Mr. John Boston
President
Wisconsin Electric Power Company
Post Office Box 2046
Milwaukee, Wisconsin 52301

Dear Mr. Boston:

On January 19, 1990, the United States Court of Appeals for the Seventh Circuit in Wisconsin Electric Power Co. v. Reilly, Nos. 88-3264 and 89-1339, issued its decision regarding a challenge by Wisconsin Electric Power Company (WEPCO) to two final determinations issued by the Environmental Protection Agency (EPA). In these determinations, EPA concluded that WEPCO's proposed renovations to its Port Washington power plant would be subject to new source performance standards (NSPS) and prevention of significant deterioration (PSD) requirements.

In its decision, the court upheld all but one of the positions advanced by EPA in the NSPS and PSD applicability determinations. However, the court rejected EPA's position on the issue of whether the "actual-to-potential" method--referred to by the court as the "potential to emit concept"--should be used to calculate emissions increases for PSD purposes in this case. Consequently, the Seventh Circuit vacated and remanded the PSD determination to EPA for further action consistent with the court's decision.

As you know, EPA decided to acquiesce in the court's holding rather than seek rehearing. This letter constitutes EPA's revised PSD applicability determination in response to the court's remand order.

The Agency believes that the court's principal instruction--that EPA consider past operating conditions at the plant when addressing modifications that involve "like-kind replacements"--can be reasonably accommodated within the present regulatory framework without further litigation in this case. The net result of the court's ruling is the recognition of a subcategory of "like- kind replacements" under the "major modification" definition of EPA's new source review provisions.

As explained below, EPA will employ an "actual-to-actual" method to calculate emissions increases for WEPCO's proposed renovations to its Port Washington power plant. The outcome in this case is that WEPCO will not be subject to PSD review for

sulfur dioxide (S02), particulate matter (PM), carbon monoxide, or hydrocarbons. However, there will be a significant net increase in actual emissions of nitrogen oxides (NOx), and WEPCO must obtain a PSD permit for that pollutant.

I. BACKGROUND
A. Factual Background.

The WEPCO owns and operates five coal-fired, steam-generating units at its Port Washington facility near Milwaukee. All units had an original design capacity of 80 megawatts when they were placed in service between 1935 and 1950. However, due to age-related deterioration and loss of efficiency, both the physical capability and actual utilization of the plant have declined over time. Unit 5 was shut down completely due to a cracked rear steam drum. Consequently, by 1987, WEPCO was faced with

removing the units from service as they reached their planned retirement dates beginning in the early 1990's, unless it undertook a costly "life extension" program to restore the physical and economic viability of the units and extend their useful life for approximately 20 years. The WEPCO proposed such a life extension to include replacement of the steam drums, air heaters, and other major capital improvements totaling over $80 million. It should be noted that this program is not a pollution control project (i.e., it is not intended to add on or improve pollution control systems even though modest improvements to the particulate matter control devices are a part of the program).

In a series of applicability determinations in 1988 and 1989, EPA ruled that the renovations planned under WEPCO's life extension program would constitute a "modification" for purposes of the NSPS provisions of the Clean Air Act (Act), and a "major modification" under the PSD provisions of the Act. Thus, WEPCO would have had to install some level of control equipment or physical capacity restriction to avoid NSPS coverage for three of the five units proposed to be renovated. As to PSD, the company would have had to accept operational restrictions or lower emissions rates to "net out" of review. Regarding SO2, for example, WEPCO could have almost doubled its projected level of future operations without triggering PSD review. However, WEPCO did not want to be constrained by new source requirements, and so sought review in the Seventh Circuit Court of Appeals.

B. The Court's Decision.

1. Physical Change.

The court unequivocally agreed with EPA that the replacement of steam drums, air heaters, and other major components was a nonroutine "physical change," and thus met the first of two tests for a modification under NSPS and PSD. The Agency found that the

renovations proposed by WEPCO were exactly the type of industrial changes that were meant to be addressed by the NSPS and PSD programs. In upholding EPA's finding that a physical change would occur, the court strongly endorsed EPA's reading of the basic congressional intent in adopting the modification provisions of the NSPS and PSD programs, because to rule otherwise "would open vistas of indefinite immunity from the provisions of NSPS and PSD" (slip op. at 11). The court also relied on the reasonableness of EPA's consideration of the magnitude, purpose, frequency, and cost of the work in upholding EPA's finding that the renovations are not "routine" (slip op. at 14-18). In addition, the court rejected WEPCO's argument that the renovations could not be deemed a modification for NSPS purposes because they did not constitute a "reconstruction" under 40 CFR 60.15 (slip op. at 18-20). 2. NSPS Emissions Increase.

The court upheld EPA's decision that there would be an increase in hourly emissions at three of the units, and thus for those three units, WEPCO met the second test for NSPS applicability. The Agency had argued that the regulations require NSPS emissions increases to be determined by comparing the current (pre-change) hourly emissions capacity of each affected facility with the post-renovation hourly emissions capacity of each unit. The Seventh Circuit agreed, and rejected WEPCO's argument that original design capacity or past "representative" capacity no longer achievable at the plant should be used for the baseline emissions rate (slip op. at 20-25).

3. PSD Emissions Increase.

The regulatory preamble to the PSD regulations provides that the set of emissions units that have "not begun normal operations" includes both "new or modified" units (45 FR 52676, 52677, 52718) (1980). Consequently, EPA used the "actual-to-potential" calculus in evaluating WEPCO's life extension project. The court rejected this methodology in the case of WEPCO's "like- kind replacement," asserting that EPA's reasoning was circular (slip op. at 28). [In addition, the court held (slip op. at 27 n. 11) that the exemption in 40 CFR 52.21(b)(2)(iii)(f) for emissions

increases due to expanded operations did not apply, because WEPCO's increased operations were directly tied to the life extension project.] Instead, the court ruled that EPA should recalculate post-change emissions considering past operating conditions where it is possible to make a more realistic assessment of future emissions (slip op. at 29-31). Alternatively, the court stated that EPA could conduct new rulemaking to explicitly apply the "actual-to-potential" calculus to "like-kind replacements" (slip op. at 30).

II. THE WEPCO DECISION IN THE CONTEXT OF THE PSD PROVISIONS

The Seventh Circuit held that EPA could not wholly disregard past operating history and automatically apply the actual-to-potential methodology for determining PSD applicability to WEPCO's "like-kind replacements." In describing the WEPCO changes as "like-kind replacements" and limiting its decision to such changes, the court did not dispute the correctness of EPA's application of the actual-to-potential test to the full spectrum of new and modified sources not covered by this subcategory of change. The recent decision in Puerto Rican Cement Co. v. EPA, 889 F.2d 292 (1st Cir. 1989), explicitly upheld EPA's position that the actual-to-potential concept should be applied to "modified" emissions units. The First Circuit case involved the modernization and reconfiguration of existing emissions units [see 889 F.2d at 293 (company planned to "convert kiln No. 6 from a 'wet' to a 'dry' cement- making process, and to combine that with Kiln No. 3")]. A key issue was whether EPA properly held that the "modified" units had "not begun normal operation" and therefore the actual-to-potential concept applied in calculating emissions increases. The First Circuit affirmed EPA's position that the actual-to-potential concept should be applied to the company's "modified" units. Puerto Rican Cement, 889 F.2d at 297. Consequently, the court found that both the language and expressed purpose of the regulations indicate that EPA applied the regulations properly in using the actual-to-potential test for a proposed modification. The Seventh Circuit in WEPCO did not dispute the correctness of EPA's application of the actual-to-potential test to the full spectrum of changes not covered by the subcategory of changes (like-kind replacements) created by the court. {Footenote 1.} Therefore, in the case of nonroutine physical or operational changes at an existing major source which are not specifically "like-kind replacements" in nature, EPA will continue to apply the actual-to-potential test for PSD applicability purposes.

{Footenote 1. EPA will leave to future case by case applicability determinations what is a "like-kind replacement." But for guidance of the parties, EPA presently considers that only for projects that are genuine "like-kind replacements" can future emissions projections be calculated using "estimated future actual emissions" in lieu of potential to emit. EPA does not consider "like-kind replacements" to mean the entire replacement (or reconstruction) of an existing emissions unit with an identical new one or one similar in design or function. Rather, EPA considers "like-kind replacements" to encompass the replacement of components at an emissions unit with the same (or functionally similar) components. Under this interpretation of the term, new components that perform essentially the same function as old ones will be viewed as "like-kind replacements." In addition, even if the design or purpose of a new component is identical to that of an old one, if the new component is part of a project that will fundamentally change the production process at an existing stationary source, this would be beyond the scope of a "like-kind replacement." Under either of those

circumstances, it would be unreasonable to rely on pre-modification usage patterns to estimate future levels of capacity utilization. Instead, in such cases, EPA believes that it is reasonable to assume that in the absence of federally-enforceable limits on hours of operation or production rates, the new components may result in a substantial increase over historical levels of utilization of the emissions unit following modification [see Puerto Rican Cement, supra,

889 F.2d at 297 ("a firm's decision to introduce new, more efficient machinery may lead the firm to decide to increase the level of production")] and will compare pre-modification actual emissions to post-modification potential emissions. In addition to this circumstance, there are cases in which sources that undergo changes that qualify as add-on control systems would, under certain circumstances, be exempt from new source review. See Letter to Timothy J. Method, Assistant Commissioner, Indiana Department of Environmental Management, from David Kee, EPA Region V, January 30, l990.}

III. THE AGENCY'S RESPONSE TO THE COURT'S REMAND ORDER

A. The PSD Baseline Emissions.

Determining the "baseline" level of actual emissions before a physical or operational change is a necessary first step to determine if emissions increase as a result of the physical change. The Agency's regulations define the baseline for PSD purposes, as follows:

> In general, actual emissions as of a particular date shall equal the average rate, in tons-per-year (tpy), at which the unit actually emitted the pollutant during a 2-year period which precedes the particular date and which is representative of normal source operation. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period [see 40 CFR 52.21(b)(21)(ii)].

The purpose of the definition is to establish a baseline that is "representative" of "normal" source operations prior to the change. The Agency historically has followed a presumption

that the most recent 2 years should be used, but has allowed another period where the source demonstrates that recent operations are abnormal [see 40 CFR 52.21(b)(21)(ii); see also 45 FR 52676, 52718 (1980)]. The WEPCO baseline period is an example of this. In this instance, plant utilization was disrupted by physical problems that led to nonroutine physical changes to remedy those problems. Consequently, EPA determined that a period prior to the onset of such problems was representative of normal operations, and as required by its regulations, used this period to establish the baseline. The period used was also within the contemporaneous period specified in 40 CFR 52.21(b)(3)(ii). It should be emphasized that, in the WEPCO case, the parties and the court agreed that 1983-84 (prior to discovery of steam drum cracks) should be the baseline years (slip op. at 26); these years had an average 29 percent utilization rate. We continue to believe this is the appropriate baseline period for the Port Washington renovation.

B. Calculating Post-Change Emissions Under PSD.

The court concluded that "EPA's reliance on an assumed continuous operation as a basis for finding an emissions increase is not properly supported" (slip op. at 30). Although the court held that EPA cannot, in this case, wholly disregard past operating conditions at the plant, it also held that EPA could not reasonably rely on the company's own unenforceable projection of operating conditions (slip op at 29). The court remanded the question of PSD applicability to EPA for further proceedings not inconsistent with its decision.

Before the court remanded EPA's determination, it attempted to ascertain whether, in fact, the proposed project would be a major modification even using the assumptions least likely to result in an emissions increase. The court felt (and we agree) that such a "best" case scenario for WEPCO would assume that the "present hours and conditions" would not change at all following the renovations (despite, of course, WEPCO's own estimates of at least tripling of utilization over current levels) (slip op. at 31, n. 14). The court, however, lacked the data to make this calculation, so it could not determine whether a major

modification would result using a set of assumptions most favorable to WEPCO. Therefore, the court remanded the determination to EPA for further consideration.

A conceivable interpretation of the court's opinion is that EPA must calculate WEPCO's post-modification emissions increases based on "present hours and conditions." However, for the reasons discussed below, EPA believes that this interpretation is incorrect. Under such an interpretation, EPA would determine WEPCO's post-renovation annual emissions in tons per year (tpy) by simply projecting into the future the hours of operation and conditions (i.e., hourly emissions rate) that existed just before the

renovations. This is the interpretation urged by WEPCO in a February 9, 1990 letter to EPA. Such a calculus will always result in exactly the same level of emissions before and after the physical change, and thus would always exempt "like-kind replacements" from PSD review. In addition, calculating emissions increases using this assumption would flatly contradict the record in this case. The WEPCO has stated that it will greatly increase capacity utilization over both current levels and the baseline levels used in the previous determinations. Capacity utilization in terms of heat input to the plant (based on nameplate capacity) during 1978-1979 was about 40 percent (Record item 7.4, WEPCO Submission, April 19, 1988 meeting with EPA). During the 1983-1984 baseline period, it was approximately 27 percent. Id. It has since declined to less than 10 percent (1988-1989 data). Id. The WEPCO has advised the State of Wisconsin that it intends to return to a forecasted 42 percent utilization level in the years following renovation, with an upper maximum forecast of 50 percent [Letter from Walter Woelfle, WEPCO, to Dale Zeige, Wisconsin Department of Natural Resources, March 29, 1990, Table 7 (enclosed)]. It would be wrong to assume that unit 5 would not be operated at all in the future when an explicit purpose of the renovation is to bring the unit back on line at its original design capacity; moreover, unit 5 is presently inoperative. Most importantly, this methodology is not fairly discernible from any reading of the current regulations. In addition, using "present hours and conditions" would disregard planned changes at WEPCO that will affect the post-renovation hourly emissions rate [e.g., increased capacity, lowering of sulfur content, and enhancement of the electrostatic precipitators (ESP)].

The court upheld EPA's position that increased utilization in the future that is linked to construction or modification activity should not be excluded in determining post-renovation emissions. Nevertheless, the court told EPA not to automatically assume 100 percent utilization in the future when historical data are available. The WEPCO has definite plans to return the plant to historical levels of utilization that are well above baseline levels of utilization, and which could not be physically or economically attained but for the renovation project. Accordingly, EPA believes it is consistent with the court decision for EPA to base its remand decision on these facts and not rely on the present hours and conditions as conclusive of post-renovation emissions. After a thorough review of the possibilities, EPA has concluded that the court intended that estimates of future emissions for WEPCO's "like- kind replacements" should consider historic pre-renovation operating hours and production rates, as well as other relevant factors, in estimating future utilization levels, and should also consider the increased capacity, switching to lower-sulfur fuel, and other changes affecting the hourly emissions rate for PSD purposes. Consequently, for WEPCO's "like-kind replacements," EPA

will compare representative actual emissions for the baseline period to estimated future actual emissions based on all the available facts in the record. Specifically, in calculating post-renovation actual emissions, this approach takes into account 1) physical changes and operational restrictions that would affect the hourly emissions rate following the renovation, 2) WEPCO's pre-renovation capacity utilization, and 3) factors affecting WEPCO's likely post-renovation capacity utilization.

To quantify WEPCO's estimated future actual emissions after the proposed changes EPA relied heavily on projected and historical operational data (e.g., fuel consumption, MMBTU consumed) representative of the source. Specifically, the Agency considered available information regarding (1) projected post- change capacity utilization filed with public utility commissions; (2) Federal and State regulatory filings; (3) the source's own representations; and (4) the source's historical operating data. As described below, EPA determined an appropriate utilization factor for future operations and combined this with post-change emissions factors (to the extent they are or will be made federally enforceable) to estimate a future level of annual emissions for the purpose of determining whether the proposed physical and operational changes would be considered a major modification for PSD purposes. Where a significant emissions increase is projected to occur, WEPCO could voluntarily agree to federally-enforceable limits on any aspect of its future operation (including physical capacity and hours of operation) to ensure that no significant emissions increase will occur.

IV. THE AGENCY'S REVISED PSD APPLICABILITY DETERMINATION

A. Estimated Future Actual Emissions.

The Agency has revised its October 14, 1989 PSD applicability determination for WEPCO's proposed Port Washington renovation based on a "representative actual" to "estimated future actual emissions" comparison (as outlined above). As previously discussed, estimated future actual emissions projections take into account the likelihood that the plant will operate in the future as it has in the past.

The stated purpose of WEPCO's renovations is to refurbish the power plant units to an "as-new" condition in terms of their capacity, efficiency, and availability. Consequently, EPA has used actual, historical, operational data representative of the plant's past operations, approximating an "as-new" configuration, to calculate "estimated future actual emissions." The Agency has verified these data by comparison to WEPCO's own projections of post- renovation capacity utilization and industry averages.

As to the emissions factors used to calculate future emissions, EPA has used WEPCO's own emissions factors for future

hourly emissions rates. These emissions factors are based on WEPCO's own assumptions regarding future sulfur in fuel and control technology performance levels. However, since these assumptions go beyond current State implementation plan (SIP) requirements, they must be made federally enforceable for EPA to continue to consider them for PSD applicability purposes.

Operational data (i.e., heat input) from the years 1978-1979 show a capacity utilization factor of 42 percent. These data points represent the closest projection of WEPCO's operational characteristics, approximating an "as-new" state, as currently available to EPA. The data currently available to us regarding WEPCO's past operational levels are limited to a 10-year period. The Agency believes that these historical levels of operation are representative of the plant's past operations in an "as-new" condition. In addition, the 1978-79 data points appear consistent with WEPCO's own projection of future operations for the year 2010 (as submitted to the Wisconsin Department of Natural Resources on March 29, 1990) and common capacity levels for the utility industry, in general, for new units. However, by this letter, EPA is requesting that WEPCO submit operational data from previous years (i.e., pre-1978), if such data show heat input levels notably higher than the 1978-1979 levels.

As previously mentioned, to calculate future emissions levels for each pollutant, EPA assumed that the amount of future coal consumed in terms of heat input to the plant would be comparable to WEPCO's annual average 1978-1979 coal-consumption figure. On March 29, 1990, WEPCO submitted to the Wisconsin Department of Natural Resources information which contained estimates of future emissions for different levels of coal and heat input

to the plant. The Agency used these estimates to establish future emissions based on 1978-1979 heat-input values. Again, it is important to note that EPA's calculation of "estimated future actual emissions" is based on WEPCO's projection of control technology performance levels and/or fuel sulfur content for post-renovation operations. Consequently, EPA's PSD applicability determination is valid only to the extent that the emissions factors (based on control technology performance levels and sulfur in fuel) used to calculate future emissions are made federally enforceable. Otherwise, the calculation of estimated future actual emissions for each pollutant will need to be revised by EPA based on existing federally-enforceable limits (i.e., applicable SIP, NSPS). The use of current, federally-enforceable emissions in the current SIP would result in higher projected future emissions than assumed in EPA's calculations and, consequently, could affect the indicated PSD applicability finding.

B. Revised Finding

In sum, EPA has considered past operations at WEPCO's Port Washington plant in estimating future actual emissions. Specifically, EPA has relied on the 42 percent utilization level (in terms of heat input) during 1978-1979. The Agency believes this is a reliable indicator of future utilization because it is consistent both with WEPCO's own projections of post-renovation operations and typical industry usage. The Agency has also considered post- renovation emissions rates on the assumption that they will be made federally enforceable. Compared to the 1983-1984 baseline period, those hourly rates are lower for SO2 and PM, and unchanged for NOx. The 42 percent estimated post-renovation capacity utilization is substantially higher than the 29 percent utilization level during the baseline period. However, in calculating total annual actual emissions, that increased usage is offset for SO2 and PM by the decreased hourly emissions rates resulting from improvements to control systems and the use of low sulfur coal. Consequently, WEPCO is not subject to PSD review for those pollutants.

In the case of NOx, there will be a direct correlation between increased utilization resulting from the renovations and increased actual emissions. Hence, WEPCO is subject to review for that pollutant and must obtain a PSD permit. The company should contact the Wisconsin Department of Natural Resources regarding the processing of a permit application for NOx. Due to insufficient source-specific information regarding emissions factors, PSD applicability for PM-10, lead, and noncriteria pollutants listed at 40 CFR 52.21 (b)(23)(i) and (ii) cannot be determined at this time. The PSD applicability for these pollutants should also be based on the "actual-to- actual" emissions test described herein.

This PSD applicability determination applies to WEPCO's currently planned renovations to units 1-5 (see Enclosure A), or, if WEPCO no longer wishes to proceed with renovating unit 5, only the renovation of units 1-4 (see Enclosure B). However, a decision to cancel the currently planned renovations to unit 5 could result in a PSD review for that unit should WEPCO reconsider renovating it some time in the future.

It is our understanding that WEPCO proposes to avoid triggering NSPS for SO2 and PM at units 1 and 4 by using dry sorbent injection and improving the existing ESP's to offset the potential emissions increases of these pollutants. To the extent that the controls are federally enforceable, and no increase in hourly emissions would occur at maximum capacity, WEPCO can use these options to avoid triggering

NSPS for PM and SO2 at units 1 and 4. However, the two units are still subject to the NSPS requirements for NOx. Unit 5 cannot, however, avoid triggering NSPS for any pollutant and, therefore, is subject to the NSPS requirements for NOx, SO2, and PM.

Sincerely,

William G. Rosenberg
Assistant Administrator
for Air and Radiation

3 Enclosures

Table 7

PORT WASHINGTON POWER PLANT
MAY 1989 FORECAST
Units 1 - 5

YEAR	MEGAWATT HOURS GENERATED	CAPACITY FACTOR	FUEL CONSUMPTION COAL (13200 Btu/lb) BURNED TONS
1995	825,288	0.24	365,548
1996	941,779	0.27	415,332
1997	1,081,002	0.31	475,624
1998	1,114,313	0.32	490,868
1999	1,247,296	0.36	546,546
2000	1,349,329	0.38	589,569
2001	1,391,882	0.40	608,621
2002	1,481,464	0.42	646,417
2003	1,420,120	0.41	620,153
2004	1,432,122	0.41	625,174
2005	1,431,412	0.41	624,904
2006	1,460,471	0.42	637,519
2007	1,488,124	0.42	649,133
2008	1,481,423	0.42	646,909
2009	1,463,981	0.42	638,750

PORT WASHINGTON POWER PLANT
UPPER MAXIMUM FORECAST
Units 1 - 5

YEAR	MEGAWATT HOURS GENERATED	CAPACITY FACTOR	FUEL CONSUMPTION COAL (13200 Btu/lb) BURNED TONS
1995	1,074,957	0.31	473,981
1996	1,202,460	0.34	528,838
1997	1,341,074	0.38	587,412
1998	1,390,470	0.40	609,237
1999	1,501,584	0.43	654,718
2000	1,600,500	0.46	696,483
2001	1,651,930	0.47	718,252
2002	1,748,046	0.50	760,000
2003	1,690,000	0.48	735,000
2004	1,690,000	0.48	734,000
2005	1,690,000	0.48	734,000
2006	1,710,000	0.49	741,000
2007	1,720,000	0.49	748,000
2008	1,720,000	0.49	747,000
2009	1,695,000	0.48	737,000

Enclosure A

Revised PSD Applicability Determination
Port Washington Power Plant Renovation of Units 1-5

(all emissions calculations are in tons per year)

Pollutant	Actual Emissions Baseline (1)	Estimated Future Actual Emissions (2)	Net Emissions Change	PSD Significance Level	Subject to PSD Review
Particulate	328	323	-5	25	no

Pollutant	Actual Emissions Baseline (1)	Estimated Future Actual Emissions (2)	Net Emissions Change	PSD Significance Level	Subject to PSD Review
Particulate matter (4) (5)	328	339	11	25	no
Sulfur dioxide (4)	24,236	15,919	-8,317	40	no
Nitrogen oxides (5)	2,592	3,405	813	40	yes
Carbon monoxide	144	217	73	100	no
Hydrocarbon	17	25	9	40	no

Other Regulated Pollutants: Due to insufficient source-specific information regarding emission factors, PSD applicability for PM-10, lead and noncriteria pollutants listed at 40 CFR Section 52.21 (b)(23)(i) and (ii) cannot be determined
at this time.

1) Average actual emissions for 2-year period defined by calendar years 1983 and 1984.

2) Calculated by EPA based on the following information submitted by WEPCO:

a. The average historic firing rate (approximately 17x106 Mbtu per year) for the 2-year period defined by calendar years 1978 and 1979.

b. The emissions estimates for the renovated units based on future coal characteristics (e.g., sulfur and heat content) and actual emissions after pollution controls for particulate.

c. Sulfur dioxide controls applied to unit 5 at 75 percent sulfur dioxide removal to comply with NSPS Subpart Da. Sulfur dioxide removal of 22 and 13 percent at units 1 and 4, respectively, to exclude these units from NSPS requirements for greater control of sulfur dioxide.

3) If new data indicate that annual, historic-firing rates at the Port Washington facility exceeded historic 1978 and 1979 levels, the indicated applicability determination could change.

4) The calculation of estimated, future, actual emissions for this pollutant is based on WEPCO's projection of control technology performance levels and/or fuel sulfur content for post-renovation operations. Consequently, EPA's PSD applicability determination is valid only to the extent that the specific particulate and sulfur dioxide emissions factors used for units 1-5 to calculate future emissions (based on particulate and S02 control technology performance levels and fuel sulfur and heat content) are made federally enforceable. Otherwise, the calculation of estimated, future, actual emissions for this pollutant will be revised by EPA, based on existing federally-enforceable limits (i.e., applicable SIP, NSPS). The use of current, federally-enforceable emissions factors would result in higher, projected, future emissions and, consequently, could affect the indicated PSD applicability finding.

5) Baseline emissions (actual emissions for 2-year period defined by calendar years 1983 and 1984) have been revised based on additional information submitted by WEPCO.

Enclosure B

Revised PSD Applicability Determination
Port Washington Power Plant Renovation of Units 1-4

(all emissions calculations are in tons per year)

Sulfur dioxide (4)	24,236	18,505	-5,731	40	no
Nitrogen oxides (5)	2,592	3,396	804	40	yes
Carbon monoxide	144	217	73	100	no
Hydrocarbon	17	25	9	40	no

Other Regulated Pollutants: Due to insufficient source specific information regarding emission factors, PSD applicability for PM-10, lead and noncriteria pollutants listed at 40 CFR Section 52.21 (b)(23)(i) and (ii) cannot be determined at this time.

1) Average actual emissions for 2-year period defined by calendar years 1983 and 1984.

2) Calculated by EPA based on the following information submitted by WEPCO:

a. The average, historic-firing rate (approximately 17x106 Mbtu per year) for the 2-year period defined by calendar years 1978 and 1979.

b. The emissions estimates for the renovated units based on future coal characteristics (e.g., sulfur and heat content) and actual emissions after pollution controls for particulate.

c. Unit 5 inoperative. Sulfur dioxide removal of 22 and 13 percent at units 1 and 4, respectively, to exclude these units from NSPS requirements for greater control of sulfur dioxide.

3) If new data indicate that annual, historic-firing rates at the Port Washington facility exceeded historic 1978 and 1979 levels, the indicated applicability determination could change.

4) The calculation of estimated, future, actual emissions for this pollutant is based on WEPCO's projection of control technology performance levels and/or fuel sulfur content for post renovation operations. Consequently, EPA's PSD applicability determination is valid only to the extent that the specific particulate and sulfur dioxide emissions factors used for units 1-4 to calculate future emissions (based on particulate and S02 control technology performance levels and fuel sulfur and heat content) are made federally enforceable. Otherwise, the calculation of estimated, future, actual emissions for this pollutant will be revised by EPA, based on existing federally-enforceable limits (i.e., applicable SIP, NSPS). The use of current, federally-enforceable emissions factors would result in higher, projected, future emissions and, consequently, could affect the indicated PSD applicability finding.

5) Baseline emissions (actual emissions for 2-year period defined by calendar years 1983 and 1984) have been revised based on additional information submitted by WEPCO.