IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF WISCONSIN GREEN BAY DIVISION

UNITED STATES OF AMERICA.

Plaintiff

v. Civil Action No.: 13-CV-10-WCG

WISCONSIN PUBLIC SERVICE CORPORATION,

Defendant.

NOTICE OF LODGING PROPOSED MODIFICATION TO CONSENT DECREE

Plaintiff, the United States of America, on behalf of the United States Environmental Protection Agency, hereby provides notice that it is lodging with the Court a proposed modification to the Consent Decree previously entered in the above-captioned matter. The Consent Decree resolved Clean Air Act New Source Review and Title V violations at two coal-fired power plants owned and operated by Wisconsin Public Service Corporation: the Weston plant located in Marathon County, Wisconsin, and the Pulliam plant located in Brown County, Wisconsin. The Consent Decree was entered by the Court in March 2013.

The parties to the Consent Decree have agreed to certain modifications set forth in a proposed stipulation, a copy of which is being lodged contemporaneously as an exhibit to this Notice. The proposed stipulation would: (1) facilitate the Defendant's decision to convert a unit at the Weston plant from burning coal to natural gas, thereby reducing particulate matter ("PM") emissions such that the operation of certain PM controls at that unit is no longer necessary to achieve the PM reductions secured by the Decree; (2) replace a hydroelectric environmental

mitigation project that was deemed unworkable with a new land acquisition and restoration project and an expansion of an existing wood stove replacement program; and (3) revise and update certain administrative notice and certification requirements.

The proposed stipulation has been agreed to by all parties, but pursuant to Section XXIII (Modification) of the Decree, the stipulation shall only be effective upon approval of the Court. However, the United States is not seeking the Court's consideration of the proposed stipulation at this time and asks the Court to take no action at this time in connection with the proposed stipulation. The United States is lodging the proposed stipulation with the Court for the purpose of soliciting public comment on the stipulation, pursuant to 28 C.F.R. § 50.7. The 30-day public comment period will begin with the publication of a notice in the Federal Register seeking comments on the proposed stipulation. At the end of the public comment period, the United States will file a motion with the Court to advise the Court of any comments received and of the United States' position as to whether the proposed stipulation should be approved and entered by the Court.

Dated: March 30, 2016 Respectfully submitted,

> JOHN C. CRUDEN **Assistant Attorney General Environment & Natural Resources Division**

/s/ Jason A. Dunn{_}

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OF COUNSEL: EATON WEILER

Associate Regional Counsel SABRINA ARGENTIERI Associate Regional Counsel United States Environmental Protection Agency, Region 5 77 W. Jackson Boulevard Chicago, IL 60604-3590

CERTIFICATE OF SERVICE

I hereby certify that on the 30th day of March, 2016, I electronically filed the foregoing Notice of Lodging with the Clerk of Court using the CM/ECF system, which will cause an electronic copy to be served on counsel of record.

/s/ Jason A. Dunn_

Jason A. Dunn
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Environmental Enforcement Section
United States Department of Justice
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IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF WISCONSIN GREEN BAY DIVISION

UNITED STATES OF AMERICA,)
Plaintiff,)
v.) Civil Action No. 13-C-10
WISCONSIN PUBLIC SERVICE CORPORATION,))
Defendant.))

STIPULATED ORDER REGARDING MODIFICATION OF CONSENT DECREE

The United States of America and Wisconsin Public Service Corporation ("WPS") (collectively, the "Parties") respectfully request the Court's approval of an agreement that they have reached to modify certain provisions of the consent decree entered by the Court in this matter on March 7, 2013 (the "Decree") (Dkt. #s 10, 11). Section XXIII (Modification) of the Decree provides that the terms of the Decree may only be modified by a subsequent written agreement signed by the Parties. Where the modification constitutes a material change to the Decree, it shall be effective only upon approval of the Court. Accordingly, the Parties now request the Court's approval of such a material change, as described in this "Stipulated Order Regarding Modification of Consent Decree" ("Modification Order").

The Parties intend that this Modification Order shall replace only those provisions of the Decree expressly referenced below. All the provisions of the Decree shall remain in force according to their terms. Capitalized terms in the Modification Order that are not otherwise defined herein have the meanings set forth in the Decree.

I. Background

- 1. On January 4, 2013, the United States filed a complaint on behalf of the United States Environmental Protection Agency ("EPA") alleging that WPS violated the Prevention of Significant Deterioration and Title V provisions of the Clean Air Act, 42 U.S.C. § 701, *et. seq.* in connection with certain projects undertaken at WPS's Weston and Pulliam plants. WPS denied all the allegations in the Complaint.
- 2. The Decree resolved the United States' claims by requiring WPS to, among other things, Retire, Refuel or Repower Weston 2 and spend at least \$6 million Project Dollars to implement certain environmental mitigation projects ("Projects") identified in Appendix A of the Decree. The Decree also contained requirements related to certification of reports and identified WPS personnel to receive notifications under the Decree.
- 3. To address changed circumstances, following entry of the Decree, the Parties have agreed to certain modifications to the Decree provisions related to particulate matter ("PM") emission reductions and controls applicable to Weston Unit 2, the Projects in Appendix A, certification of submittals required by the Decree and the notice list. Each of these modifications is discussed in turn below.

A. PM Emission Reduction and Control Requirements

- 1. Pursuant to Paragraph 65 of the Decree, WPS was required to Retire, Refuel or Repower Weston Unit 2 by June 1, 2015. To comply with this requirement, WPS converted the Unit to combust natural gas in 2015.
- 2. Weston Unit 2 was equipped with an Electrostatic Precipitator ("ESP") to control PM emissions from the Unit when combusting coal. Pursuant to Paragraph 103

of the Decree, WPS continuously operated the ESP to maximize PM reductions at all times the Unit was in operation when combusting coal.

- 3. The ESP on Weston Unit 2 was not physically removed when the Unit was refueled to natural gas. Uncontrolled PM emissions from natural gas combustion, however, are significantly lower than controlled PM emissions from coal combustion, such that operation of the ESP is no longer needed to achieve the environmental benefits secured by the Decree. The plain language of Paragraph 103, however, would require operation of the ESP.
- 4. In lieu of meeting current Decree requirements, the Parties agree to modify Paragraph 103 of the Decree in two respects: (i) impose a new PM limit of 0.010 lb/mmBTU for Weston Unit 2 and any other Unit that is Refueled to Natural Gas in the future; and (ii) provide a one-time performance testing requirement for Refueled Units. The revised language is provided in Section II below, and clarifies that PM controls need not be Continuously Operated at Units that are Refueled to Natural Gas. The revised text has been highlighted in yellow for easy reference.

B. Environmental Mitigation Projects

1. As noted above, WPS is required to spend at least \$6 million Project

Dollars implementing environmental mitigation projects under the Decree. Appendix A

of the Decree identified five Projects that WPS was required to undertake and two

Projects that it could elect to undertake with a maximum amount of Project Dollars that

could be devoted to each Project. Under the Decree, WPS was required to spend \$2

million on a Project to increase water utilization and energy output at an existing

hydroelectric facility (the "Hydro Boost Project") and \$2 million on a wood stove replacement project.

- 2. In accordance with Paragraph 120 of the Decree and Section II of Appendix A, WPS prepared and submitted to EPA for approval a plan to implement the Hydro Boost Project. Following submittal of this plan, EPA determined that this project could not be approved due to consistency issues with its Green Power Partnership.
- 3. In lieu of undertaking the required Hydro Boost Project, the Parties have agreed on a substitute Project pursuant to which WPS will spend \$2 million on acquisition and restoration of ecologically significant lands, watersheds, vegetation, and/or forests that are part of, adjacent to, or near the Barkhausen Water Fowl Preserve in Brown County, Wisconsin. The Barkhausen Water Fowl Preserve is a 920 acre park on the west shore of Green Bay. It is composed of wetlands, forests and fields and is home to numerous species of birds and other animals. In implementing this Project, WPS anticipates it will acquire available properties near the Preserve and fund restoration activities, including wetland restoration.
- 4. Pursuant to Paragraph 120 of the Decree and Appendix A, WPS also implemented a \$2 million Wood Stove Replacement Project. In implementing this project, WPS, working with the American Lung Association, provided households with vouchers to replace, retrofit or upgrade inefficient, higher polluting outdoor wood boilers and pre-1988 indoor wood burning stoves. The project was successful. The amount of Project Dollars allocated for this project under the Decree were dispersed prior to June 20, 2015, approximately one year ahead of the projected completion date.

- 5. Replacing, upgrading and retrofitting residential wood stoves and heaters results in significant reductions in pollutants including particulate matter, carbon monoxide, volatile organic compounds, and methane. In light of the environmental benefits of the Wood Stove Replacement Project and community interest, the Parties agree to increase the amount of Project Dollars authorized to be spent on this Project by \$600,000 and to provide until December 31, 2017, for WPS complete the Project in light of the additional allocation of funds. In addition, several conforming changes have been made to the description of the Wood Stove Replacement Project, in order to reflect certain revisions to the Standards of Performance for new residential wood heaters and hydronic heaters that were promulgated by EPA following entry of the original Consent Decree (80 Fed. Reg. 13,671 (Mar. 16, 2015)).
- 6. The revisions to the Projects discussed above are further detailed in a revised version of Appendix A ("Revised Appendix A") to the Decree, which is attached to this Modification Order as Exhibit 1. The changes to the document are presented in redline/strikeout format and the new, revised language has been highlighted in yellow for easy reference. Except for these revisions, Revised Appendix A is unchanged from the Appendix that was originally entered by the Court as part of the Decree.

C. <u>Certification of Reports and Notice List for WPS</u>

1. In addition to the above modifications, the Parties agree to include in this Modification Order certain revisions to the certification requirements of Paragraph 136 to provide WPS with the option of having reports and submittals under the Decree certified by authorized personnel other than the Responsible Official, as defined in Title V of the Clean Air Act, for Weston and Pulliam and to update the WPS notice list in Paragraph

188. The revised language is provided in Section III below. The revised text has been highlighted in yellow for easy reference.

D. <u>Modification of the Decree</u>

- 1. Section XXIII of the Decree provides that the terms of the Decree may be modified only by a subsequent written agreement signed by the Parties. It also states that where the modification constitutes a material change to any term of the Decree, it shall be effective only upon approval by the Court. While not all of the individual modifications agreed to in this order would be considered a "material change," the Parties agree that this Modification Order requires Court approval and respectfully request that the Court review and approve the modifications set forth below and in Revised Appendix A.
- 2. The United States and WPS agree and this Court finds that this Modification Order has been negotiated in good faith, that settlement of this matter will avoid prolonged and complicated litigation between the Parties and that this Modification Order is fair, reasonable, and in the public interest.

NOW THEREFORE, it is hereby ORDERED, ADJUDGED AND DECREED as follows:

II. MODIFICATIONS TO CONSENT DECREE

- 1. Paragraph 103 of the Decree shall be revised as follows:
 - 103. By no later than 90 Days from the Date of Entry of this Consent Decree, and continuing thereafter, WPS shall Continuously Operate each existing PM Control Device on each Unit in the WPS System to maximize PM emission reductions at all times when the Unit is in operation. Except as required during correlation testing under 40 C.F.R. Part 60, Appendix B, Performance Specification 11, and Quality Assurance Requirements under

Appendix F, Procedure 2, as required by this Consent Decree, WPS shall, at a minimum, ensure that to the extent practicable: (a) each section of each ESP at such Unit is fully energized and each compartment of each Baghouse at such Unit remains operational; (b) the automatic control systems on each ESP at such Unit are operated to maximize PM collection efficiency, where applicable; (c) each opening in the casings, ductwork, and expansion joints for each ESP and each Baghouse at such Unit is inspected and repaired during the next planned Unit outage (or unplanned outage of sufficient length) to minimize air leakage; (d) the power levels delivered to each ESP at such Unit are maintained, where applicable, consistent with manufacturers' specifications, the operational design of the Unit, and good engineering practices; (e) the plate-cleaning and dischargeelectrode-cleaning systems for each ESP at such Unit are optimized, where applicable, by varying the cycle time, cycle frequency, rappervibrator intensity, and number of strikes per cleaning event; and (f) for each such Unit with one or more Baghouses, a bag leak detection program is developed and implemented to ensure that leaking bags are promptly replaced. In lieu of the foregoing obligation to Continuously Operate each existing PM Control Device, existing WPS System Units that are Repowered or Refueled to Natural Gas will instead meet a PM Emission Rate of no greater than 0.010 lbs/mmBTU. Compliance with this limitation will be based on a one-time performance stack test which will be completed either within 180 days of entry of the Modification Order or

the completion of a project to Repower or Refuel a Unit to Natural Gas, whichever occurs later.

2. Paragraph 136 of the Decree shall be revised as follows:

136. Each WPS report required by this Consent Decree shall be signed by the Responsible Official as defined in Title V of the Clean Air Act for Pulliam and Weston, or his or her equivalent or designee of at least the rank of Vice President or General Counsel, as appropriate, and shall contain the following certification:

This information was prepared either by me or 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 evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

3. In Paragraph 188, the contacts for WPS should be deleted and the following substituted:

As to WPS:

Office of Vice President - Environmental Wisconsin Public Service Corporation 231 W. Michigan St.
Milwaukee, WI 53203

and

Executive Vice President, Corporate Secretary and General Counsel
Wisconsin Public Service Corporation
231 W. Michigan St.
Milwaukee, WI 53203

4. The Appendix to the Decree shall be deleted and replaced with the document labeled "Revised Appendix A" that is attached to the Modification Order as Exhibit 1.

III. MISCELLANEOUS TERMS

- 5. Except as specifically provided for in this Modification Order, all other terms and conditions of the Decree will remain in full force and effect in accordance with their terms.
- 6. This Modification Order shall be lodged with the Court for a period of not less than thirty (30) days for public notice and comment in accordance with Department of Justice policy as described at 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold consent if comments by the public regarding this Modification Order disclose facts or considerations which indicate that the modifications to the Decree are inappropriate, improper or inadequate. If for any reason the Court should decline to approve this Modification Order, then this Modification Order and its terms and provisions shall be voidable at the sole discretion of either party and may not be used as evidence in any litigation between the Parties.
- 7. The Court shall retain jurisdiction over the Decree and the Parties, including modifications to the Decree, as specified in Sections XXII (Retention of Jurisdiction) and XXIII (Modification).

SO ORDERED this day of, 2016	
	WILLIAM C. GRIESBACH, Chief Judge
	United States District Court - WIED

FOR THE UNITED STATES OF AMERICA

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FOR DEFENDANT WISCONSIN PUBLIC SERVICE CORP.

Allen L. Leverett

Chairman, President and Chief

Executive Officer

Wisconsin Public Service Corp.

APPENDIX A

ENVIRONMENTAL MITIGATION PROJECTS

WPS shall spend at least \$6,000,000, and shall comply with the requirements of this Appendix and with Section IX of the Consent Decree (Environmental Mitigation Projects) to implement and secure the environmental benefits of the Environmental Mitigation Projects described below. Nothing in the Consent Decree or this Appendix shall require WPS to spend any more than a total of \$6,000,000 on Environmental Mitigation Projects.

I. National Park Service and Forest Service Mitigation

- A. National Park Service Mitigation: Within forty-five (45) days from the Date of Entry, WPS shall pay to the National Park Service the sum of \$250,000 to be used in accordance with the Park System Resource Protection Act, 16 U.S.C. § 19jj, for the restoration of land, watersheds, vegetation, and forests using techniques designed to improve ecosystem health and mitigate harmful effects from air pollution. The Project(s) shall focus on one or more areas alleged by Plaintiff to have been injured by emissions from WPS System plants, including but not limited to Pictured Rocks National Lakeshore, Sleeping Bear Dunes National Lakeshore, Keweenaw National Historic Park, Apostle Islands National Lakeshore, Mississippi River and Recreation Area, Saint Croix National Scenic Riverway, and Effigy Mounds National Monument.
- B. Payment of the amount specified in the preceding Paragraph shall be made to the Natural Resources Damage and Assessment Fund managed by the United States Department of the Interior. Instructions for transferring funds will be provided to WPS by the National Park Service. Notwithstanding Subsection I.A of this Appendix, payment of funds is not due until ten (10) days after receipt of payment instructions. Upon payment of the required funds into the Natural Resource Damage and Assessment Fund, WPS shall have no further responsibilities regarding the implementation of any project selected by the National Park Service in connection with this provision.
- C. <u>United States Forest Service Mitigation</u>: Within forty-five (45) days from the Date of Entry, WPS shall pay to the United States Forest Service the sum of \$250,000 to be used in accordance with 16 U.S.C. § 579c, for the improvement, protection, or rehabilitation of lands under the administration of the Forest Service. The Project(s) shall focus on one or more areas alleged by Plaintiff to have been injured by emissions from WPS System plants, including but not limited to the Chequamegon-Nicolet National Forest and the Manistee National Forest.

D. Payment of the amount specified in the preceding Paragraph shall be made to the Forest Service pursuant to payment instructions provided to WPS.

Notwithstanding Subsection I.C of this Appendix, payment of funds by WPS is not due until ten (10) days after receipt of payment instructions. Upon payment of the required funds, WPS shall have no further responsibilities regarding the implementation of any project selected by the Forest Service in connection with this provision.

II. Overall Schedule and Budget for Remaining Environmental Mitigation Projects

- A. Within 120 Days of the Date of Entry, unless otherwise specified by this Appendix, WPS shall submit proposed plans to EPA for review and approval pursuant to Section XIII of the Consent Decree (Review and Approval of Submittals) for spending \$5,500,000 in Project Dollars for the Projects listed in Sections III through VII over a period of not more than 5 years from the date of plan approval, and in accordance with the deadlines established in this Appendix. EPA reserves the right to disapprove any of the plans should the Agency determine based on an analysis of the plans submitted by WPS and all the potential environmental impacts that the Project is not environmentally beneficial. WPS shall perform the Projects listed in Sections III through V, and may perform the Projects listed in Sections VI and VII.
- B. WPS may, at its election, consolidate the Project plans required by this Appendix into one or more Project plans.
- C. Unless otherwise specified by this Appendix, WPS may, at its election, spread its payments for Environmental Mitigation Projects over the five-year period commencing upon the date of plan approval. WPS may also accelerate its payments to better effectuate a proposed mitigation plan, but WPS shall not be entitled to any reduction in the nominal amount of the required payments by virtue of the early expenditures.
- D. All proposed Project plans shall include the following:
 - 1. A plan for implementing the Project.
 - 2. A summary-level budget for the Project.
 - 3. A time line for implementation of the Project.
 - 4. A description of the anticipated environmental benefits of the Project including an estimate of emission reductions (e.g., SO2, NOx, PM, mercury, CO2) expected to be realized.
- E. Upon approval by EPA of the plan(s) required by this Appendix, WPS shall complete the approved Projects according to the approved plan(s). Nothing in this Consent Decree shall be interpreted to prohibit WPS from completing the Projects ahead of schedule.

- F. Commencing with its first progress report due pursuant to Section XII (Periodic Reporting) of the Consent Decree, and continuing biannually thereafter until completion of the Projects, WPS will include in the progress report information describing the progress of each Project and the Project Dollars expended on each Project to date.
- G. In accordance with the requirements of Paragraph 116 of the Consent Decree, within sixty (60) days following the completion of each Project, WPS shall submit to the United States for approval of Project closure, a Project completion report that documents:
 - 1. The date the Project was completed;
 - 2. The results and documentation of implementation of the Project, including the estimated emission reductions or other environmental benefits achieved;
 - 3. The Project Dollars incurred by WPS in implementing the Project; and
 - 4. Certification by an authorized representative in accordance with Paragraph 136 of the Consent Decree that the Project has been completed in full satisfaction of the requirements of the Consent Decree and this Appendix.
- H. If EPA concludes based on the Project completion report or subsequent information provided by WPS that a Project has been performed and completed in accordance with the Consent Decree, then EPA will approve completion of the Project for purposes of the Consent Decree.

III. Community Manure Digester

- A. Consistent with the requirements of Section II of this Appendix, WPS shall propose a plan to spend up to \$300,000 to fund a project to reduce pollutants through conversion of food and/or animal waste to biogas or electricity within WPS's service territory. These Project Dollars will act as seed funding for the entire Project, which is expected to cost significantly more and which may include the construction of community manure treatment facilities designed to receive manures from nearby dairy farms. Such a project will promote solutions to the continuing water quality issues posed by phosphorus and nutrient-containing runoff and generate a biogas that would be used to generate renewable electricity for offsite or facility use.
- B. In undertaking this Project, WPS may partner with governmental and other third party organizations in Wisconsin. Locations would be sought to maximize the "brown power" generation displaced and the nutrient loading reduced in the host watershed.

- C. WPS shall spend a maximum of \$300,000 in Project Dollars to implement the Digester Project. In addition to the requirements of Section II of this Appendix, the plan required to be submitted pursuant to this Appendix shall also satisfy the following criteria:
 - 1. Describe how the proposed Project is consistent with the requirements of this Section and the Consent Decree, and how the Projects will actually result in the emission reductions projected to be reduced pursuant to this Section.
 - 2. Describe the governmental and other third party organizations involved in the implementation of the Project.
- D. <u>Performance:</u> Upon approval of the Digester Plan by EPA, WPS shall complete the Project according to the approved plan and schedule.

IV. Renewable Energy Resource Enhancements

- A. Wind Boost. Consistent with the requirements of Section II of this Appendix, WPS shall propose a plan to spend up to \$2,000,000 in Project Dollars on projects designed to increase the power production potential of the Crane Creek wind farm or existing wind farms in Wisconsin. As required by Paragraph 124 of the Consent Decree, such projects shall be in addition to any other legal obligations, including WPS's obligations under any state Renewable Portfolio Standard. Prior to implementation of the project, WPS shall complete a study of equipment, historic production, and wind conditions to customize optimizations and maximize production from individual turbines and from the wind site as a whole. The potential improvements might include a control system upgrade, blade tip extensions, winter icing prevention, turbine pitch optimization, and turbine control software. The intent of the projects would be to increase the generation from the renewable resource wind generation facility. This would be in excess of WPS's obligations under the state's Renewable Portfolio Standard, producing additional MW generation from renewable wind power, which is expected to offset coal generation.
- B. Hydro Boost: Consistent with the requirements of Section II of this Appendix, WPS shall propose a plan to spend up to \$2,000,000 in Project Dollars on activities designed to increase the existing hydroelectric facility water utilization and energy output. As required by Paragraph 124 of the Consent Decree, such projects shall be in addition to any other legal obligations, including WPS's obligations under any state Renewable Portfolio Standard. The intent of the projects would be to gain electrical energy production from the renewable resource without changing the river flow characteristics. This would be in excess of WPS's obligations under the state's Renewable Portfolio Standard, producing additional MW generation from renewable hydropower, which is expected to

offset coal generation. Such projects shall comply with the eligibility requirements of EPA's Green Power Partnership http://www.epa.gov/greenpower/documents/gpp_partnership_reqs.pdf. Project activities include improving the water wheel design for increased energy output while maintaining the current river water flow and making control system enhancements to maintain water levels at lower flow rates while continuing electrical generation.

__WPS shall spend a maximum of \$2,000,000 in Project Dollars to implement the Wind Boost Project and \$2,000,000 to implement the Hydro Boost Project. For purposes of calculating the Project Dollars to be used for the Wind Boost and Hydro Boost projects Project, Project Dollar credit given for the Projects Project shall reflect the net between WPS's cost in implementing the Projects Project (less project studies and feasibility analyses), and the economic benefit or income resulting from the Project. WPS shall receive Project Dollar Credit for expenditures only to the extent WPS does not receive an offsetting financial or economic benefit from such expenditures; in determining how many Project dollars have been spent by WPS, WPS shall debit any such offsetting financial or economic benefit received against WPS's expenditures for the Project. WPS shall not be given Project Dollar Credit for any cost associated with studies and/or feasibility analyses and shall only include those construction activities and improvements that generate actual additional energy output. Any additional Renewable Energy Credits (RECs) generated from such projects shall not be available for sale or use toward any State Renewable Portfolio Standard obligation.

Performance: Upon approval of the Wind Boost and Hydro Boost

Plans Project Plan by EPA, WPS shall complete the Projects Project according to the approved plans and schedules.

V. Wood Stove Change out Project

A. Consistent with the requirements of Section II of this Appendix, WPS shall propose a plan to spend no less than \$750,000, and up to \$2,600,000,000, Project Dollars to sponsor a wood-burning appliance change out and retrofit project ("Wood Stove Project") that shall be implemented by one or more state, local or tribal air pollution control agencies, or by one or more third-party non-profit organizations or entities, in areas that would benefit from reductions of fine particle pollution and hazardous air pollutants. The air pollutant reductions shall be obtained by replacing, retrofitting or upgrading inefficient, higher polluting wood-burning stoves and outdoor boilers as follows: (1) replacing older hydronic or outdoor wood boilers with EPA Phase II hydronic heaters, or retrofitting such older hydronic or outdoor wood boilers to meet EPA Phase II hydronic heater standardscertified hydronic heaters; (2) replacing pre-1988 wood stoves with EPA-certified wood stoves and/or cleaner burning, more energy-efficient hearth appliances (e.g., wood pellet, gas, or propane hearth appliances); and/or (3)

- replacing spent catalysts in EPA-certified wood stoves. To qualify for replacement, retrofitting or upgrading, the older boiler, pre 1988 wood stove, or EPA certified wood stoveappliance must be the primary source of residential heat.
- B. WPS shall complete the Wood Stove Project not later than three years after the Date of Entryby December 31, 2017, except that WPS may request an extension of time to complete the project if it appears likely that all Project Dollars designated under the Plan will not be spent within such three year period despite WPS's best efforts to implement the Wood Stove Project.
- C. WPS shall sponsor the implementation of the Wood Stove Project in Brown, Marathon, and adjacent counties in Wisconsin. In determining the specific areas to implement this project within the aforementioned geographic areas, WPS shall give priority to: (1) areas with high amounts of air pollution, especially particle pollution and hazardous air pollutants; (2) areas located within a geography and topography that make them susceptible to high levels of particle pollution; (3) areas that have a significant number of older hydronic or outdoor wood boilers and pre-1988 wood stoves; and (4) areas with dense residential populations.
- D. WPS and the air pollution control agency(ies) or non-profit organization(s) that will implement the Wood Stove Project shall consult with EPA's Residential Wood Smoke Reduction Team and shall implement the Wood Stove Project consistent with the materials available on EPA's Burn Wise website at http://www.epa.gov/burnwise.
- E. WPS shall limit the use of Project Dollars for administrative costs associated with implementation of the Wood Stove Project to no greater than 10% of the Project Dollars that WPS provides to a specific air pollution control agency or non-profit organization.
- F. The Wood Stove Project shall provide incentives for the wood stove and wood boiler replacements, retrofits and upgrades described above in this Section through rebates, vouchers and/or discounts. The Wood Stove Project shall provide for the issuance of rebates, vouchers and/or discounts to residential homeowners in amounts ranging from \$3,000 to \$4,000 for each Phase HEPA certified hydronic heater, or \$1,000 to \$1,500 for each replacement wood stove. The Wood Stove Project may also provide rebates or vouchers for the full cost of replacing older hydronic or outdoor wood boilers and pre-1988 wood stoves for incomequalified residential homeowners, if such full cost rebates or vouchers are included and approved in the Plan in accordance with the requirements of Subsection H.5 below.
- G. The Wood Stove Project shall provide educational information and outreach regarding the energy efficiency, health and safety benefits of cleaner-burning

- alternatives to older hydronic or outdoor wood boilers and pre-1988 wood stoves, and the proper operation of wood-burning stoves and hearth appliances.
- H. In addition to the requirements of Section II, the Wood Stove Project plan proposed by WPS shall:
 - 1. Identify the air pollution control agency(ies) or non-profit organization(s) that have agreed to implement the WSC Project.
 - 2. Describe the schedule and the budgetary increments in which WPS shall provide the necessary funding to the air pollution control agency(ies) or non-profit organization(s) to implement the Wood Stove Project.
 - 3. Describe all of the elements of the Wood Stove Project that the air pollution control agency(ies) and/or non-profit(s) will implement.
 - 4. Include measures to ensure that the air pollution control agency(ies), or non-profit organization(s), that are acting on WPS's behalf shall implement the Wood Stove Project in accordance with the requirements of this Appendix, and that the Project Dollars will be used to support the actual replacement, retrofitting, and/or upgrading of wood-burning stoves and boilers currently used as the primary source of residential heat.
 - 5. If the plan proposes to provide rebates or vouchers for the full cost of replacing older hydronic or outdoor wood boilers and pre-1988 wood stoves for income-qualified residential homeowners, describe and estimate the number of energy efficient appliances it intends to make available, the cost per unit, and the criteria the air pollution control agency(ies) or nonprofit organization(s) will use to determine which residential homeowners should be eligible for such full cost replacement.
 - 6. If applicable, identify any organizations or entities with which the air pollution control agency(ies) or non-profit organization(s) will partner to implement the Wood Stove Project, including wood-burning appliance trade associations, national or local health organizations, facilities that will dispose of old stoves so that they cannot be resold or reused, individual wood stove retailers, propane dealers, housing assistance agencies, local fire departments, and local green energy organizations.
 - 7. Describe how the air pollution control agency(ies) or non-profit organization(s) will ensure that the inefficient, higher polluting wood-burning stoves and outdoor boilers that are replaced under the Wood Stove Project will be properly recycled or disposed.

- 8. Describe how the air pollution control agency(ies) or non-profit organization(s) will conduct outreach in the Wisconsin counties within the geographic area of the Wood Stove Project.
- I. <u>Performance</u>: Upon approval of the Wood Stove Project Plan by EPA, WPS shall complete the Project according to the approved plan and schedule. Should WPS, despite its best efforts to fund the Project Dollars at the levels required by and in compliance with this Section, be unable to spend at least \$750,000 on this Project, WPS may request EPA's approval to allocate such Project Dollars towards another of the Projects specified in this Appendix.

ADDITIONAL MITIGATION PROJECTS

VI. Compressed Natural Gas (CNG) or Hybrid Fleet Project

A. Consistent with the requirements of Section II of this Appendix, WPS may propose a plan to spend up to \$2,000,000 Project Dollars to replace gasoline and diesel powered fleet vehicles located in WPS's service territory (passenger cars, light trucks, and heavy duty service vehicles) with newly manufactured Alternative Fuels Vehicles (as defined below) and/or Compressed Natural Gas (CNG) Vehicles. Upgraded fleet vehicles shall be owned by WPS or shall be publicly-owned motor vehicles. The replacement of gasoline and diesel vehicles with Alternative Fuels Vehicles or CNG Vehicles will reduce emissions of NOx, PM, VOCs, and other air pollutants. Any Alternative Fuel Vehicle or CNG Vehicle shall meet all applicable engine standards, certifications, and/or verifications required by law.

B. Definitions for Plan:

- 1. "Alternative Fuels Vehicle" means a Hybrid Vehicle, Plug in Hybrid vehicle, or Electric Vehicle.
- 2. "Hybrid Vehicle" means a vehicle that can generate, store, and utilize electric power to reduce the vehicle's consumption of fossil fuel.
- 3. "Plug in Hybrid" means a vehicle that can be charged from an external source and can generate, store, and utilize electric power to reduce the vehicle's consumption of fossil fuel. These vehicles typically include a larger battery pack to allow an extended range of operation without the use of the gasoline or diesel engine.
- 4. "Electric Vehicle" means a vehicle that does not utilize an internal combustion engine and instead relies entirely on battery power for propulsion.
- C. In addition to the requirements of Section II, the plan will also satisfy the following criteria:

- 1. Ensure that all vehicles proposed for inclusion in this program will be regular production models that meet all applicable engine standards, certifications or verifications;
- 2. Include a schedule and budget for completing the fleet replacement program;
- 3. Describe the process and criteria WPS will use to select any fleet operators and owners in WPS's service territory that their fleet of vehicles may be eligible to participate in the fleet replacement program and to solicit their interest in participating in the program.
- 4. Describe the process and criteria WPS will use to select any fleet operators and owners to participate in the program, consistent with the requirements of this Section.
- 5. Prioritize the public fleets in WPS's service territory that will be selected for participation in this Project, including consideration of such issues as environmental justice and air quality.
- 6. Describe the rationale and basis (including a discussion of cost) for selecting the make and model of the Alternative Fuel Vehicle or CNG Vehicle chosen for this Project, including information about other available vehicles and why such vehicles were not selected.
- 7. Describe the final disposition of the vehicles that are being replaced.
- 8. Propose a method to account for the amount of Project Dollars that will be credited for each replaced vehicle, taking into account the incremental costs of program vehicles compared to similar conventional vehicles and potential savings associated with the replacement;
- 9. Provide a method of determining net present value of the savings of program vehicles as compared to similar conventional vehicles;
- 10. Certify that the program vehicles will be retained and operated for their useful life;
- 11. Prioritize the replacement of diesel-powered vehicles to the greatest extent practical and available; and
- 12. Identify any person or entity, other than WPS, that will be involved in the Project. This does not include vehicle manufacturers or dealers who would provide vehicles but does include any proposed third party who would have a coordination or project management role in the fleet replacement program.
- D. With respect to costs associated with vehicles, WPS shall only receive credit toward Project Dollars for the incremental cost of Alternative Fuels Vehicles or CNG Vehicles as compared to the cost of a newly manufactured, similar motor vehicle powered by conventional diesel or gasoline engines. WPS shall also receive credit toward Project Dollars for costs associated with infrastructure needed to support such Project.

VII. Solar/Thermal Technologies Project

- A. Consistent with the requirements of Section II of this Appendix, WPS may propose a plan to spend up to \$2,000,000 Project Dollars to install conventional flat panel or thin film solar photovoltaics ("PV Project"), and/or solar thermal water ("Thermal Project") at a state or local government-owned building, and/or buildings owned by nonprofit groups, in Brown, Marathon, and adjacent counties in Wisconsin. WPS shall implement the PV and/or Thermal Project(s) as described below.
- B. PV Project: A PV Project shall, at a minimum, consist of: (1) the installation of solar panels at a single location with unrestricted solar access, producing at least 10 kilowatts direct current, but not to exceed the total annual electricity baseload of the building the project serves; (2) a grid-tied inverter, appropriately sized for the capacity of the solar panels installed at the location; (3) the appropriate solar panel mounting equipment for the type of roof or project site location at the particular school, government-owned building, or building owned by nonprofit groups selected, i.e., roof mount or ground mount; (4) wiring, conduit, and associated switchgear and metering equipment required for interconnecting the solar generator to the utility grid; and (5) appropriate monitoring equipment supported by kiosk-delivered educational software to enable the school students and/or staff to monitor the total and hourly energy output of the system (kilowatt hours), environmental benefits delivered (pounds CO2 avoided), hourly ambient temperature and cell temperature (C°), irradiance (W/M2), as well as time sensitive voltage, power and current metrics. The PV Project shall be installed on the customer side of the meter and ownership of the system shall be conveyed to the building owner at the site. All related environmental benefits shall be retained by the system owner, including associated renewable energy certificates. WPS shall include in its bid proposals the requirement that the major subcomponents of the PV System include manufacturer parts warranties (e.g. PV modules, inverter) and a Project Service Contract, as described in Subsection VII.E, below. The service and maintenance contract/warranty will be delivered through a third-party provider (system integrator or service provider) but be administered by the project host by way of payment through the escrow account specified in Subsection VII.E below. WPS shall use North American Board of Certified Energy Practitioners (NACEP) certified energy professionals to perform the design and installation of the PV Project to ensure the highest quality installation and performance of the system.
- C. Thermal Project: A Thermal Project shall, at a minimum, consist of: (1) the proper installation of solar thermal technologies at a single location with unobstructed solar access, using active direct or indirect systems with OG-100 or OG-300 certification from the Solar Rating and Certification Corporation; (2) use of industry best practices in sizing the solar thermal collectors' surface area to match the intended storage tank and end use application; (3) appropriate monitoring equipment supported by kiosk-delivered educational software to enable the school students and/or staff to monitor the total and hourly thermal energy output of the system, operating parameters, and environmental benefits

delivered; and (4) installed systems should provide adequate and redundant freeze protection appropriate for the system's climate region. The Thermal Project shall be installed on the customer side of the meter and ownership of the system shall be conveyed to the building owner at the site. All related environmental benefits shall be retained by the system owner, including associated renewable energy certificates or carbon offsets. WPS shall include in its bid proposals the requirement that each Thermal System include a manufacturer parts warranty and a Project Service Contract, as described in Subsection VII.E below. The service and maintenance contract/warranty will be delivered by WPS or through a third-party provider (system integrator or service provider) but be administered by the project host by way of payment through the escrow account specified in Subsection VII.E below. WPS shall use NABCEP-certified energy professionals to perform the design and installation of the Thermal Project to ensure the highest quality installation and performance of the system.

- D. Warranty/Service Contract: The plan for any PV and/or Thermal Project shall also include the requirement for (1) a manufacturer parts warranty for the solar panels installed for 25 years and invertors installed for 10 years; and (2) a service contract ("Project Service Contract") for maintenance of the Project for twenty-five (25) years from the date of installation, including but not limited to annual system checkups and solar module cleaning, and normal Project component replacements, including installation of new system components as needed to extend the life of the Project through the termination of the contract term.
- E. WPS shall purchase the Project Service Contract for the benefit of the entity that owns the building where the Project is installed (Service Contract Beneficiary) and shall fund the cost of the Project Service Contract by depositing funds in an escrow account for use by such Service Contract Beneficiary solely for purposes of maintaining the system for the life of the Project.
- F. In addition to the requirements of Section II, the proposed Project(s) plan shall also satisfy the following criteria:
 - 1. Include a schedule and budget for completing each portion of the PV or Thermal Project(s).
 - 2. Provide a detailed accounting supporting the costs and activities associated with the Project Service Contract, and, if using an escrow account to fund the Project Service Contract, the schedule and monetary installments for deposits to such account to support the operation and maintenance activities over the life of the system and a demonstration that such escrow account includes appropriate restrictions on the Service Contract Beneficiary's use of such funds, solely for purposes of maintaining the Project.

- 3. Describe the process WPS will use to notify the potential recipients described in Subsection VII. A above that they are eligible to participate in this Project and to solicit their interest in participating.
- 4. Describe the process and criteria that WPS will use to select the final recipients for the PV or Thermal Project(s), including baseload electricity usage, thermal load, solar access availability, low income neighborhood schools and other relevant criteria.
- 5. Identify any person or entity other than WPS that will be involved in the PV or Thermal Project and describe the third-party's role in the PV or Thermal Project, the basis for asserting that such entity is able and suited to perform the intended role, and the competitive bidding process used to solicit third-party interest. Any proposed third-party must be legally authorized to perform the proposed role and to receive Project Dollars.
- G. In addition to the information required by Subsection II.F above, WPS's final report for the Project(s) shall also identify the government/nonprofit owned buildings where the PV and/or Thermal Project(s) were installed, the size of the system(s), the components installed, the total cost(s) and expected energy output and environmental benefits, and any lessons learned.

VIII. Land Acquisition and Restoration Project

- A. Consistent with the requirements of Section II of this Appendix, WPS may submit a plan to EPA for review and approval for the use of up to \$2,000,000 in Project Dollars for acquisition and restoration of ecologically significant lands, watersheds, vegetation, and/or forests that are part of, adjacent to, or near the Barkhausen Water Fowl Preserve in Brown County, Wisconsin. ("Land Acquisition and Restoration Project").
- B. The goal of the Land Acquisition and Restoration Project is the protection through acquisition and/or restoration of ecologically significant lands, watersheds, vegetation, and/or forests using adaptive management techniques designed to improve ecosystem health and mitigate harmful effects from air pollution. In addition, the funding shall be used to provide for public use of acquired areas in a manner consistent with the ecology of the area.
- C. For purposes of this Appendix and Section IX of this Consent Decree (Environmental Mitigation Projects), land acquisition means purchase (on behalf of the Defendant or a third-party) of interests in land, including fee ownership, easements, or other restrictions that run with the land that provide for the perpetual protection of the acquired land. Restoration may include, but is not limited to, reforestation or revegetation (using plants native to the area) and/or removal of non-native, invasive plant species. Any restoration action must

- incorporate the acquisition of an interest in the restored lands sufficient to ensure perpetual protection of the restored land.
- D. In addition to the requirements of Section II of this Appendix, the proposed Land Acquisition and Restoration Project plan shall also satisfy the following criteria:
 - 1. Describe generally the areas proposed to be acquired or restored, including a map clearly identifying the location of the land relative to the Units addressed in this Consent Decree and all city, state, or federal publicly protected lands/parks in the area surrounding the proposed land to be acquired/restored.
 - Provide a justification of why the area should be considered ecologically and/or environmentally significant and warrants preservation and/or restoration.
 - 3. Provide the projected cost of the project and a schedule for completing and funding each portion of the project.
 - 4. Identify any person or entity(s) other than WPS that will be involved in the project, including all owners with interests in the land. WPS shall describe all third-party roles in the action and the basis for asserting that such entity is able and suited to perform the intended role. Any proposed third-party must be legally authorized to perform the proposed action and to receive Project Dollars.
- E. Upon EPA's approval of the Land Acquisition and Restoration Project plan, WPS may transfer up to \$2,000,000 of Project Dollars to one or more land acquisition funds, provided that the use of such funds by the recipient is conditioned to use for partial or full implementation of the land acquisition and restoration described in the Land Acquisition and Restoration Project plan. If WPS elects to transfer funds as described in this Paragraph, all Project Dollars shall be transferred within 2 years of the Date of Entry of the Modification Order.
- F. In addition to the information required to be included in the report pursuant to Section II.G of this Appendix, WPS shall include in that report any reports related to this Land Acquisition and Restoration Project that any applicable third-party fund or organization provided to WPS.
- G. All Land Acquisition and Restoration Project lands shall be acquired within 5 years of plan approval. If all Land Acquisition and Restoration Project lands are acquired earlier than 5 years after plan approval, WPS shall have no further responsibilities regarding the implementation of the Land Acquisition and Restoration Project upon EPA approval of the report described in Section II.G of this Appendix.