically recording this

data and the sorbent feed rate, in pounds per million actual cubic feet of exhaust gas at the injection point, on an hourly average.

B) If a blend of bituminous and subbituminous coal is fired in the EGU, maintain records of the amount of each type of coal burned and the required injection rate for injection of sorbent, on a weekly basis.

C) If a mercury control technique other than sorbent injection is approved by the Agency, monitor appropriate parameter for that control technique as specified by the Agency.

3) Notification and Reporting Requirements. In addition to complying with all applicable reporting requirements of Sections 225.240 through 225.290, the owner or operator of an EGU operating pursuant to this Section must also submit the following notifications and reports to the Agency:

A) Written notification prior to the month in which any of the following events will occur: the EGU will no longer be eligible to operate under this Section due to a change in operation; the type of coal fired in the EGU will change; the mercury emission standard with which the owner or operator is attempting to comply for the EGU will change; or operation under this Section will be terminated.

B) Quarterly reports for the recordkeeping and monitoring conducted pursuant to subsection (c)(2) of this Section.

C) Annual reports detailing activities conducted for the EGU to further improve control of mercury emissions, including the measures taken during the past year and activities planned for the current year.

d) Applications to Operate under the Technology-Based Standard.

1) Application Deadlines.

A) The owner or operator of an EGU that is seeking to operate the EGU pursuant to this Section must submit an application to the Agency no later than three months prior to the date that compliance with Section 225.237 would otherwise have to be demonstrated.

B) Unless the Agency finds that the EGU is not eligible to operate pursuant to this Section or that the application for operation under

this Section does not meet the requirements of subsection (d)(2) of this Section, the owner or operator of the EGU is authorized to operate the EGU pursuant to this Section beginning 60 days after receipt of the application by the Agency.

C) The owner or operator of an EGU operating pursuant to this Section must reapply to operate pursuant to this Section if it is planning a physical change to or a change in the method of operation of the EGU, control equipment, or practices for injection of sorbent or other mercury control technique that is expected to reduce the level of control of mercury emissions.

2) Contents of Application. An application to operate pursuant to this Section must be submitted as an application for a new or revised federally enforceable operating permit for the new EGU, and it must include the following information:

A) A formal request to operate pursuant to this Section showing that the EGU is eligible to operate pursuant to this Section and describing the reason for the request, the measures that have been taken for control of mercury emissions, and factors preventing more effective control of mercury emissions from the EGU.

B) The applicable mercury emission standard in Section 225.237 with which the owner or operator of the EGU is attempting to comply and a summary of relevant mercury emission data for the EGU.

C) If a unit-specific rate or rates for sorbent or other mercury control technique injection are proposed pursuant to subsection (b)(2) of this Section, detailed information to support the proposed injection rates.

D) An action plan describing the measures that will be taken while operating pursuant to this Section to improve control of mercury emissions. This plan must address measures such as evaluation of alternative forms or sources of sorbent or other mercury control technique, changes to the injection system, changes to operation of the unit that affect the effectiveness of mercury absorption and collection, and changes to other emission control devices. For each measure contained in the plan, the plan must provide a detailed description of the specific actions that are planned, the reason that the measure is being pursued and the range of improvement in control of mercury that is expected, and the factors that affect the timing for carrying out the measure, with the current schedule for the measure.

e) Evaluation of Alternative Control Techniques for Mercury Emissions.

1) During an evaluation of the effectiveness of the current sorbent, alternative sorbent, or other technique to control mercury emissions, the owner or operator of an EGU operating pursuant to this Section does not need to comply with the eligibility criteria for operation pursuant to this Section as needed to carry out an evaluation of the practicality and effectiveness of such technique, further subject to the following limitations:

A) The owner or operator of the EGU must conduct the evaluation in accordance with a formal evaluation program that it has submitted to the Agency at least 30 days prior to beginning the evaluation.

B) The duration and scope of the formal evaluation program must not exceed the duration and scope reasonably needed to complete the desired evaluation of the alternative control technique, as initially addressed by the owner or operator in a support document that it has submitted with the formal evaluation program pursuant to subsection (e)(1)(A) of this Section.

C) Notwithstanding 35 Ill. Adm. Code 201.146(hhh), the owner or operator of the EGU must obtain a construction permit for any new or modified air pollution control equipment to be constructed as part of the evaluation of the alternative control technique.

D) The owner or operator of the EGU must submit a report to the Agency no later than 90 days after the conclusion of the formal evaluation program describing the evaluation that was conducted and providing the results of the formal evaluation program.

2) If the evaluation of the alternative control technique shows less effective control of mercury emissions from the EGU than was achieved with the prior control technique, the owner or operator of the EGU must resume use of the prior control technique. If the evaluation of the alternative control technique shows comparable effectiveness, the owner or operator of the EGU may either continue to use the alternative control technique in an optimum manner or resume use of the prior control technique. If the evaluation of the alternative control technique shows more effective control of mercury emissions, the owner or operator of the EGU must continue to use the alternative control technique in an optimum manner, if it continues to operate pursuant to this Section.

Section 225.240 General Monitoring and Reporting Requirements

The owner or operator of an EGU must comply with the monitoring, recordkeeping, and reporting requirements as provided in this Section, Sections 225.250 through 225.290 of this Subpart B, and Subpart I of 40 CFR 75 (sections 75.80 through 75.84), incorporated by reference in Section 225.140. If the EGU utilizes a common stack with units that are not EGUs and the owner or operator of the EGU does not conduct emissions monitoring in the duct to the common stack from each EGU, the owner or operator of the EGU must conduct emissions monitoring in accordance with 40 CFR 75.82(b)(2) and this Section, including monitoring in the duct to the common stack from each unit that is not an EGU, unless the owner or operator of the EGU counts the combined emissions measured at the common stack as the mass emissions of mercury for the EGUs for recordkeeping and compliance purposes.

a) Requirements for installation, certification, and data accounting. The owner or operator of each EGU must:

1) Install all monitoring systems required pursuant to this Section and Sections 225.250 through 225.290 for monitoring mercury mass emissions (including all systems required to monitor mercury concentration, stack gas moisture content, stack gas flow rate, and CO_2 or O_2 concentration, as applicable, in accordance with 40 CFR 75.81 and 75.82).

2) Successfully complete all certification tests required pursuant to Section 225.250 and meet all other requirements of this Section, Sections 225.250 through 225.290, and subpart I of 40 CFR Part 75 applicable to the monitoring systems required under subsection (a)(1) of this Section.

3) Record, report, and assure the quality of the data from the monitoring systems required under subsection (a)(1) of this Section.

4) If the owner or operator elects to use the low mass emissions excepted monitoring methodology for an EGU that emits no more than 464 ounces (29 pounds) of mercury per year pursuant to 40 CFR 75.81(b), it must perform emissions testing in accordance with 40 CFR 75.81(c) to demonstrate that the EGU is eligible to use this excepted emissions monitoring methodology, as well as comply with all other applicable requirements of 40 CFR 75.81(b) through (f). Also, the owner or operator must submit a copy of any information required to be submitted to the USEPA pursuant to these provisions to the Agency. The initial emissions testing to demonstrate eligibility of an EGU for the low mass emissions excepted methodology must be conducted by the applicable of the following dates:

A) If the EGU has commenced commercial operation before July 1, 2008, at least by January 1, 2009, or 45 days prior to relying on the low mass emissions excepted methodology, whichever date is later.

B) If the EGU has commenced commercial operation on or after July 1, 2008, at least 45 days prior to the applicable date specified pursuant to subsection (b)(2) of this Section or 45 days prior to relying on the low mass emissions excepted methodology, whichever date is later.

b) Emissions Monitoring Deadlines. The owner or operator must meet the emissions monitoring system certification and other emissions monitoring requirements of subsections (a)(1) and (a)(2) of this Section on or before the applicable of the following dates. The owner or operator must record, report, and quality-assure the data from the emissions monitoring systems required under subsection (a)(1) of this Section on and after the applicable of the following dates:

1) For the owner or operator of an EGU that commences commercial operation before July 1, 2008, by January 1, 2009.

2) For the owner or operator of an EGU that commences commercial operation on or after July 1, 2008, by 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which the EGU commences commercial operation.

3) For the owner or operator of an EGU for which construction of a new stack or flue or installation of add-on mercury emission controls, a flue gas desulfurization system, a selective catalytic reduction system, a fabric filter, or a compact hybrid particulate collector system is completed after the applicable deadline pursuant to subsection (b)(1) or (b)(2) of this Section, by 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which emissions first exit to the atmosphere through the new stack or flue, add-on mercury emission controls, flue gas desulfurization system, selective catalytic reduction system, fabric filter, or compact hybrid particulate collector system.

c) Reporting Data.

1) Except as provided in subsection (c)(2) of this Section, the owner or operator of an EGU that does not meet the applicable emissions monitoring date set forth in subsection (b) of this Section for any emissions monitoring system required pursuant to subsection (a)(1) of this Section must, for each such monitoring system, determine, record, and report the maximum potential (or, as appropriate, the minimum potential) values for mercury concentration, the stack gas flow rate, the stack gas moisture content, and any other parameters required to determine mercury mass emissions in accordance with 40 CFR 75.80(g).

2) The owner or operator of an EGU that does not meet the applicable emissions monitoring date set forth in subsection (b)(3) of this Section for

any emissions monitoring system required pursuant to subsection (a)(1) of this Section must, for each such monitoring system, determine, record, and report substitute data using the applicable missing data procedures as set forth in 40 CFR 75.80(f), in lieu of the maximum potential (or, as appropriate, minimum potential) values for a parameter, if the owner or operator demonstrates that there is continuity between the data streams for that parameter before and after the construction or installation pursuant to subsection (b)(3) of this Section.

d) Prohibitions.

1) No owner or operator of an EGU may use any alternative emissions monitoring system, alternative reference method for measuring emissions, or other alternative to the emissions monitoring and measurement requirements of this Section and Sections 225.250 through 225.290, unless such alternative is promulgated by the USEPA and approved in writing by the Agency, or the use of such alternative is approved in writing by the Agency, and USEPA.

2) No owner or operator of an EGU may operate its EGU so as to discharge, or allow to be discharged, mercury emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this Section, Sections 225.250 through 225.290, and subpart I of 40 CFR 75.

3) No owner or operator of an EGU may disrupt the CEMS, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording mercury mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this Section, Sections 225.250 through 225.290, and subpart I of 40 CFR 75.

4) No owner or operator of an EGU may retire or permanently discontinue use of the CEMS or any component thereof, or any other approved monitoring system pursuant to this Subpart B, except under any one of the following circumstances:

A) The owner or operator is monitoring emissions from the EGU with another certified monitoring system that has been approved, in accordance with the applicable provisions of this Section, Sections 225.250 through 225.290 of this Subpart B, and subpart I of 40 CFR 75, by the Agency for use at that EGU and that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

B) The owner or operator or designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with Section 225.250(a)(3)(A).

e) Long-term Cold Storage.

The owner or operator of an EGU that is in long-term cold storage is subject to the provisions of 40 CFR 75.4 and 75.64 relating to monitoring, recordkeeping, and reporting for units in long-term cold storage.

Section 225.250 Initial Certification and Recertification Procedures for Emissions Monitoring

a) The owner or operator of an EGU must comply with the following initial certification and recertification procedures for a CEMS (i.e., a CEMS or an excepted monitoring system (sorbent trap monitoring system) pursuant to 40 CFR 75.15, incorporated by reference in Section 225.140) required by Section 225.240(a)(1). The owner or operator of an EGU that qualifies for, and for which the owner or operator elects to use, the low-mass-emissions excepted methodology pursuant to 40 CFR 75.81(b), incorporated by reference in Section 225.140, must comply with the procedures set forth in subsection (c) of this Section.

1) Requirements for Initial Certification. The owner or operator of an EGU must ensure that, for each CEMS required by Section 225.240(a)(1) (including the automated data acquisition and handling system), the owner or operator successfully completes all of the initial certification testing required pursuant to 40 CFR 75.80(d), incorporated by reference in Section 225.140, by the applicable deadline in Section 225.240(b). In addition, whenever the owner or operator of an EGU installs a monitoring system to meet the requirements of this Subpart B in a location where no such monitoring system was previously installed, the owner or operator must successfully complete the initial certification requirements of 40 CFR 75.80(d).

2) Requirements for Recertification. Whenever the owner or operator of an EGU makes a replacement, modification, or change in any certified CEMS, or an excepted monitoring system (sorbent trap monitoring system) pursuant to 40 CFR 75.15, and required by Section 225.240(a)(1), that may significantly affect the ability of the system to accurately measure or record mercury mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of 40 CFR 75.21 or Appendix B to 40 CFR 75, each incorporated by reference in Section 225.140, the owner or operator of an EGU must recertify the monitoring

system in accordance with 40 CFR 75.20(b), incorporated by reference in Section 225.140. Furthermore, whenever the owner or operator of an EGU makes a replacement, modification, or change to the flue gas handling system or the EGU's operation that may significantly change the stack flow or concentration profile, the owner or operator must recertify each CEMS, and each excepted monitoring system (sorbent trap monitoring system) pursuant to 40 CFR 75.15, whose accuracy is potentially affected by the change, all in accordance with 40 CFR 75.20(b). Examples of changes to a CEMS that require recertification include, but are not limited to, replacement of the analyzer, complete replacement of an existing CEMS, or change in location or orientation of the sampling probe or site.

3) Approval Process for Initial Certification and Recertification. Subsections (a)(3)(A) through (a)(3)(D) of this Section apply to both initial certification and recertification of a CEMS required by Section 225.240(a)(1). For recertifications, the words "certification" and "initial certification" are to be read as the word "recertification", the word "certified" is to be read as the word "recertified", and the procedures set forth in 40 CFR 75.20(b)(5) are to be followed in lieu of the procedures set forth in subsection (a)(3)(E) of this Section.

A) Notification of Certification. The owner or operator must submit to the Agency, USEPA Region 5, and the Administrator of the USEPA written notice of the dates of certification testing, in accordance with Section 225.270.

B) Certification Application. The owner or operator must submit to the Agency a certification application for each monitoring system. A complete certification application must include the information specified in 40 CFR 75.63, incorporated by reference in Section 225.140.

C) Provisional Certification Date. The provisional certification date for a monitoring system must be determined in accordance with 40 CFR 75.20(a)(3), incorporated by reference in Section 225.140. A provisionally certified monitoring system may be used pursuant to this Subpart B for a period not to exceed 120 days after receipt by the Agency of the complete certification application for the monitoring system pursuant to subsection (a)(3)(B) of this Section. Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of 40 CFR 75, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Agency does not invalidate the provisional certification by issuing

a notice of disapproval within 120 days after the date of receipt by the Agency of the complete certification application.

D) Certification Application Approval Process. The Agency must issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days after receipt of the complete certification application required by subsection (a)(3)(B) of this Section. In the event the Agency does not issue a written notice of approval or disapproval within the 120-day period, each monitoring system that meets the applicable performance requirements of 40 CFR 75 and which is included in the certification application will be deemed certified for use pursuant to this Subpart B.

i) Approval Notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR 75, then the Agency must issue a written notice of approval of the certification application within 120 days after receipt.

ii) Incomplete Application Notice. If the certification application is not complete, then the Agency must issue a written notice of incompleteness that sets a reasonable date by which the owner or operator must submit the additional information required to complete the certification application. If the owner or operator does not comply with the notice of incompleteness by the specified date, the Agency may issue a notice of disapproval pursuant to subsection (a)(3)(D)(iii) of this Section. The 120-day review period will not begin before receipt of a complete certification application.

iii) Disapproval Notice. If the certification application shows that any monitoring system does not meet the performance requirements of 40 CFR 75, or if the certification application is incomplete and the requirement for disapproval pursuant to subsection (a)(3)(D)(ii) of this Section is met, the Agency must issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated, and the data measured and recorded by each uncertified monitoring system will not be considered valid quality-assured data beginning with the date and hour of provisional certification (as defined pursuant to 40 CFR 75.20(a)(3)). The owner or operator must follow the procedures for loss of certification set forth in subsection

(a)(3)(E) of this Section for each monitoring system that is disapproved for initial certification.

iv) Audit Decertification. The Agency may issue a notice of disapproval of the certification status of a monitor in accordance with Section 225.260(b).

E) Procedures for Loss of Certification. If the Agency issues a notice of disapproval of a certification application pursuant to subsection (a)(3)(D)(iii) of this Section or a notice of disapproval of certification status pursuant to subsection (a)(3)(D)(iv) of this Section, the owner or operator must fulfill the following requirements:

i) The owner or operator must substitute the following values for each disapproved monitoring system and for each hour of EGU operation during the period of invalid data specified pursuant to 40 CFR 75.20(a)(4)(iii) or 75.21(e), continuing until the applicable date and hour specified pursuant to 40 CFR 75.20(a)(5)(i), each incorporated by reference in Section 225.140. For a disapproved mercury pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of mercury and the maximum potential flow rate, as defined in sections 2.1.7.1 and 2.1.4.1 of Appendix A to 40 CFR 75, incorporated by reference in Section 225.140. For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO_2 concentration or the minimum potential O_2 concentration (as applicable), as defined in Sections 2.1.5, 2.1.3.1, and 2.1.3.2 of Appendix A to 40 CFR 75, incorporated by reference in Section 225.140. For a disapproved excepted monitoring system (sorbent trap monitoring system) pursuant to 40 CFR 75.15 and disapproved flow monitor, respectively, the maximum potential concentration of mercury and maximum potential flow rate, as defined in sections 2.1.7.1 and 2.1.4.1 of Appendix A to 40 CFR 75, incorporated by reference in section 225.140.

ii) The owner or operator must submit a notification of certification retest dates and a new certification application in accordance with subsections (a)(3)(A) and (B) of this Section.

iii) The owner or operator must repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Agency's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

b) Exemption.

1) If an emissions monitoring system has been previously certified in accordance with 40 CFR 75 and the applicable quality assurance and quality control requirements of 40 CFR 75.21 and Appendix B to 40 CFR 75 are fully met, the monitoring system will be exempt from the initial certification requirements of this Section.

2) The recertification provisions of this Section apply to an emissions monitoring system required by Section 225.240(a)(1) exempt from initial certification requirements pursuant to subsection (a)(1) of this Section.

c) Initial certification and recertification procedures for EGUs using the mercury low mass emissions excepted methodology pursuant to 40 CFR 75.81(b). The owner or operator that has elected to use the mercury-low-mass-emissions-excepted methodology for a qualified EGU pursuant to 40 CFR 75.81(b) must meet the applicable certification and recertification requirements in 40 CFR 75.81(c) through (f), incorporated by reference in Section 225.140.

d) Certification Applications. The owner or operator of an EGU must submit an application to the Agency within 45 days after completing all initial certification or recertification tests required pursuant to this Section, including the information required pursuant to 40 CFR 75.63.

Section 225.260 Out of Control Periods for Emission Monitors

a) Whenever any emissions monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of 40 CFR 75, incorporated by reference in Section 225.140, data must be substituted using the applicable missing data procedures in Subparts D and I of 40 CFR 75, each incorporated by reference in Section 225.140.

b) Audit Decertification. Whenever both an audit of an emissions monitoring system and a review of the initial certification or recertification application reveal that any emissions monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement pursuant to Section 225.250 or the applicable provisions of 40 CFR 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Agency must issue a notice of disapproval of the certification status of such monitoring system. For the

purposes of this subsection (b), an audit must be either a field audit or an audit of any information submitted to the Agency. By issuing the notice of disapproval, the Agency revokes prospectively the certification status of the emissions monitoring system. The data measured and recorded by the monitoring system must not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator must follow the applicable initial certification or recertification procedures in Section 225.250 for each disapproved monitoring system.

Section 225.261 Additional Requirements to Provide Heat Input Data

The owner or operator of an EGU that monitors and reports mercury mass emissions using a mercury concentration monitoring system and a flow monitoring system must also monitor and report the heat input rate at the EGU level using the procedures set forth in 40 CFR 75, incorporated by reference in Section 225.140.

Section 225.263 Monitoring of Gross Electrical Output

The owner or operator of an EGU complying with this Subpart B by means of Section 225.230(a)(1) or using electrical output (O_i) and complying by means of Section 225.230(b) or (d) or Section 225.232 must monitor gross electrical output of the associated generator(s) in MWh on an hourly basis.

Section 225.265 Coal Analysis for Input Mercury Levels

a) The owner or operator of an EGU complying with this Subpart B by means of Section 225.230(a)(2) or using input mercury levels (I_i) and complying by means of Section 225.230(b) or (d) or Section 225.232 must fulfill the following requirements:

1) Perform daily sampling of the coal combusted in the EGU for mercury content. The owner or operator of such EGU must collect a minimum of one 2-lb grab sample per day of operation from the belt feeders anywhere between the crusher house or breaker building and the boiler. The sample must be taken in a manner that provides a representative mercury content for the coal burned on that day.

2) Analyze the grab coal sample for the following:

A) Determine the heat content using ASTM D5865-04 or an equivalent method approved in writing by the Agency.

B) Determine the moisture content using ASTM D3173-03 or an equivalent method approved in writing by the Agency.

C) Measure the mercury content using ASTM D6414-01, ASTM D3684-01, or an equivalent method approved in writing by the Agency.

3) The owner or operator of multiple EGUs at the same source using the same crusher house or breaker building may take one sample per crusher house or breaker building, rather than one per EGU.

4) The owner or operator of an EGU must use the data analyzed pursuant to subsection (b) of this Section to determine the mercury content in terms of lbs/trillion Btu.

b) The owner or operator of an EGU that must conduct sampling and analysis of coal pursuant to subsection (a) of this Section must begin such activity by the following date:

1) If the EGU is in daily service, at least 30 days before the start of the month for which such activity will be required.

2) If the EGU is not in daily service, on the day that the EGU resumes operation.

Section 225.270 Notifications

The owner or operator of a source with one or more EGUs must submit written notice to the Agency according to the provisions in 40 CFR 75.61, incorporated by reference in Section 225.140 (as a segment of 40 CFR 75), for each EGU or group of EGUs monitored at a common stack and each non-EGU monitored pursuant to 40 CFR 75.82(b)(2)(ii), incorporated by reference in Section 225.140.

Section 225.290 Recordkeeping and Reporting

a) General Provisions.

1) The owner or operator of an EGU and its designated representative must comply with all applicable recordkeeping and reporting requirements in this Section and with all applicable recordkeeping and reporting requirements of 40 CFR 75.84, incorporated by reference in Section 225.140.

2) The owner or operator of an EGU must maintain records for each month identifying the emission standard in Section 225.230(a) or 225.237(a) of this Section with which it is complying or that is applicable for the EGU and the following records related to the emissions of mercury that the EGU is allowed to emit:

A) For an EGU for which the owner or operator is complying with this Subpart B by means of Section 225.230(a)(2) or 225.237(a)(1)(B) or using input mercury levels to determine the allowable emissions of the EGU, records of the daily mercury content of coal used (lbs/trillion Btu) and the daily and monthly input mercury (lbs), which must be kept in the file pursuant to 40 CFR 75.84(a).

B) For an EGU for which the owner or operator of an EGU complying with this Subpart B by means of Section 225.230(a)(1) or 225.237(a)(1)(A) or using electrical output to determine the allowable emissions of the EGU, records of the daily and monthly gross electrical output (GWh), which must be kept in the file required pursuant to 40 CFR 75.84(a).

3) The owner or operator of an EGU must maintain records of the following data for each EGU:

A) Monthly emissions of mercury from the EGU.

B) For an EGU for which the owner or operator is complying by means of Section 225.230(b) or (d) of this Subpart B, records of the monthly allowable emissions of mercury from the EGU.

4) The owner or operator of an EGU that is participating in an Averaging Demonstration pursuant to Section 225.232 of this Subpart B must maintain records identifying all sources and EGUs covered by the Demonstration for each month and, within 60 days after the end of each calendar month, calculate and record the actual and allowable mercury emissions of the EGU for the month and the applicable 12-month rolling period.

5) The owner or operator of an EGU must maintain the following records related to quality assurance activities conducted for emissions monitoring systems:

A) The results of quarterly assessments conducted pursuant to section 2.2 of Appendix B of 40 CFR 75, incorporated by reference in Section 225.140; and

B) Daily/weekly system integrity checks pursuant to section 2.6 of Appendix B of 40 CFR 75, incorporated by reference in Section 225.140.

6) The owner or operator of an EGU must maintain an electronic copy of all electronic submittals to the USEPA pursuant to 40 CFR 75.84(f), incorporated by reference in Section 225.140.

7) The owner or operator of an EGU must retain all records required by this Section at the source unless otherwise provided in the CAAPP permit issued for the source and must make a copy of any record available to the Agency upon request.

b) Quarterly Reports. The owner or operator of a source with one or more EGUs must submit quarterly reports to the Agency as follows:

1) These reports must include the following information for operation of the EGUs during the quarter:

A) The total operating hours of each EGU and the mercury CEMS, as also reported in accordance with 40 CFR 75, incorporated by reference in Section 225.140.

B) A discussion of any significant changes in the measures used to control emissions of mercury from the EGUs or the coal supply to the EGUs, including changes in the source of coal.

C) Summary information on the performance of the mercury CEMS. When the mercury CEMS was not inoperative, repaired, or adjusted, except for routine zero and span checks, this must be stated in the report.

D) If the CEMS downtime was more than 5.0 percent of the total operating time for the EGU: the date and time identifying each period during which the CEMS was inoperative, except for routine zero and span checks; the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR 75, i.e., the dates and results of the Linearity Tests and any RATAs during the quarter; a listing of any days when a required daily calibration was not performed; and the date and duration of any periods when the CEMS was out-of-control as addressed by Section 225.260.

2) The owner or operator must submit each quarterly report to the Agency within 45 days following the end of the calendar quarter covered by the report.

c) Compliance Certification. The owner or operator of a source with one or more EGUs must submit to the Agency a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary

responsibility for ensuring that all of the EGUs' emissions are correctly and fully monitored. The certification must state:

1) That the monitoring data submitted were recorded in accordance with the applicable requirements of this Section, Sections 225.240 through 225.270 and Section 225.290 of this Subpart B, and 40 CFR 75, including the quality assurance procedures and specifications; and

2) For an EGU with add-on mercury emission controls, a flue gas desulfurization system, a selective catalytic reduction system, or a compact hybrid particulate collector system and for all hours where mercury data are substituted in accordance with 40 CFR 75.34(a)(1):

   A) That:

      i) The mercury add-on emission controls, flue gas desulfurization system, selective catalytic reduction system, or compact hybrid particulate collector system was operating within the range of parameters listed in the quality assurance/quality control program pursuant to Appendix B to 40 CFR 75; or

      ii) With regard to a flue gas desulfurization system or a selective catalytic reduction system, quality-assured SO_2 emission data recorded in accordance with 40 CFR 75 document that the flue gas desulfurization system was operating properly, or quality-assured NO_X emission data recorded in accordance with 40 CFR 75 document that the selective catalytic reduction system was operating properly, as applicable; and

   B) The substitute data values do not systematically underestimate mercury emissions.

d) Annual Certification of Compliance.

1) The owner or operator of a source with one or more EGUs subject to this Subpart B must submit to the Agency an Annual Certification of Compliance with this Subpart B no later than May 1 of each year and must address compliance for the previous calendar year. Such certification must be submitted to the Agency, Air Compliance and Enforcement Section, and the Air Regional Field Office.

2) Annual Certifications of Compliance must indicate whether compliance existed for each EGU for each month in the year covered by the Certification and it must certify to that effect. In addition, for each EGU,

the owner or operator must provide the following appropriate data as set forth in subsections (d)(2)(A) through (d)(2)(E) of this Section, together with the data set forth in subsection (d)(2)(F) of this Section:

A) If complying with this Subpart B by means of Section 225.230(a)(1)(A) or 225.237(a)(1)(A):

i) Actual emissions rate, in lb/GWh, for each 12-month rolling period ending in the year covered by the Certification;

ii) Actual emissions, in lbs, and gross electrical output, in GWh, for each 12-month rolling period ending in the year covered by the Certification; and

iii) Actual emissions, in lbs, and gross electrical output, in GWh, for each month in the year covered by the Certification and in the previous year.

B) If complying with this Subpart B by means of Section 225.230(a)(1)(B) or 225.237(a)(1)(B):

i) Actual control efficiency for emissions for each 12-month rolling period ending in the year covered by the Certification, expressed as a percent;

ii) Actual emissions, in lbs, and mercury content in the fuel fired in such EGU, in lbs, for each 12-month rolling period ending in the year covered by the Certification; and

iii) Actual emissions, in lbs, and mercury content in the fuel fired in such EGU, in lbs, for each month in the year covered by the Certification and in the previous year.

C) If complying with this Subpart B by means of Section 225.230(b):

i) Actual emissions and allowable emissions for each 12-month rolling period ending in the year covered by the Certification; and

ii) Actual emissions and allowable emissions, and which standard of compliance the owner or operator was utilizing for each month in the year covered by the Certification and in the previous year.

D) If complying with this Subpart B by means of Section 225.230(d):

i) Actual emissions and allowable emissions for all EGUs at the source for each 12-month rolling period ending in the year covered by the Certification; and

ii) Actual emissions and allowable emissions, and which standard of compliance the owner or operator was utilizing for each month in the year covered by the Certification and in the previous year.

E) If complying with this Subpart B by means of Section 225.232:

i) Actual emissions and allowable emissions for all EGUs at the source in an Averaging Demonstration for each 12-month rolling period ending in the year covered by the Certification; and

ii) Actual emissions and allowable emissions, with the standard of compliance the owner or operator was utilizing for each EGU at the source in an Averaging Demonstration for each month for all EGUs at the source in an Averaging Demonstration in the year covered by the Certification and in the previous year.

F) Any deviations, data substitutions, or exceptions each month and discussion of the reasons for such deviations, data substitutions, or exceptions.

3) All Annual Certifications of Compliance required to be submitted must include the following certification by a responsible official:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

4) The owner or operator of an EGU must submit its first Annual Certification of Compliance to address calendar year 2009 or the calendar year in which the EGU commences commercial operation, whichever is later. Notwithstanding subsection (d)(2) of this Section, in the Annual Certifications of Compliance that are required to be submitted by May 1,

2010, and May 1, 2011, to address calendar years 2009 and 2010, respectively, the owner or operator is not required to provide 12-month rolling data for any period that ends before June 30, 2010.

e) Deviation Reports. For each EGU, the owner or operator must promptly notify the Agency of deviations from requirements of this Subpart B. At a minimum, these notifications must include a description of such deviations within 30 days after discovery of the deviations, and a discussion of the possible cause of such deviations, any corrective actions, and any preventative measures taken.

f) Quality Assurance RATA Reports. The owner or operator of an EGU must submit to the Agency, Air Compliance and Enforcement Section, the quality assurance RATA report for each EGU or group of EGUs monitored at a common stack and each non-EGU pursuant to 40 CFR 75.82(b)(2)(ii), incorporated by reference in Section 225.140, within 45 days after completing a quality assurance RATA.

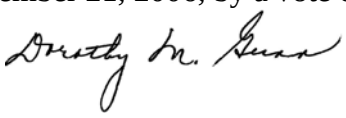
Section 225.295 Treatment of Mercury Allowances

Any mercury allowances allocated to the Agency by the USEPA must be treated as follows:

a) No such allowances may be allocated to any owner or operator of an EGU or other sources of mercury emissions into the atmosphere or discharges into the waters of the State.

b) The Agency must hold all allowances allocated by the USEPA to the State. At the end of each calendar year, the Agency must instruct the USEPA to retire permanently all such allowances.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on December 21, 2006, by a vote of 4-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

APPENDIX TO THE OPINION AND ORDER

R06-25 – Acronyms/Abbreviations

ACI	activated carbon injection
APA	Administrative Procedure Act
ASTM	American Society for Testing and Materials
CAA	Clean Air Act
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CAMR	Clean Air Mercury Rule
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
CMAQ	Community Multi-Scale Air Quality
CWLP	City Water, Light & Power
DCEO	Department of Commerce and Economic Opportunity
DOE	United States Department of Energy
EGU	Electric Generating Unit
EPA	Environmental Protection Agency
EPRI	Electric Power Research Institute
ESP	electrostatic precipitator
FCMP	Fish Contaminant Monitoring Program
FGD	flue gas desulfurization scrubber
GWh	gigawatt hour
HAP	hazardous air pollutant
HCI	halogenated carbon injection
Hg^0	elemental mercury
Hg^{2+}	reactive gaseous mercury
Hg_p	particulate mercury
IERG	Illinois Environmental Regulatory Group
MACT	maximum achievable control technology
Mmacf	million actual cubic feet
MPS	Multi-Pollutant Standard
MW	megawatt
MWC	municipal waste combuster
Mwe	megawatt electrical
MWh	megawatt hour
NAAQS	National Ambient Air Quality Standards
NHANES	National Health and Nutrition Examination Survey
NO_x	nitrogen oxides
NRC	National Research Council
PAC	powdered activated carbon
PCB	polychlorinated biphenyls
PM	particulate matter

$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PPM	parts per million
PRB	Powder River Basin
PSD	prevention of significant deterioration
RATA	relative accuracy test audit
RfD	reference dose
RGM	reactive gaseous mercury
SCA	specific collection area
SCR	selective catalytic reduction
SIP	State Implementation Plan
SIPC	Southern Illinois Power Cooperative
SNCR	selective non- catalytic reduction
SO_2	sulfur dioxide
SO_3	sulfur trioxide
TEAM	Trace Element Analysis Model
TSD	Technical Support Document
TTBS	Temporary Technology Based Standard
USEPA	United States Environmental Protection Agency