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The Bonneville Power Administration's Energy Curtailment Problem: An Analysis of Its Redispatch Policy and Oversupply Protocol P and Their Impact on Washington's Wind Power Producers, Utility Companies, and Energy Independence Act

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**THE BONNEVILLE POWER ADMINISTRATION'S
ENERGY CURTAILMENT PROBLEM: AN ANALYSIS OF
ITS REDISPATCH POLICY AND OVERSUPPLY
PROTOCOL P AND THEIR IMPACT ON
WASHINGTON'S WIND POWER PRODUCERS, UTILITY
COMPANIES, AND ENERGY INDEPENDENCE ACT**

Drew Pearsall

Abstract: The Bonneville Power Administration (BPA) is the primary transmitter of power in the Pacific Northwest. Charged with operating the federal dams on the Columbia River, the BPA also maintains and operates 15,000 miles of high-voltage power lines that transmit power produced by federal and non-federal power sources alike. Under federal law, the BPA must accept onto its transmission system power from non-federal sources in a manner that is fair, non-preferential, and does not discriminate against non-federal sources. Recently, strong snowpack and periods of heavy runoff have stressed the Federal Columbia River Power System and has led to a problem: the over-generation of hydropower for which there is not enough capacity on the transmission system. Compounding this problem is the fact that wind power generation has greatly increased in the Pacific Northwest over the past decade, with no sign of significantly slowing down. The over-generation of power, in conjunction with the BPA's statutory mandate to accept non-federal power sources, has created a challenge for the BPA: to maintain the reliability of its stressed power transmission system while fulfilling its obligation to accept, in a fair and non-discriminatory manner, power from both federal and non-federal sources.

In an attempt to accomplish this task, the BPA began implementing a curtailment policy beginning in 2011 that, according to the Federal Energy Regulatory Commission, unlawfully discriminated against non-federal wind power producers. The BPA has since revised and updated its displacement policy; nevertheless, the BPA's policies continue to unfairly discriminate against wind power producers by placing a preference on the generation and transmission of federal hydropower at the expense of non-federal wind power. Not only do these policies violate the BPA's statutory obligations and requirements of the Federal Energy Regulatory Commission, but they also hurt the ability for utility companies in Washington to meet obligations to diversify energy portfolios as required by the Washington Energy Independence Act. Because wind power is the dominant renewable energy resource available to satisfy Washington's new renewable portfolio standards (RPS), its curtailment is problematic for utility companies and consumers alike. This Comment evaluates the BPA's past and existing curtailment policies, their impact on the ability to satisfy the goals of the Washington Energy Independence Act, and the ability for utility companies in Washington to meet RPS requirements.

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I. INTRODUCTION

The Pacific Northwest has long had access to cheap power, primarily because of the abundant hydropower generated from the many dams built on the Columbia River and its tributaries. However, in November 2006, Washington State voters approved Initiative 937, requiring utility companies to

obtain eligible renewable energy resources in order to meet specific percentages of their electrical load capacity.¹ Codified as the Energy Independence Act, the definitions and language of the statute effectively preclude hydropower generated by dams on the Columbia River and some of its tributaries from qualifying as an eligible renewable energy resource.² This was purposeful, as hydropower accounts for over seventy percent of the electricity generated in Washington, and the State wanted to diversify its renewable energy resources.³ In order for electric utilities to meet the requirements of the Energy Independence Act to include renewable energy resources within their portfolios, they must look to qualifying resources as defined in the Energy Independence Act.⁴ At present, the most prominent of these alternative renewable resources is wind energy.⁵

The Bonneville Power Administration (BPA), the major source of power generation and transmission in the Pacific Northwest, impacts the ability for Washington utilities to meet their renewable energy quotas. By operating more than 15,000 miles of transmission lines in the Pacific Northwest—equivalent to seventy-five percent of the transmission service in the region—the BPA effectively controls the distribution of power in Washington.⁶ However, as a major generator of hydropower the BPA uses most of the transmission system's capacity to distribute its own power, leaving little room for additional alternative energy resources to connect to its system.⁷ Thus, without major upgrades to the BPA's

1. See Sam Reed, Washington Secretary of State, Initiative 937 (2006) available at <http://www.sos.wa.gov/elections/initiatives/text/i937.pdf>.

2. See WASH. REV. CODE § 19.285.030 (2012); BONNEVILLE POWER ADMIN., ISSUE BRIEF: INITIATIVE I-937 WASHINGTON STATE CLEAN AND RENEWABLE ENERGY 2, (2006) [hereinafter ISSUE BRIEF]; TODD MYERS, *Washington Policy Center: A Guide to Initiative 937 Washington Green Energy Quotas* 4–5 (2006).

3. MYERS, *supra* note 2, at 4–5. See also WASH. REV. CODE § 19.285.020 (2012).

4. WASH. REV. CODE § 19.285.030(10), (18) (2012).

5. See *id.* § 19.285.030 (2012); MYERS, *supra* note 2, at 5.

6. See BONNEVILLE POWER ADMIN., DOE/BP-3949, SERVING THE PEOPLE OF THE NORTHWEST 3–5 (2d ed. 2009) [hereinafter SERVING THE PEOPLE]; BONNEVILLE POWER ADMIN., DOE/BP-4280, 2010 BPA FACTS 1–2 (2011), *on file with Journal*.

7. See Complaint and Petition for Order Under Fed. Power Act Section 211A Against Bonneville Power Admin. Requesting Fast Track Processing at 12–14, Iberdrola

transmission system the ability of existing and future alternative energy resources to reliably integrate their power into the system is limited.⁸

In 2011, the BPA implemented its Environmental Redispatch and Negative Pricing Policies (Redispatch Policy), a curtailment policy that limited the transmission of wind power across the BPA's transmission system.⁹ The BPA implemented this policy for many reasons, including: (1) to ease the strain placed on the transmission system caused by excess hydropower generation during periods when Columbia River flows are exceptionally high; (2) to allow the BPA to place this excess hydropower generation onto its transmission system; (3) to ensure the BPA's compliance with the Endangered Species Act by avoiding harm to fish species; and (4) to maintain reliable power transmission across its system.¹⁰ FERC determined in December 2011 that the curtailment of wind power under the BPA's Redispatch Policy was unduly discriminatory and demanded that the BPA stop.¹¹

In response, the BPA issued a new curtailment policy entitled "Oversupply Management Protocol Attachment P" (Oversupply Protocol P).¹² Oversupply Protocol P fails to satisfy the concerns expressed by FERC as it continues to curtail the production and transmission of wind power in an unfair and discriminatory manner. In turn, this practice threatens the ability for some utilities to meet the renewable portfolio standards defined in the Energy Independence Act.¹³

Renewables, Inc. v. Bonneville Power Admin., No. EL11-44-000 (Fed. Energy Regulatory Comm'n, June 13, 2011) [hereinafter Complaint]; BONNEVILLE POWER ADMIN., DOE/BP-4288, BPA'S INTERIM ENVIRONMENTAL REDISPATCH AND NEGATIVE PRICING POLICIES: ADMINISTRATOR'S FINAL RECORD OF DECISION 7-9, 11 (2011) [hereinafter REDISPATCH POLICY].

8. See BONNEVILLE POWER ADMIN., DOE/EIS-0422, CENTRAL FERRY-LOWER MONUMENTAL 500-KILOVOLT TRANSMISSION LINE PROJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT S1-S2 (2010) (discussing lack of transmission capacity for new wind projects developed in southeast Washington).

9. See generally REDISPATCH POLICY, *supra* note 7.

10. *Id.* at 1, 7.

11. Order Granting Petition, 137 FERC ¶ 61,185 (2011).

12. BONNEVILLE POWER ADMIN., OPEN ACCESS TRANSMISSION TARIFF: OVERSUPPLY MANAGEMENT PROTOCOL ATTACHMENT P (2012) [hereinafter OVERSUPPLY PROTOCOL P].

13. See generally Complaint, *supra* note 7.

Thus, the BPA's current energy curtailment policy, as defined in its Oversupply Protocol P, continues to have adverse ramifications for wind power producers, Washington utility companies, and the achievement of the goals articulated in the Energy Independence Act.

This Comment will evaluate the legal and policy implications that the BPA's wind curtailment policies have on (1) wind power generation in Washington, (2) the ability of Washington utilities to obtain sufficient eligible renewable resources necessary to meet the renewable portfolio standards codified in the Energy Independence Act, and (3) the prospects of reaching certain goals identified in the Energy Independence Act, which are affected by these policies. After evaluating these issues, this Comment will provide a series of recommendations to replace the BPA's current curtailment policy aimed at: addressing the BPA's power oversupply problem, minimizing adverse impacts to wind power producers and utility companies caused by curtailment, and creating a policy moving forward that is aligned with the goals articulated in the Energy Independence Act.

II. HISTORY AND BACKGROUND

To understand the impacts that the BPA's current curtailment policy has on wind power producers, utility companies, and the achievement of goals articulated in the Energy Independence Act, it is necessary to consider background information regarding the BPA, its prior Redispatch Policy, and Washington's Energy Independence Act.

A. *The Bonneville Power Administration*

In the early twentieth century, a series of dams were built on the Columbia River and its tributaries to prevent flooding, increase the river's navigability, expand irrigation capacity to rural areas, and to harness the river's power to provide cheap electricity to the people and industries of the Pacific Northwest.¹⁴ Various federal agencies built these dams,

14. See BONNEVILLE POWER ADMIN., FEDERAL COLUMBIA RIVER POWER SYSTEM 2-3 (2003) [hereinafter FEDERAL COLUMBIA RIVER POWER SYSTEM].

including the Bureau of Reclamation and the Army Corps of Engineers,¹⁵ but the BPA was tasked with coordinating operations amongst the dams and balancing the electrical output generated by the waters of the Columbia River.¹⁶ Originally created in 1937 to market the electricity generated from the first two large dams built on the river (Grand Coulee and Bonneville), the BPA eventually took control of marketing the power generated from all the dams on the Columbia River with the signing of the Pacific Northwest Coordination Agreement and enactment of the Federal Columbia River Transmission System Act.¹⁷

The area in which the BPA markets power is commonly referred to as the Federal Columbia River Power System (FCRPS).¹⁸ Within the FCRPS, the BPA controls facilities that generate power including: thirty-one federal dams, one non-federal nuclear power plant at Hanford, and several wind projects.¹⁹ In addition, the BPA maintains more than 15,000 miles of power transmission lines throughout its service territory, which includes Idaho, Oregon, Washington, western Montana and parts of eastern Montana, California, Nevada, Utah, and Wyoming.²⁰ The transmission grid operated by the BPA “links virtually all utilities in the Northwest,” including

15. *Id.* at 2.

16. *See* Bonneville Project Act of 1937 § 1, 16 U.S.C. § 832 (2006); Federal Columbia River Transmission System Act of 1974 § 2(a), 16 U.S.C. § 838(a), (d), (f) (2006) (making the BPA sole marketing authority of federal generated power on the Federal Columbia River Power System and making it a self-funding agency). The BPA was created by the Bonneville Project Act of 1937 and housed in the Department of the Interior. However, control over the BPA was transferred to the Department of Energy when it was created in 1977, which is where it still resides, albeit as a self-funding entity that pays for its operations through the sale and transmission of electricity. *See* BONNEVILLE POWER ADMIN., DOE/BP-3818, 70 PROUD MOMENTS IN BPA’S 70 YEARS 1–8 (2007) [hereinafter 70 PROUD MOMENTS IN BPA’S 70 YEARS].

17. 16 U.S.C. § 838(f) (2006); *see also* 70 PROUD MOMENTS IN BPA’S 70 YEARS, *supra* note 16, at 2.

18. REDISPATCH POLICY, *supra* note 7, at 2.

19. BONNEVILLE POWER ADMIN., DOE/BP-4224: 2010 ANNUAL REPORT 1 (2010) [hereinafter 2010 ANNUAL REPORT]. Currently, there are thirty-two completed wind projects integrated to BPA’s transmission system, nine ongoing projects that have yet to be completed, and twenty-five proposed projects that, if built, will be integrated into the transmission system. *See* BONNEVILLE POWER ADMIN., BPA WIND MAP 2012, TRANSMISSION SERVICES, WIND PROJECTS (2012), *available at* http://transmission.bpa.gov/PlanProj/Wind/documents/BPA_wind_map_2012.pdf.

20. *See* SERVING THE PEOPLE, *supra* note 6, at 3–5.

those that generate their own power, but still rely on the “BPA’s [transmission] system rather than building their own transmission lines.”²¹ Together, the BPA’s generation and transmission services create its Balancing Authority Area in which the BPA must ensure that there is a balance between electricity generated and transmission capacity for this power.²²

Maintaining transmission system reliability is just one of many obligations that the BPA must juggle in its attempt to satisfy all of its statutory and court-ordered duties. Important to this Comment, however, are the statutory obligations that define how the BPA generates and transmits power within its Balancing Authority Area. These obligations can be categorized as environmental responsibilities and statutory responsibilities.²³ The first category—environmental responsibilities—requires the BPA to comply with the Endangered Species Act, as endangered fish species exist in the Columbia River. These species are affected by the BPA’s decision to either run water through its power generating turbines or spill it over the top of the dams.²⁴

The second category—statutory responsibilities—requires the BPA to comply with legal mandates set forth in its authorizing statutes, such as the Pacific Northwest Electric Power Planning and Conservation Act, the Pacific Northwest Power Preference Act, the Bonneville Project Act, the Federal Columbia River Transmission System Act, the Federal Power Act, and legal orders given by FERC.²⁵ Collectively, these mandates require the BPA to consider energy conservation and the equitable treatment of fish and wildlife top priorities;²⁶ give Northwest utilities and customers preference in the acquisition of power;²⁷ control how the BPA generates, transmits, and exchanges power, including excess federal

21. *Id.* at 4.

22. REDISPATCH POLICY, *supra* note 7, at 7.

23. *Id.* at 1.

24. *See* FEDERAL COLUMBIA RIVER POWER SYSTEM, *supra* note 14, at 5–7; REDISPATCH POLICY, *supra* note 7, at 5–7.

25. *See* REDISPATCH POLICY, *supra* note 7, at 1.

26. FEDERAL COLUMBIA RIVER POWER SYSTEM, *supra* note 14, at 4.

27. SERVING THE PEOPLE, *supra* note 6, at 3.

power;²⁸ describe the conditions that must be satisfied to allow interconnection of non-federal sources to its transmission grid;²⁹ and ensure that the BPA provides open, fair and nondiscriminatory access to non-federal power generators connecting to its transmission system.³⁰

The BPA's environmental and statutory responsibilities provide the framework within which the BPA must operate its power generation and transmission services. Although protecting endangered fish species is a top priority, the BPA cannot neglect or ignore its other responsibilities.³¹ The BPA recognizes this dilemma, but does not give a clear indication of any existing hierarchy that prioritizes its obligations or coordinates the multiple objectives created by this array of laws.³² Instead, it appears that the BPA utilizes the bevy of controlling laws to its advantage by arguing that certain responsibilities require action and trump other obligations when such arguments benefit the BPA's operation of the FCRPS.³³

B. *The BPA's Curtailment Policies*

As a federal agency housed in the Department of Energy, the BPA has multiple statutory obligations it must follow in operating the FCRPS. Although all of its obligations are important, the three statutory requirements that most concern the BPA in regard to marketing hydropower throughout the FCRPS are: (1) to maintain an adequate, efficient, economical, and reliable energy supply; (2) to operate a transmission system that provides open access to non-federal energy sources that is sufficient to integrate and transmit power from federal and non-federal power generators; and (3) to mitigate the

28. See generally Bonneville Project Act of 1937, 16 U.S.C. §§ 832a–832m (2006); Pacific Northwest Consumer Power Preference Act, 16 U.S.C. §§ 837a–837g (2006).

29. Federal Power Act, 16 U.S.C. §§ 824i–824k (1920), amended by 16 U.S.C. § 839d-1 (2006) and 25 U.S.C. § 3505 (2006).

30. Fed. Energy Regulatory Comm'n, Dep't of Energy, Rules and Regulations, Order No. 888, Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities (1996).

31. See Complaint, *supra* note 7, at 16–18.

32. See REDISPATCH POLICY, *supra* note 7, at 1–7.

33. See, e.g., *id.* at 5–6, 26–27; 2010 ANNUAL REPORT, *supra* note 19, at 21, 45.

impact that dam operations have on fish and wildlife by complying with the Endangered Species Act.³⁴ In order to fulfill these statutory obligations, the BPA maintains that it has discretion in operating its power generation and transmission systems.³⁵

For years, the BPA has been forced to deal with periods of over-generation of hydropower.³⁶ When this occurs—often because of heavy rains, runoff from large snow pack, or flood events caused by the fast dissipation of snowpack—the BPA runs excess water through dam turbines which increases the amount of hydropower entering the power transmission grid.³⁷ This affects the BPA's ability to reliably transmit power as the additional hydropower stresses the system, causing overloads and potential outages.³⁸ As high water flows have occurred with greater frequency in recent years, stresses to the transmission system have become even more problematic.³⁹

Compounding this problem is the Endangered Species Act protections of fish found in the Columbia River. This, according to the BPA, requires water to be run through dam turbines as opposed to spilling it over the dams, so as to avoid an increase in Total Dissolved Gas (TDG) levels.⁴⁰ TDG levels, which are regulated by the state, can be dangerous or fatal to fish if too high.⁴¹ Thus, running the excess water through turbines avoids increasing TDG to dangerous levels, but also generates

34. Redispatch Policy, *supra* note 7, at 1, 5–7; BONNEVILLE POWER ADMIN., DOE/BP–4280, 2010 BPA FACTS 1–2 (2011), on file with Journal.

35. *See* Complaint, *supra* note 7, at 4.

36. REDISPATCH POLICY, *supra* note 7, at 7, 10.

37. *See* BONNEVILLE POWER ADMIN., BONNEVILLE POWER ADMINISTRATION'S DRAFT OVERSUPPLY MANAGEMENT PROTOCOL: A NARRATIVE EXPLANATION 1 (2012) [hereinafter BPA'S NARRATIVE EXPLANATION]; REDISPATCH POLICY, *supra* note 7, at 5–7.

38. REDISPATCH POLICY, *supra* note 7, at 9–10.

39. *Id.* at 10.

40. *Id.* at 5–7.

41. *Id.* Some groups contest this claim, believing that current TDG levels the BPA uses to determine when to run excess water through its turbines are too low and instead, increased spillage would actually benefit endangered fish species. *See* Protest of and Comments on Respondent's Compliance Filing by Save Our Wild Salmon, Pacific Coast Federation of Fishermen's Associations, Institute for Fisheries Resources, Idaho Rivers United, and American Rivers at 4–6, Iberdrola Renewables, Inc. v. Bonneville Power Admin., No. EL11-44-002 (Fed. Energy Regulatory Comm'n, Mar. 27, 2012) [hereinafter Salmon Protest].

additional hydropower.⁴²

In the past, this excess hydropower generated during high water flows was less problematic because there was sufficient capacity on the BPA's transmission system to accommodate the increased generation.⁴³ However, in recent years, a boom in wind power generation and its subsequent integration onto the BPA's transmission system has stressed the transmission grid.⁴⁴ Thus, there is not sufficient capacity on the transmission system for the excess hydropower generated during high water events, which can last anywhere from a few days to more than a month,⁴⁵ and existing wind power connected to the BPA's system.⁴⁶ In order to accommodate the increased hydropower entering the transmission grid, the BPA reduces the amount of wind power it transmits on its system.⁴⁷ Otherwise, the BPA claims that it would not be able to satisfy its statutory mandates to maintain transmission reliability, keep costs to its consumers low by not paying for wasted power generation, and comply with regulations protecting endangered fish species.⁴⁸

To satisfy these obligations, the BPA implemented its Environmental Redispatch and Negative Pricing Policy (Redispatch Policy) in 2011, which mandated that other sources of energy connected to the BPA's transmission system be shut down when excess hydropower was generated.⁴⁹ The Redispatch Policy was designed to:

Ensure BPA is taking all reasonable efforts to meet its legal responsibilities under the Clean Water Act ("CWA"), Endangered Species Act ("ESA"), and court order[s] (collectively, "environmental responsibilities), as well as BPA's legal obligations under its authorizing

42. See REDISPATCH POLICY, *supra* note 7, at 5–7.

43. *Id.* at 7, 9–10

44. *Id.*

45. *Id.* at 10, 16. In its Redispatch Policy, the BPA admits that high flow events large enough to trigger redispatch are not rare on the Columbia River. In fact, there is a one in three chance of their occurrence, which may last for one month or more. *Id.* at 10.

46. *Id.* at 9–10.

47. *Id.* at 14–15.

48. *Id.*

49. *Id.* at 15, 19.

legislation, such as the Pacific Northwest Electric Power Planning and Conservation Act (“Northwest Power Act”), the Federal Columbia River Transmission System Act (“Transmission System Act”), the Pacific Northwest Power Preference Act (“Preference Act”), and the Bonneville Project Act (collectively, “statutory responsibilities”), under specific hydro and load conditions, and after all reasonably practicable mitigating measures have been implemented. In addition, Environmental Redispatch will help provide options for BPA to maintain system reliability by balancing loads and resources within BPA’s Balancing Authority Area while meeting BPA’s environmental and statutory responsibilities.⁵⁰

In practice, the BPA’s Redispatch Policy forced wind power producers placing power onto the BPA’s transmission system to stop generating and transmitting power so that the BPA could utilize that transmission capacity for the distribution of its own excess hydropower.⁵¹

This curtailment policy was problematic from the outset and was immediately challenged by wind power groups throughout the Pacific Northwest.⁵² In June 2011, a lawsuit was filed with FERC alleging that the BPA’s Redispatch Policy provided unfair access to its transmission system and thus was unduly discriminatory in violation of the Federal Power Act and FERC Orders Nos. 888 and 890.⁵³ FERC ultimately determined that the Redispatch Policy “significantly diminishes open access to transmission, and results in Bonneville providing transmission service to others on terms and conditions that are not comparable to those it provides itself.”⁵⁴ FERC required the BPA to file a policy “providing for transmission service on terms and conditions that are comparable to those under

50. *Id.* at 1.

51. See Order Granting Petition, *supra* note 11, ¶¶ 4–6. See also Ted Sickinger, *BPA Braces for Strong Spring Runoff, Excess Power and Wind Power Cuts*, OREGONLIVE (Apr. 7, 2012, 10:32 AM), http://blog.oregonlive.com/environment_impact/print.html?entry=/2012/04/wind_farms_bpa_brace_for_power.html (discussing impact to wind power producers during actual curtailment event).

52. See generally Complaint, *supra* note 7.

53. See *id.* at 2–7.

54. Order Granting Petition, *supra* note 11, ¶ 33.

which Bonneville provides to itself and that are not unduly discriminatory or preferential.”⁵⁵

In an attempt to comply with the terms and conditions set forth in FERC’s order, the BPA created Oversupply Protocol P and submitted it to FERC.⁵⁶ However, Oversupply Protocol P is not a satisfactory response to the problems FERC identified with the BPA’s energy curtailment program. Instead, the BPA’s Oversupply Protocol P is a continuation of the defunct Redispatch Policy that continues to: (1) unfairly and unnecessarily discriminate against the wind power industry, (2) inhibit utility companies from obtaining the eligible renewable resources necessary to meet Washington’s renewable portfolio standards (RPS) targets, and (3) negatively impact the State’s ability to achieve the goals set forth in the Energy Independence Act.

C. *Washington’s Energy Independence Act*

Washington’s Energy Independence Act was enacted in 2007 and codified the renewable portfolio standards passed by voters, who approved Initiative 937 on November 7, 2006.⁵⁷ By its very nature, the Energy Independence Act is considered a renewable portfolio standard (RPS) since it requires electricity retailers to “acquire a minimum percentage of their power from renewable energy resources.”⁵⁸ The Energy Independence Act is one of the nation’s most stringent and requires qualifying utilities—those serving 25,000 or more customers—to have “eligible renewable resources” make up three percent of their overall electric load by January 1, 2012, nine percent of their electric load by January 1, 2016, and fifteen percent of their electric load by January 1, 2020.⁵⁹ As of 2009, there were

55. *Id.* ¶ 30.

56. See Compliance Filing of the Bonneville Power Admin. at 3–4, Iberdrola Renewables, Inc. v. Bonneville Power Admin., No. EL11-44-000, (Fed. Energy Regulatory Comm’n Mar. 6, 2012) [hereinafter Compliance Filing].

57. See WASH. REV. CODE § 19.285 (2012); Sam Reed, Washington Secretary of State, Initiative 937 (2006), available at <http://www.sos.wa.gov/elections/initiatives/text/i937.pdf>.

58. WILLIAM BRIDGES, RENEWABLE PORTFOLIO STANDARDS AND RENEWABLE ENERGY CREDITS 1 (2010).

59. WASH. REV. CODE § 19.285.040(2)(a) (2012).

seventeen qualifying utility companies in Washington, which accounted for more than eighty percent of the State's electric load.⁶⁰ Some of these utilities will be affected by the BPA's Oversupply Protocol P differently than others, as some utilities own their own eligible renewable resource facilities, obtain eligible renewable resources from a transmission system not controlled by the BPA, or have the financial capability to purchase renewable energy credits to meet RPS targets.⁶¹ However, because the BPA controls eighty percent of the transmission system, many qualifying utilities will rely on the BPA in some capacity for obtaining eligible renewable resources.⁶²

RPS requirements defined in the Energy Independence Act do not control or mandate action by the BPA, since the agency runs a thoroughly federal, interstate structure in the FCRPS.⁶³ These State requirements are inherently intertwined with, and frustrated by, the BPA's operation of the FCRPS and its control over the transmission system that accepts and delivers

60. UNITED STATES ENERGY INFO. ADMIN., DOE/EIA-0348(01)/2, WASHINGTON ELECTRICITY PROFILE, DEPARTMENT OF ENERGY: TABLE 10—CLASS OF OWNERSHIP, NUMBER OF CONSUMERS, SALES, REVENUES, AND AVERAGE RETAIL PRICE BY STATE AND UTILITY (Apr. 2011), http://www.eia.gov/cneaf/electricity/st_profiles/washington.html [hereinafter QUALIFYING WASHINGTON UTILITIES]; see also DATABASE OF STATE INCENTIVES FOR RENEWABLES & EFFICIENCY, WASHINGTON: INCENTIVES/POLICIES FOR RENEWABLES & EFFICIENCY (Mar. 15, 2012), http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=WA15R [hereinafter STATE INCENTIVES] (stating that the seventeen qualifying utilities in Washington account for eighty-four percent of the State's electric load).

61. See, e.g., AVISTA, INVESTOR-OWNED AND PUBLIC UTILITIES (2011); Order Regarding 2012 Renewable Energy Target, In the Matter of Avista Corporation's Renewable Energy Target Progress Report Under RCW 19.285.070 and WAC 480-109-040, Docket UE-120791, at 9 (Wash. Util. and Transp. Comm'n, Sept. 13, 2012).

62. See, e.g., AVISTA, 2011 ELECTRIC INTEGRATED RESOURCE PLAN 5-1 to 5-5 (2011) (discussing the need to still rely on the BPA for certain transmission capacity even though Avista owns its own generating facilities and transmission system); CLARK COUNTY PUBLIC UTILITIES, FINAL INTEGRATED RESOURCE PLAN 9, 46-49, 63-65, 74-75 (2010) (discussing Clark County's reliance on the BPA for meeting most of its energy needs, including obtaining eligible renewable resources necessary to meet future RPS targets). Integrated Resource Plans are invaluable to understanding the energy needs of the seventeen qualifying utilities. Each qualifying utility has an Integrated Resource Plan. These documents identify how the utility obtains its energy, what its energy demands are, projections for meeting RPS targets, and describe challenges to obtaining these resources, especially as targets increase to nine percent of total load in 2016 and fifteen percent of total load in 2020.

63. REDISPATCH POLICY, *supra* note 7, at 48.

seventy-five percent of the Pacific Northwest's power.⁶⁴ The BPA is required to provide open, fair, and nondiscriminatory access to its transmission system under federal law, and cannot promote its own hydropower generation over non-federal power generation, including private wind power projects throughout Washington.⁶⁵ Nevertheless, the BPA's curtailment policies do not provide open access to non-federal wind power producers.⁶⁶ This frustrates the ability for Washington utilities to obtain the eligible renewable resources necessary to satisfy the requirements set forth in the Energy Independence Act. Although Washington's RPS requirements do not have any legal effect on the BPA, compliance with FERC's open access transmission tariff would help utility companies meet state-mandated RPS targets by providing them better access to a greater amount of eligible renewable resources on the BPA controlled transmission system.

The Energy Independence Act outlines various options qualifying utilities may follow in order to comply with RPS targets. Two backdoor compliance methods articulated in the statute involve utilities: (1) investing four percent of their total annual retail revenue on the incremental costs of eligible renewable resources, the cost of purchasing renewable energy credits (RECs), or a combination of both;⁶⁷ or (2) satisfying three specific requirements, which entail maintaining electric load levels for a three year period, not commencing or renewing purchases of electricity from sources other than renewable resources, and investing one percent of total annual revenue on eligible renewable resources, RECs, or a combination of both.⁶⁸ The ability of utility companies to comply with RPS requirements using these methods is difficult to determine, as is ascertaining the potential pitfalls or benefits of these procedures.

64. *See id.* at 48, 64–65.

65. *See* Order Granting Petition, *supra* note 11, ¶¶ 32–33, 62–65.

66. *Id.* ¶ 62.

67. WASH. REV. CODE § 19.285.050(1)(a) (2012). Under the Energy Independence Act, a REC refers to a “tradable certificate of proof of at least one megawatt-hour of an eligible renewable resource where the generation facility is not powered by freshwater. . . . and the certificate is verified by a renewable energy credit tracking system” *Id.* § 19.285.030(19).

68. *See id.* § 19.285.040(2)(d).

A more conventional way for utility companies to comply with RPS requirements is to directly acquire eligible renewable resources, their equivalent RECs, or a combination of both to meet the annual targets for the years 2012, 2016, and 2020.⁶⁹ Under this provision, a utility may obtain power directly from actual eligible renewable resources or may purchase eligible RECs, which are certificates sold in regulated markets representing power generated from an eligible renewable resource not directly transmitted to a consumer.⁷⁰ These certificates serve two purposes. First, they allow for increased production of renewable energy, which can then be traded or sold for profit, and second, they provide an alternative method for utility companies to meet RPS requirements.

A final way to comply with the Energy Independence Act's RPS requirements exists for utility companies that cannot obtain enough eligible renewable resources due to "events beyond the reasonable control of the utility that could not have been reasonably anticipated or ameliorated."⁷¹ Events contemplated under this noncompliance defense include "weather-related damage, mechanical failure, strikes, lockouts, and actions of a governmental authority that adversely affect the generation, transmission, or distribution of an eligible renewable resource under contract to a qualifying utility."⁷² At first glance, this section appears to exempt utility companies affected by the BPA's curtailment policies from complying with Washington's RPS obligations; however, it can be argued that the Redispatch Policy and Oversupply Protocol P place utility companies on notice of events that may affect the distribution of eligible renewable resources. Thus, the utility companies will not meet the requirements of the statutory exemption because they can reasonably anticipate these events and attempt to ameliorate them. If this argument fails, and instead a utility could achieve RPS compliance without actually obtaining eligible renewable resources, then the goals of the

69. *Id.* § 19.285.040(2)(a).

70. JOSEPH P. TOMAIN & RICHARD D. CUDAHY, *ENERGY LAW IN A NUTSHELL* 541 (West Nutshell Series ed., 2d ed. 2011).

71. WASH. REV. CODE § 19.285.040(2)(i) (2012).

72. *Id.*

Energy Independence Act cannot be met. In that situation, the BPA's curtailment policies would essentially make the Energy Independence Act ineffective and void, contradicting the clear intent of the citizens of Washington who voted to implement RPS targets by passing Initiative 937 in November 2006.

As defined in the Energy Independence Act, eligible renewable resources mean "electricity from a generation facility powered by a renewable resource other than freshwater that commences operation after March 31, 1999," so long as the generating facility is located in the Pacific Northwest or the power is delivered to Washington on a real time basis.⁷³ In addition, an eligible renewable resource can mean "incremental electricity produced as a result of efficiency improvements completed after March 31, 1999, to hydroelectric generation projects owned by a qualifying utility," or to hydroelectric generation in irrigation pipes and canals located in the Pacific Northwest, "where the additional generation in either case does not result in new water diversions or impoundments."⁷⁴

Under the Energy Independence Act, and as recognized by the BPA itself, hydropower generated at dams within FCRPS does not qualify as an eligible renewable resource; wind power, on the other hand, is a qualifying resource.⁷⁵ The definition purposefully excludes hydropower generated at dams operated by the BPA, which already accounts for seventy percent of all power generated in Washington.⁷⁶ Otherwise, the abundance of hydropower in Washington would hurt the State's ability to achieve goals articulated in the Energy Independence Act by stymieing the development and diversification of alternative renewable resources in the State, reducing the development of green business and clean technologies in the State, and reducing economic opportunities for Washington counties and farmers.⁷⁷

73. WASH. REV. CODE § 19.285.030(11)(a) (2012).

74. *Id.* § 19.285.030(11)(b).

75. *See id.* § 19.285.030; ISSUE BRIEF, *supra* note 2.

76. 2010 ANNUAL REPORT, *supra* note 19, at 5 (stating that eighty percent of BPA electricity comes from hydropower); MYERS, *supra* note 2, at 5 (noting that as of 2004, seventy percent of all energy generated in Washington comes from hydro sources).

77. WASH. REV. CODE § 19.285.020 (2012). The Energy Independence Act identifies the following as important goals: promote energy independence in Washington; utilize

Unlike the BPA-generated hydropower, wind power qualifies as an eligible renewable resource as defined by the Energy Independence Act.⁷⁸ In Washington, wind power accounts for nearly seventy-one percent of eligible renewable resource generation.⁷⁹ This percentage is likely to increase as wind turbines, both inland and on the coast, continue to be built. In fact, wind power in Washington currently generates around 2400 megawatts of electricity—enough energy to power 625,000 homes for a year—with 343 additional megawatts under construction, and future facilities in the project queue that will generate an additional 5800 megawatts of electricity.⁸⁰ Furthermore, future projections indicate that a total of 18,479 megawatts of wind power could be produced in Washington.⁸¹ As the largest eligible renewable resource, wind power producers are hurt by the BPA's curtailment policies (e.g. Redispatch Policy and Oversupply Protocol P) that restrict access to its transmission system. The reduction in wind power caused by curtailment, significant or not, impacts the ability of utility companies to acquire the eligible renewable resources necessary to meet Washington's RPS targets.

In addition to RPS targets and specific renewable resource mandates, the Energy Independence Act establishes specific policy goals tied to the development of renewable resources, including obtaining energy independence within Washington State by utilizing the region's diverse local resources, providing economic benefits to counties and farms, creating high-quality

local resources; provide economic benefits to Washington counties and farmers; create high quality, local jobs; provide opportunities within the renewable energy fields; and position Washington as a national leader in clean energy technologies.

78. *See id.* § 19.285.030(20) (defining “renewable resource”); *id.* § 19.285.030(11)(a) (defining “eligible renewable resource”).

79. *See* UNITED STATES ENERGY INFO. ADMIN., RENEWABLE & ALTERNATIVE FUELS, WASHINGTON RENEWABLE ELECTRICITY PROFILE: 2009 SUMMARY RENEWABLE ELECTRIC POWER INDUSTRY STATISTICS (WASHINGTON) TABLE 1 (Jul. 2011), <http://www.eia.gov/renewable/state/Washington/pdf/washington.pdf> [hereinafter WASHINGTON RENEWABLE ELECTRICITY PROFILE]. It is important to remind the reader that hydropower, for all intents and purposes, is not an eligible renewable resource under the Energy Independence Act. The “seventy-one percent” number expressed in the text represents the percentage of wind power as calculated against all other eligible renewable energy resources.

80. AM. WIND ENERGY ASS'N, WIND ENERGY FACTS: WASHINGTON 1 (2011).

81. *Id.*

local jobs, and establishing Washington as a leader in clean energy technologies.⁸² The Energy Independence Act promotes these goals in two ways. First, the Act excludes the vast majority of hydropower from qualifying as an eligible renewable resource.⁸³ Second, it requires Washington utilities to obtain the eligible renewable resources necessary to satisfy RPS requirements from generating facilities within Washington or from out-of-state facilities that deliver power to the utility on a real time basis.⁸⁴ These two requirements help achieve the policy goals articulated in the Energy Independence Act by diversifying the State's renewable resources, developing alternative renewable resources, and by promoting economic growth through the development of green industry and technology within the State. An effective way to turn these goals into a reality is by continuing to promote, develop, and invest in wind power.

The continued development of wind power will help fulfill the Energy Independence Act's stated goal of creating energy independence in Washington using a local, clean, renewable energy resource.⁸⁵ Just as important, developing wind power helps satisfy the economic goals articulated in the Energy Independence Act, as it is a direct investment in jobs.⁸⁶ The economic benefits of wind power are twofold. First, in addition to the jobs required for the development of the transmission system necessary to integrate and deliver the wind power to consumers,⁸⁷ it creates jobs at all stages of development—the manufacture, construction, maintenance, and operation of the turbines and wind facilities.⁸⁸ Second, it provides economic support to farmers who receive payments for leasing the land on which the wind facilities are often built and to rural counties whose tax revenues increase through the influx of

82. WASH. REV. CODE § 19.285.020 (2012)

83. *Id.* § 19.285.030(11)(a)–(b).

84. *Id.* § 19.285.030(11)(a).

85. See *Sierra Club 2012 Legislative Priorities for Washington*, SIERRA CLUB: WASHINGTON STATE CHAPTER, <http://cascade.sierraclub.org/priorities/legislation> (last visited Jan. 11, 2013).

86. AM. WIND ENERGY ASS'N, *supra* note 80, at 2.

87. *Id.*

88. See *id.*

activity experienced by local businesses.⁸⁹ In 2010 alone, wind power supported up to 2000 jobs in Washington, generating over \$13,500,000 in tax payments by project owners and over \$6,500,000 in lease payments to land owners.⁹⁰

As indicated, the Energy Independence Act promotes renewable resource development, economic development, and energy independence within Washington. It accomplishes these goals through the implementation of its RPS targets, which currently apply to seventeen qualifying utilities in the State.⁹¹ To comply with this mandate and work towards achieving the policy goals of the Energy Independence Act, the seventeen qualifying utility companies must have reliable access to eligible renewable resources, especially wind power. Reliable access is currently thwarted by the BPA's curtailment policies, specifically its Oversupply Protocol P, a mere continuation of its Redispatch Policy condemned by FERC.⁹²

III. THE BPA'S CURTAILMENT POLICY: OVERSUPPLY PROTOCOL P

On December 7, 2011, FERC issued an order requiring the BPA to provide power transmission service on "terms and conditions that are comparable to those under which Bonneville provides transmission services to itself and that are not unduly discriminatory or preferential."⁹³ In response to this order, the BPA created its Oversupply Protocol P in an attempt to satisfy FERC's requirement that the BPA provide fair, non-discriminatory access to the transmission system it

89. AM. WIND ENERGY ASS'N, *supra* note 80, at 2; *see also* Anne Mulkern, *Renewable Energy: Wind is the New Cash Crop in Rural Wash. Town*, N.Y. TIMES, Oct. 18 2010, <http://www.nytimes.com/gwire/2010/10/18/18greenwire-wind-is-the-new-cash-crop-in-rural-wash-town-3529.html>. Currently, large wind farms exist in rural areas of Klickitat, Kittitas, Columbia, Walla Walla, and Garfield Counties. *See* AM. WIND ENERGY ASS'N, *supra* note 80. (In addition to increased tax revenues received by the county, rural county businesses benefit from wind power development as workers who construct and maintain the facilities eat at local restaurants, stay at local hotels, and use local gas stations.)

90. AM. WIND ENERGY ASS'N, *supra* note 80, at 2.

91. *See* STATE INCENTIVES, *supra* note 60.

92. Order Granting Petition, *supra* note 11, ¶¶ 33, 62–65.

93. *Id.* ¶ 1.

operates.⁹⁴ Although a change from the BPA's previous curtailment policy (the Redispatch Policy), Oversupply Protocol P and the Cost Allocation submitted in conjunction with the Protocol fail to mitigate the fundamental problem FERC identified with the BPA's curtailment practice: the BPA's displacement of wind power, which results in non-comparable transmission service, is unduly discriminatory and preferential.⁹⁵ Oversupply Protocol P is merely a continuation of the Redispatch Policy invalidated by FERC that gives preference to the generation and transmission of federal hydropower over non-federal wind power.⁹⁶ Ultimately, Oversupply Protocol P and its Cost Allocation fail to satisfy the concerns FERC has with the BPA's curtailment practices.⁹⁷

A. *Overview of Oversupply Protocol P*

Oversupply Protocol P requires the BPA to pay non-federal wind power producers a fee when their ability to transmit power is curtailed during high water flow events.⁹⁸ Under the policy, the BPA will take all actions it deems reasonable to reduce or avoid the need to displace wind power and will revert to a Least-Cost Displacement Cost Curve (Cost-Curve) in the event that displacement must occur.⁹⁹ The Cost-Curve is a list containing the cost of displacement for each generating facility within the BPA's Balancing Authority Area and is based on information submitted by the generating facilities, which establishes the dollar amount per megawatt-hour (\$/MWh) that a generator will lose when not producing power.¹⁰⁰ Oversupply Protocol P explains how the cost of displacement is calculated, how the BPA will compensate generators for their

94. See BPA'S NARRATIVE EXPLANATION, *supra* note 37, at 5.

95. See Order Granting Petition, *supra* note 11.

96. *Id.* ¶ 78 (“[T]he Commission finds that Bonneville’s Environmental Redispatch Policy results in non-comparable transmission service that is unduly discriminatory and preferential. Accordingly, Bonneville may not extend its current environmental redispatch policies or implement new environmental redispatch policies that result in noncomparable transmission service.”).

97. *Id.*

98. See generally OVERSUPPLY PROTOCOL P, *supra* note 12.

99. *Id.* ¶¶ 2–4.

100. *Id.* ¶¶ 4–5.

lost power, and how the agency proposes to minimize these costs.¹⁰¹

A generator's cost of displacement (\$/MWh) is limited based on when the generator contracted for the sale of its power. For generators with contracts executed before March 6, 2012, the cost of displacement includes the amount of partial tax credits (PTCs) and contracted-for RECs lost due to displacement in addition to penalties a generator incurs for its failure to deliver RECs.¹⁰² If RECs have not yet been contracted for, a generator is paid the fair market value of the potential RECs lost because of curtailment.¹⁰³ If a generator executes a contract after March 6, 2012, it is eligible to receive lost PTCs and RECs, but will not be compensated for penalties incurred for failing to deliver power under the terms of its contracts.¹⁰⁴ The BPA believes that these generators can build penalty costs into future contracts with third parties since Oversupply Protocol P places generators on notice that the BPA will not pay these penalty costs.¹⁰⁵

The BPA will, however, compensate for curtailment by paying generators the cost of power displacement (\$/MWh) multiplied by the difference between the number of scheduled megawatts of generation and the actual megawatts generated during curtailment.¹⁰⁶ Put in mathematical terms, the BPA will pay generators based on the following equation: \$/MWh x (Scheduled MW – Actual MW generated). In conjunction with Oversupply Protocol P, the BPA submitted a rate case in order to establish a rate of recovery for costs the BPA incurs under Oversupply Protocol P, which the BPA refers to as “Cost Allocation.”¹⁰⁷ The BPA has proposed to allocate fifty percent of the costs it incurs to generators subject to curtailment and the other fifty percent of costs it incurs to power purchases from the Federal Base System.¹⁰⁸ Under the Cost Allocation terms,

101. *Id.* ¶¶ 3–6.

102. *Id.* ¶ 3(a)(i)–(ii)(A).

103. *Id.* ¶ 3(a)(ii)(B).

104. *Id.* ¶ 3(b).

105. See Compliance Filing, *supra* note 56, at 14–15.

106. OVERSUPPLY PROTOCOL P, *supra* note 12, ¶ 4.

107. Compliance Filing, *supra* note 56, at 21.

108. *Id.*

the BPA's Oversupply Protocol P provides power generators with two options to determine their compensation for curtailment: (1) a generator may submit a cost displacement (\$/MWh) figure, in which case the generator be subject to the fifty/fifty Cost Allocation proposed by BPA; or (2) a generator can decide to have a cost displacement (\$/MWh) figure of \$0/MWh—in which case the generator will receive no compensation for displaced power, but will not be subject to the fifty/fifty Cost Allocation proposal.¹⁰⁹

Finally, the BPA will displace power in order of least cost facility to highest cost facility as listed on the Cost-Curve, until the necessary amount of curtailment is met.¹¹⁰ In addition to these Cost-Curve payments, the BPA will continue to replace displaced wind power with its own federal hydropower in order to maintain transmission schedules.¹¹¹

B. *Oversupply Protocol P Fails to Satisfy the Conditions of FERC's Order*

FERC invalidated the BPA's prior curtailment policy, the Redispatch Policy, and demanded that the BPA submit a new policy that provides access to its transmission system on a fair, non-discriminatory and non-preferential basis.¹¹² Oversupply Protocol P is the BPA's attempt to comply with this mandate by compensating non-federal wind power producers for the forced curtailment of their power.¹¹³ However, this added economic incentive fails to address the fundamental issue that FERC has with the BPA's curtailment practice—that it interrupts non-federal generators' firm transmission service without doing the same to firm transmission service held by federal generators, making it unfairly discriminatory and preferential to the BPA.¹¹⁴ Ultimately, it is the BPA's Oversupply Protocol P failure to mitigate this practice that troubles FERC.

109. See OVERSUPPLY PROTOCOL P, *supra* note 12, ¶ 3.

110. *Id.* ¶ 2.

111. *Id.* at Summary ¶.

112. See Order Granting Petition, *supra* note 11, ¶¶ 33, 62–65.

113. BPA'S NARRATIVE EXPLANATION, *supra* note 37, at 5.

114. See Order Granting Petition, *supra* note 11, ¶ 62.

1. *Oversupply Protocol P Fails to Fully Compensate Curtailment Costs*

Oversupply Protocol P is tied to the Cost Allocation that the BPA submitted to FERC in conjunction with this policy.¹¹⁵ Under the Cost Allocation proposal, the BPA will split the costs it incurs to curtail wind power on a fifty-fifty basis between its ratepayers and the generators whose energy is forcibly displaced.¹¹⁶ The BPA believes this is an equitable solution since it allows the Administration to meet one of its statutory obligations—to provide low-cost power to its customers—while allocating costs between the two entities causing the problem: the BPA, which over-generates power, and the wind power industry whose recent growth helps create the oversupply problem.¹¹⁷ Whether correct or not, this argument fails to adequately address FERC's concern over the BPA's curtailment practice, as allocating the cost of curtailment on a fifty-fifty basis is still unfair and discriminatory for the following reasons.

First, the over-generation and over-supply of power is something the BPA has dealt with for years and that existed well before the recent boom in wind power production; thus, too much hydropower, not wind power generation, is the fundamental cause of the problem.¹¹⁸ Because the problem stems from an over-abundance of federal hydropower generation, the BPA should be forced to cover all curtailment costs. Second, although the recent increase in wind power generated in the BPA's Balancing Authority Area adds additional stress to the transmission system, the amount of wind power generated accounts for a little more than five percent of total statewide power generation.¹¹⁹ Furthermore,

115. See Compliance Filing, *supra* note 56, at 4–7.

116. See BPA'S NARRATIVE EXPLANATION, *supra* note 37, at 17; see also OVERSUPPLY PROTOCOL P, *supra* note 12, ¶ 3(b) (noting that wind power producers submitting a cost of displacement will be subject to Cost Allocation, described in BPA'S NARRATIVE EXPLANATION, *supra* note 37).

117. See Compliance Filing, *supra* note 56, at 21–26.

118. REDISPATCH POLICY, *supra* note 7, at 7, 9–10.

119. AM. WIND ENERGY ASS'N, ANNUAL REPORT: WIND POWER BRINGING INNOVATION, MANUFACTURING BACK TO AMERICAN INDUSTRY (Apr. 12, 2012), http://www.awea.org/newsroom/pressreleases/Annual_Report.cfm.

during the 2011 curtailment period (May 13, 2011 through July 13, 2011), wind power accounted for only 8.5 percent of the power generated in the BPA's Balancing Authority Area, whereas federal hydropower accounted for eighty-nine percent of the generated power.¹²⁰ In its response to comments regarding Oversupply Protocol P, the BPA stated that Cost Allocation should adhere to the principle of cost causation, which equitably distributes costs based on each entity's contribution to the problem.¹²¹ As indicated above, non-federal wind power makes up only a fraction of the amount of power generated in the BPA's Balancing Authority Area. Therefore, wind power producers should not incur fifty percent of curtailment costs when federal hydropower generation accounts for close to ninety percent of the oversupply problem.¹²² Splitting curtailment costs equally discriminates against wind power producers by placing a disproportionate amount of the total cost on them and contradicts the BPA's own statements regarding equitable cost causation principles.¹²³

In addition to the fact that wind power producers do not equally contribute to the BPA's over-generation problem, Oversupply Protocol P discriminates against these same entities by failing to pay them sufficiently for curtailing their power production. Oversupply Protocol P provides non-federal wind power producers two payment options for displacing their power.¹²⁴ First, these entities can choose to receive no compensation for displaced power, in which case they do not have to participate in the BPA's Cost Allocation proposal.¹²⁵ This payment option is discriminatory as it fails to pay wind power producers money for the forced curtailment of their power. In effect, this option is a replica of BPA's Redispatch

120. Protest of Northwest Wind Group and American Wind Energy Association, Iberdrola Renewables, Inc. v. Bonneville Power Admin., No. EL11-44-002, 15 (Fed. Energy Regulatory Comm'n, Mar. 27, 2012) [hereinafter Wind Protest].

121. BONNEVILLE POWER ADMIN., BPA'S RESPONSE TO COMMENT ON 2012 OVERSUPPLY MANAGEMENT PROTOCOL 19 (rev. ed., Mar. 28, 2012) [hereinafter BPA'S RESPONSE TO COMMENTS].

122. See *supra* notes 119 and 120.

123. BPA'S RESPONSE TO COMMENTS, *supra* note 121, at 19.

124. See OVERSUPPLY PROTOCOL P, *supra* note 12, ¶ 3.

125. *Id.*

Policy, which FERC explicitly invalidated.¹²⁶ Second, wind power producers can choose to receive payment for their displaced power by submitting a cost displacement figure (\$/MWh), which is primarily determined by the amount of PTCs and RECs a generator loses during curtailment. However, if an entity chooses to receive this payment, it must abide by the BPA's Cost Allocation proposal.¹²⁷ This option also discriminates against non-federal wind generators because it fails to compensate them for the actual amount of money lost due to curtailment. Although the BPA will pay them for lost PTCs, RECs, and contractual penalties incurred (in certain situations), the BPA offsets this payment by forcing wind generators to split the costs the BPA incurs for implementing Oversupply Protocol P, including the payments made to wind generators for displacing their power.¹²⁸

2. *The Cost-Curve Mechanism Is Discriminatory*

Oversupply Protocol P also unfairly discriminates against facilities that have low displacement costs (\$/MWh). The BPA relies on the Cost-Curve to determine which non-federal wind power facilities will be shut down, displacing energy from facilities with the lowest costs first.¹²⁹ This practice disproportionately impacts generators with low costs in order to minimize the impact on the Administration's finances.¹³⁰ In particular, the practice discriminates against public utility companies, which are not eligible to receive PTCs, and thus inevitably have lower displacement costs than generators that are eligible for PTCs.¹³¹ Based on the Cost-Curve, these entities will be shut down more frequently than wind power facilities receiving PTCs.¹³² Finally, the Cost-Curve

126. Order Granting Petition, *supra* note 11, ¶ 78.

127. OVERSUPPLY PROTOCOL P, *supra* note 12, ¶¶ 3(b), 3(c)(i).

128. *Id.* ¶ 3(b).

129. *Id.* ¶¶ 2, 4.

130. See Wind Protest, *supra* note 120, at 13.

131. *Renewable Energy Tax Credits*, THE BOTTOM LINE ON RENEWABLE ENERGY TAX CREDITS (WORLD RES. INST., Washington, D.C.), Oct. 2010, at 1, available at http://pdf.wri.org/bottom_line_renewable_energy_tax_credits_10-2010.pdf.

132. See OVERSUPPLY PROTOCOL P, *supra* note 12, ¶ 4 (because public utilities do not receive PTCs, they will have lower costs of displacement and so will be first on the Cost Curve).

mechanism is facially preferential towards the BPA as it only applies to non-federal power generators. Thus, the BPA's hydropower operations are not subject to curtailment.¹³³ As ordered by FERC, the BPA is not allowed to "implement new redispatch policies that result in non-comparable transmission service" between it and non-federal power sources.¹³⁴ However, this is exactly what the Cost-Curve mechanism does, showing that the BPA's Oversupply Protocol P fails to satisfy FERC's order.

3. *Generators with Contracts Executed After March 6, 2012 Are at a Competitive Disadvantage*

In addition to discriminating against wind power producers with low displacement costs, Oversupply Protocol P further discriminates against all non-federal wind power producers with transmission contracts executed after March 6, 2012. Under Oversupply Protocol P, the BPA will compensate these generators only for PTCs and RECs lost during displacement and not for penalties that generator might incur for its failure to deliver power to a third-party.¹³⁵ The BPA claims that non-federal wind power producers should incorporate into their contracts with third-party power recipients language that absolves the generators from incurring penalties for failing to deliver wind power due to forced curtailment.¹³⁶ This policy places generators with contracts executed after March 6, 2012 at a competitive disadvantage and discriminates against them in three ways: (1) their prices will be higher in order to incorporate penalties derived from failing to deliver power due to curtailment, (2) they might lose business due to the price increases necessary to cover potential liabilities for failing to deliver, or (3) they might have to simply cover these penalty costs, resulting in diminished profits.¹³⁷ Non-federal generators with contracts executed after implementation of

133. See *id.*, Introduction ¶ (specifically referring to the definition of "Transmission Provider").

134. Order Granting Petition, *supra* note 11, ¶ 78.

135. OVERSUPPLY PROTOCOL P, *supra* note 12, ¶ 3(b)(ii).

136. See BPA'S RESPONSE TO COMMENTS, *supra* note 121, at 5.

137. See OVERSUPPLY PROTOCOL P, *supra* note 12, ¶ 3(b)(ii); see also Wind Protest, *supra* note 120, at 16–17.

Oversupply Protocol P risk losing business and are at a financial disadvantage compared to generators with contracts that predate March 6, 2012, a problem created by the BPA's curtailment practice. The BPA's new curtailment policy, Oversupply Protocol P, is inherently unfair and so does not comply with the requirements detailed in FERC's order.¹³⁸

IV. IMPACT OF THE BPA'S CURTAILMENT POLICIES ON WIND POWER PRODUCERS, QUALIFYING UTILITIES, AND THE ENERGY INDEPENDENCE ACT

The BPA claims that its Redispatch Policy did not affect a customer's transmission rights,¹³⁹ that it left transmission service unaffected because the overall quantity of energy delivered remained the same,¹⁴⁰ that it was merely a limitation on the ability to generate power,¹⁴¹ that it went to great lengths to ensure wind generation was not affected,¹⁴² and that substitution of hydropower for wind power did not constitute improper curtailment.¹⁴³ FERC's order determining that the Redispatch Policy was unfair, discriminatory, and preferential towards BPA proved these statements incorrect. In response, the BPA contends that its Oversupply Protocol P "complies with the Commission's [FERC] direction to provide comparable transmission service."¹⁴⁴ The BPA contends the policy is fair because it compensates those affected by curtailment in an equitable manner and represents a reasonable alignment of costs and benefits.¹⁴⁵ Ultimately, the BPA believes the proposal "satisfies the Commission's [FERC] injunction to provide fair and equitable solutions to the BPA's oversupply problem."¹⁴⁶ Nevertheless, Oversupply Protocol P is a continuation of the BPA's curtailment program, posing very

138. Order Granting Petition, *supra* note 11, ¶ 78; *see also* REDISPATCH POLICY, *supra* note 7, at 25.

139. REDISPATCH POLICY, *supra* note 7, at 43.

140. *Id.* at 25.

141. *Id.*

142. *Id.* at 26.

143. *Id.* at 26, 43.

144. BPA'S NARRATIVE EXPLANATION, *supra* note 37, at 11–12.

145. *Id.* at 12, 17.

146. *Id.* at 12–13.

real, adverse impacts to the wind power industry, the ability for Washington utility companies to meet RPS targets, and the ability to achieve certain goals identified in the Energy Independence Act.

A. *Impact on Wind Power Producers*

BPA's Oversupply Protocol P negatively impacts the wind power industry in two ways. First, the policy hurts the ability of wind power producers to transmit power reliably, affecting their ability to satisfy contractual obligations made with entities off-loading wind power.¹⁴⁷ Second, by continuing to shut down wind power production and thus decreasing PTC and REC payments, the policy's Cost Allocation lessens wind power producers' economic viability that otherwise helps promote the continued development of this green industry.¹⁴⁸ As capital costs for wind projects are high, these subsidies are an important tool for spurring future growth and development of the wind power industry.

For instance, between May 18, 2011 and June 13, 2011, the BPA invoked its curtailment authority for "several hours almost every day, curtailing more than 60,000 megawatt-hours of wind generation," while seizing the newly created transmission capacity to deliver its own hydropower to customers who had specifically contracted to receive wind power.¹⁴⁹ Under Oversupply Protocol P, wind power producers either receive no compensation for this lost output or receive less than the actual value of the power produced as defined by the terms of BPA's fifty-fifty Cost Allocation.¹⁵⁰ The

147. See Sickinger, *supra* note 51, at 3–4; see also REDISPATCH POLICY, *supra* note 7, at 70 (noting that curtailment generally affects the ability to satisfy third-party contracts).

148. See Sickinger, *supra* note 51, at 2.

149. Complaint, *supra* note 7, at 3. Several specific wind power facilities have been hurt by the BPA's Redispatch Policy: Iberdrola Renewables, Inc. (1300 megawatt facility and purchases BPA services); PacifiCorp (two facilities and purchases BPA services); NextEra Energy Resources, LLC (two facilities with total capacity of 115 megawatts and purchases BPA services); Invenergy Wind North America LLC (interconnection agreements subject to redispatch); and Horizon Wind Energy LLC (facilities with 300 megawatts interconnected to the BPA's transmission service with additional projects generating 900 megawatts under construction). See *id.* at 10–12.

150. OVERSUPPLY PROTOCOL P, *supra* note 12, ¶ 3. According to the BPA's own calculations, PTCs are valued at \$21 per megawatt-hour while RECs range from \$8 to

curtailment of wind power under the BPA's curtailment program significantly impacts the profitability of wind power producers.

Wind power producers within the BPA's Balancing Authority Area suffer adverse impacts from the BPA's ability to curtail their power; however, curtailment also affects utility companies, who are unable to reliably obtain the wind power they contracted to receive.¹⁵¹

B. *Impact on Qualifying Washington Utilities*

Although wind power producers directly suffer from the BPA's Oversupply Protocol P, curtailing wind power will also adversely affect qualifying Washington utilities by reducing the amount of eligible renewable resources available to comply with RPS requirements and avoid stiff penalties.¹⁵² It is important to note that not all of the seventeen qualifying utility companies receive their eligible renewable resources from generators impacted by the BPA's curtailment program. However, the BPA's Oversupply Protocol P will hurt those that do.¹⁵³ Because wind power transmitted by the BPA is the predominant eligible renewable resource in Washington, minor or significant reductions to its availability will make it difficult for utility companies to meet their RPS requirements.¹⁵⁴

\$20 per megawatt-hour. See REDISPATCH POLICY, *supra* note 7, at 11. Using these dollar amounts, one month of curtailment like what occurred between May and June of 2011 would cost the wind power industry \$1,260,000 in PTCs and anywhere from \$480,000–\$1,200,000 in RECs. According to a peer-reviewed study conducted by the BPA, the value of PTCs and RECs lost to curtailment could cost \$50,000,000 in 2012 alone. REDISPATCH POLICY, *supra* note 7, at 20, 66.

151. Complaint, *supra* note 7, at 4.

152. *Id.*; see also REDISPATCH POLICY, *supra* note 7, at 48, 64–65, 68. (noting initial concerns by some qualifying utilities that curtailing wind power will inhibit their ability to meet RPS targets). Failing to meet RPS targets results in a \$50 fine per megawatt-hour shortage, which can lead to steep penalties. See WASH. REV. CODE § 19.285.060 (2012).

153. See, e.g., AVISTA, *supra* note 62, at 5-1 to 5-5 (noting the extensive transmission system Avista privately owns and controls, its predominant reliance on its own generating sites for eligible renewable resources, and its minimal use of BPA's transmission system); CLARK COUNTY PUBLIC UTILITIES, *supra* note 62 at 9, 37, 46–49, 63–65, 74–75 (noting its extensive reliance on BPA's generation and transmission systems and expressing concerns about meeting RPS targets and uncertainty over the existence of enough wind power to meet future RPS targets).

154. *Id.*; see also AM. WIND ENERGY ASS'N, *supra* note 80, at 1 (noting that wind

This will be especially true as RPS targets increase to comprise fifteen percent of a utility company's overall load.¹⁵⁵ If a utility is unable to meet its RPS target, it will be fined fifty dollars for every megawatt-hour shortfall that occurs.¹⁵⁶ It is important to note that the Energy Independence Act provides utility companies a type of force majeure defense that excuses noncompliance with the RPS requirements in certain situations.¹⁵⁷ Under this provision, a qualifying utility will be in compliance with the annual RPS targets if:

[E]vents beyond the reasonable control of the utility that could not have been reasonably anticipated or ameliorated prevented it from meeting the renewable energy target. Such events include weather-related damage, mechanical failure, strikes, lockouts, and actions of a governmental authority that adversely affect the generation, transmission, or distribution of an eligible renewable resource under contract to a qualifying utility.¹⁵⁸

This seemingly provides utilities with a way to avoid fines by claiming that the BPA's curtailment policy falls within the meaning of an "event" as defined in the statute.

Key to this provision, however, is its insistence that the events be "beyond the reasonable control of the utility" and that they could not be "reasonably anticipated or ameliorated."¹⁵⁹ Two arguments against utilities using this provision to avoid fines come to mind. First, by publishing its Redispatch Policy and Oversupply Protocol P, the BPA has arguably notified both wind power producers connecting to its transmission system and the utilities that obtain this power of the possibility that this eligible renewable resource will be

power provides 4.6 percent of all Washington's power); Washington Renewable Electricity Profile, *supra* note 79, at tbl.1. *See also* Sickinger, *supra* note 51, at 2; REDISPATCH POLICY, *supra* note 7, at 48, 68; Order Granting Petition, *supra* note 11, ¶ 63 (all referencing the difficulties utility companies will have if wind power curtailment continues).

155. *See* WASH. REV. CODE § 19.285.040(2)(a)(iii) (2012); SNOHOMISH COUNTY PUB. UTILITY DIST., 2010 INTEGRATED RESOURCE PLAN 49 (Aug. 17, 2010).

156. WASH. REV. CODE § 19.285.060(1) (2012).

157. *Id.* § 19.285.040(2)(i).

158. *Id.*

159. *Id.*

curtailed throughout the year. Therefore, utilities would have a hard time claiming that they could not anticipate potential shortfalls in obtaining eligible resources necessary to meet the statutorily-required RPS targets.¹⁶⁰ Second, having been put on notice that curtailment will occur, utilities could look to obtain eligible renewable resources from providers not connected to the BPA's transmission system and thus not subject to Administration's curtailment policies.¹⁶¹ Therefore, it would be difficult for utilities to claim that events leading to noncompliance were out of their reasonable control.¹⁶² It is difficult to imagine that the State would allow qualifying utilities to utilize this defense to avoid fines and escape compliance with RPS targets, which serve as the basis for achieving the goals of the Energy Independence Act.

Turning to the fifty dollar per megawatt-hour penalty provision, we can look at an example to put its significance into perspective. Snohomish County Public Utility District (PUD) is a qualifying utility under the Energy Independence Act.¹⁶³ In 2009, Snohomish PUD sold 6,872,796 megawatt-hours of electricity.¹⁶⁴ In 2012, three percent of this total amount of electricity was required to come from eligible renewable resources, or, the equivalent of 206,183.08 megawatt-hours. Under a worst case scenario (e.g. if Snohomish County PUD obtained zero percent of its requirement) Snohomish County PUD would be on the hook for \$10,309,194. Although this is an extreme scenario, this potential liability demonstrates the potentially devastating impact a failure to meet RPS requirements could have on a utility company.¹⁶⁵

160. *Id.*

161. For example, Avista, an investor-owned utility, generates eighty-five percent of its own electricity from projects it owns, operates, and transmits itself. *See* AVISTA, *supra* note 61, at 1. *See also* QUALIFYING UTILITIES' REPORTED COMPLIANCE WITH I-937'S 3% RENEWABLE ENERGY STANDARD FOR 2012, at 2, n.5 (Sept. 2012) (noting that Puget Sound Energy listed five of its own wind projects as eligible renewable resources to help meet the RPS target).

162. WASH. REV. CODE § 19.285.040(2)(i) (2012).

163. *See* QUALIFYING UTILITIES' REPORTED COMPLIANCE WITH I-937'S 3% RENEWABLE ENERGY STANDARD FOR 2012, *supra* note 161, at 2 (listing the seventeen qualifying utilities and their reported compliance for 2012).

164. QUALIFYING WASHINGTON UTILITIES, *supra* note 60, at tbl.10 cell 9.

165. To put the \$10,309,194 into perspective, Snohomish County PUD had revenues of \$512,094,000 in 2009. Therefore, \$10,309,194 is equal to two percent of Snohomish

A more realistic calculation to show the potential impact that failing to meet RPS targets could have on a utility is as follows: in 2020, Snohomish County PUD must obtain fifteen percent of its electrical load from eligible renewable resources, or the equivalent of 129.5 annual megawatts (the amount of megawatts required per day for an entire year).¹⁶⁶ According to Snohomish County PUD, it will fall 64.3 annual megawatts short of achieving its 2020 RPS target.¹⁶⁷ When converted to megawatt-hours, this shortfall equates to 1543.2 annual megawatt-hours, or a total of 563,268 megawatt-hours a year.¹⁶⁸ Under this scenario, Snohomish County PUD must acquire an additional 563,268 megawatt-hours of power from eligible renewable resources in order to comply with the RPS targets for 2020.¹⁶⁹ A fifty dollar fine is imposed for every megawatt-hour that Snohomish County PUD falls short of meeting its RPS target, which equates to a potential maximum fine of \$28,163,400—a severe penalty for failing to meet RPS requirements.¹⁷⁰

C. *Impact on Washington's Energy Independence Act*

Because the BPA sells nearly forty-five percent of all electricity consumed in the Pacific Northwest and operates more than 15,000 miles of high-voltage transmission lines, equivalent to eighty percent of the transmission network in the Pacific Northwest, policies that curtail the generation and transmission of eligible renewable resources adversely affect producers, utility companies, and consumers alike.¹⁷¹ If the BPA forces renewable resource producers to stop producing energy, those producers lose money.¹⁷² If utility companies

County PUD's total revenue for 2009. See SNOHOMISH COUNTY PUB. UTILITY DIST., *supra* note 155, at 51.

166. *Id.*

167. *Id.*

168. To convert annual megawatt-hours into the total number of megawatts hours in a year, multiply the annual megawatt hours—in this case 1543.2—by the days in a calendar year.

169. See WASH. REV. CODE § 19.285.040(2)(a)(iii) (2012) (regarding electrical load requirement for 2020).

170. See *id.* § 19.285.060(1) (regarding penalty amount).

171. See Complaint, *supra* note 7, at 12.

172. See REDISPATCH POLICY, *supra* note 7, at 28–31, 48–49, 62–67 (noting, amongst

cannot obtain enough eligible renewable resources to meet RPS targets, they will be fined.¹⁷³ If utility companies are penalized for noncompliance, then consumers will be hurt as they will bear the brunt of the generators' and utilities' losses through increased rates.¹⁷⁴ These trickle-down effects created by the BPA's Oversupply Protocol P could compromise achieving the goals articulated in the Energy Independence Act and lead to significant changes to the statute.

1. *Implication for Achieving the Goals of the Energy Independence Act*

Broadly defined, the three main goals articulated in the Energy Independence Act are to promote the development of alternative renewable energy resources, increase the capacity and use of local renewable energy resources, and develop a green economy in Washington.¹⁷⁵ Achieving these goals will be difficult if curtailment policies such as the BPA's Oversupply Protocol P continue to undermine the foundation for accomplishing all three aims—the reliable generation and transmission of eligible renewable resources like wind power. To begin, the development of eligible renewable resources in Washington will not continue if generators are unable to transmit the power they produce.¹⁷⁶ Because the BPA controls eighty percent of the transmission system in the Pacific Northwest,¹⁷⁷ and because its curtailment policies create discriminatory, inconsistent, and unreliable access to the transmission grid, renewable power producers have no incentive to operate existing facilities or build new ones.¹⁷⁸

other problems, that the curtailing energy will cost wind energy producers nearly \$50,000,000 in 2012 alone, that curtailing wind power costs these producers potential revenue received for PTCs and RECs, and that curtailment does have a negative economic impact on wind power producers).

173. WASH. REV. CODE § 19.285.060(1) (2012).

174. See Erik Smith, *Ratepayers Paying Wind Farmers Not to Produce Electricity—\$2.7 Million So Far This Year*, WASH. STATE WIRE (Sept. 19, 2012), <http://washingtonstatewire.com/blog/too-much-windpower-rivers-surged-this-summer-and-oversupply-cost-2-7-million/>.

175. See WASH. REV. CODE § 19.285.020 (2012).

176. See REDISPATCH POLICY, *supra* note 7, at 62; Sickinger, *supra* note 51, at 2.

177. Complaint, *supra* note 7, at 13.

178. See REDISPATCH POLICY, *supra* note 7, at 62; Sickinger, *supra* note 51, at 2;

Therefore, the practical effect of the BPA's Oversupply Protocol P is to create "inefficient market operation and participation, [a] loss of confidence in markets and market operations, [and] disincentives to develop renewable generation" in Washington.¹⁷⁹ As many power companies and renewable energy coalitions have suggested, the BPA's curtailment policies will "discourage the development of renewable resources in the Pacific Northwest."¹⁸⁰

Inconsistency in the reliable transmission of wind power caused by curtailment will also stagnate the growth and use of local renewable energy resources. For instance, wind power producers, currently the State's largest producers of eligible renewable energy,¹⁸¹ rely on PTCs and REC's to make money.¹⁸² To obtain these, wind facilities must generate power,¹⁸³ which does not occur during curtailment because facilities are forced to shut down.¹⁸⁴ By depriving wind power producers of their major source of income and by creating unreliable service conditions,¹⁸⁵ the BPA's Oversupply Protocol P discourages the development of new facilities in Washington and encourages the development of new facilities in states not impacted by such curtailment policies. This creates two problems. First, wind power companies will not expand development in Washington, so the use of local renewable energy resources to satisfy Washington's power demands will level out. Second, Washington utility companies will be forced to turn to out of state producers to obtain eligible renewable resources required to meet RPS targets. Combined, these effects contradict the goal of the Energy Independence Act of securing Washington's energy independence through the use of local resources.¹⁸⁶

Complaint, *supra* note 7, at 34, 66; Order Granting Petition, *supra* note 11, ¶ 63.

179. Complaint, *supra* note 7, at 66.

180. REDISPATCH POLICY, *supra* note 7, at 62.

181. See Washington Renewable Electricity Profile, *supra* note 79, at tbl.1.

182. Complaint, *supra* note 7, at 3-4.

183. *Id.* at 13.

184. See Sickinger, *supra* note 51, at 2; OVERSUPPLY PROTOCOL P, *supra* note 12, summary ¶.

185. See Sickinger, *supra* note 51, at 2-3.

186. WASH. REV. CODE § 19.285.020 (2012).

Finally, as wind power facilities move elsewhere and plans for future expansion and development within Washington are scrapped, “green” jobs will disappear thwarting yet another goal articulated in the Energy Independence Act.¹⁸⁷ The Energy Independence Act states, “[m]aking the most of our plentiful local resources will . . . provide economic benefits for Washington counties and farmers, [and] create high-quality jobs in Washington.”¹⁸⁸ The BPA’s Oversupply Protocol P inhibits the development of a green economy in Washington by: (1) reducing tax revenues that counties would receive from the development of new wind facilities, (2) reducing the amount of money local farmers would receive from leasing land to the wind power producers to place turbines on their property, and (3) reducing income that third parties would receive for transporting, constructing, and maintaining turbines and wind power facilities.

As addressed in comments made to the BPA by Community Renewable Energy Association, Renewable Northwest Project, Horizon Wind Energy LLC, Pacific Gas & Electric, and Iberdrola Renewables, Inc., BPA’s curtailment policies “will lead to a decrease in new renewable energy projects and economic development in rural communities.”¹⁸⁹ Thus, achieving a major goal expressed in the Energy Independence Act will not occur and could force substantial changes to the Energy Independence Act, which goes against the will of the voters who passed Initiative 937 establishing the RPS targets and fundamental goals codified in the Energy Independence Act.

2. *Policy Implications for the Energy Independence Act*

Achievement of the goals expressed in the Energy Independence Act will be negatively impacted by the BPA’s Oversupply Protocol P and could force the Washington

187. *Id.*

188. *Id.* See also AM. WIND ENERGY ASS’N, *supra* note 80, at 2 (detailing the economic benefits of wind power development in Washington); SIERRA CLUB: WASHINGTON STATE CHAPTER, *supra* note 85 (noting that Initiative 937, codified as the Energy Independence Act, has generated over \$7 billion in renewable energy investments in Washington).

189. REDISPATCH POLICY, *supra* note 7, at 62.

Legislature to change the requirements set forth in the statute. The cause of potential change is simple: utility companies that once supported the progressive standards¹⁹⁰ and the people who supported and voted for Initiative 937¹⁹¹ will not support legislation that costs companies large sums of money. Moreover, onetime supporters are unlikely to continue to support legislation that creates unachievable RPS targets and that hurts family income due to rate hikes to account for penalties incurred for noncompliance and allocated costs stemming from curtailment.¹⁹² As a result, changes to the Energy Independence Act might occur that would prohibit achieving the goals stated in the original act.¹⁹³

If the Energy Independence Act was amended to make RPS targets more achievable, there are three potential changes that are more likely: (1) changing the definition of “eligible renewable resources” to include hydropower, which is mostly prohibited; (2) changing the RPS targets by either reducing the percentage of eligible renewable resources that must make up a utility’s electric load or by extending the dates for implementing the requirements; and (3) adding strong excusable noncompliance defenses for utility companies. Any of these changes would negatively impact the goals articulated in the Energy Independence Act and would be regressive actions that hurt Washington’s energy independence.

For instance, changing the definition of “eligible renewable resource” to include hydropower would diminish efforts to diversify Washington’s energy portfolio through the

190. See *Washington Energy Conservation, Initiative 937 (2006)*, BALLOTEDIA, [http://ballotpedia.org/wiki/index.php/Washington_Energy_Conservation,_Initiative_937_\(2006\)](http://ballotpedia.org/wiki/index.php/Washington_Energy_Conservation,_Initiative_937_(2006)) (last visited June 8, 2013) (noting that many energy groups and environmentalists, including the Washington Public Utility Districts Association, supported the initiative’s passage).

191. See *id.* (noting that the bill passed with 61 percent of the vote and that many local and State public officials endorsed the initiative).

192. See, e.g., *Cowlitz PUD to Increase Electric Rates*, THE REFLECTOR (Nov. 2, 2011, 9:00AM), http://www.thereflector.com/news/article_df1e39f2-03ef-11e1-b377-001cc4c03286.html?mode=story.

193. See Smith, *supra* note 174, at 3–4 (noting that bills in both the Washington House and Senate were introduced in 2012 to change the terms of I-937, delay its implementation, and “dial back” its conditions.). See also H.B. 2682, 62nd Leg. (Wash. 2012), S.B. 6418, 62nd Leg. (Wash. 2012) (proposed bills aimed at delaying the implementation of I-937’s requirements).

development of alternative renewable resources like wind power.¹⁹⁴ This action would make meeting RPS targets an easier task because hydropower currently accounts for seventy percent of all power generated in Washington. There would be no need or incentive to invest in and develop alternative renewable resources necessary to diversify the State's energy portfolio.¹⁹⁵ This not only hurts the diversity of the State's energy resources, but it also impacts the development of a "green" economy in Washington by decreasing incentives to build new renewable resource facilities that satisfy the existing definition of "eligible renewable resources."¹⁹⁶ Because hydropower is easily obtainable and the infrastructure for its generation and transmission already exist (and are predominantly controlled by the BPA) utility companies could satisfy RPS targets with existing power resources.¹⁹⁷ There would be no need to develop wind power facilities or other currently eligible renewable resource options. A failure to do so would hurt county tax revenues, decrease farmers' income from leasing land for turbine placement, and cut jobs otherwise created for the construction, operation, and maintenance of these facilities.

Adjusting the RPS targets with which utility companies must comply would also adversely impact the State's ability to achieve the Energy Independence Act's stated goals. For example, decreasing the RPS targets hurts the development of a "green" economy as there would be less need overall for additional eligible renewable resources. This eliminates jobs that would otherwise be required to construct the new facilities and infrastructure necessary to accommodate the increase in power generation. Not only does this hurt those directly involved at all stages of the construction and operation processes, but it also hurts county tax revenues and takes money out of farmers' pockets, as they would not receive lease payments from the placement of turbines on their land.

Extending the dates for RPS target compliance would similarly impact developing a "green" economy. First, power

194. See Smith, *supra* note 174.

195. MYERS, *supra* note 2, at 4–5.

196. WASH. REV. CODE § 19.285.030(11), (20) (2012).

197. See Smith, *supra* note 174.

producers that have already developed facilities in anticipation of generating enough power to meet the needs of utilities and under the existing implementation structure would lose their investments. Second, procrastinating will leave alternative renewable resource producers in limbo when deciding whether to move forward with the construction of approved facilities, whether to apply for permits to build future facilities, or to increase production at existing facilities because it would be unknown when additional resource capacity would be required. Therefore, increasing the number of unknowns involved with these already expensive “green” energy projects will further slow the process, negatively impacting State revenues and the development of a “green” economy in Washington.

Finally, an amendment to the Energy Independence Act creating excusable noncompliance defenses for utility companies that do not meet the RPS targets might be effective, so long as it is stringent enough to dissuade illegitimate claims by utilities. If written too broadly or too vaguely, such an amendment could become a vast loophole that utilities use to avoid complying with the RPS targets. The implications that the BPA’s curtailment policies have on Washington’s Energy Independence Act are significant. Whether directly making the goals of the Energy Independence Act unachievable or forcing changes to the act in order to make compliance possible, the BPA’s current curtailment policy, Oversupply Protocol P, threatens to defeat the will of Washington citizens who voted to implement aggressive RPS targets in order to diversify the State’s renewable resources, develop a “green” economy, and provide the State with energy independence.¹⁹⁸

V. CONCLUSION

The BPA’s curtailment policies are inadequate approaches to curbing the over-generation of power during times of high water flow on the Columbia River. Both its Redispatch Policy and Oversupply Protocol P fail to address the problem in a way that satisfies FERC’s demand that the BPA provide fair, comparable, and nondiscriminatory access to its transmission

198. See WASH. REV. CODE § 19.285.020 (2012).

system.¹⁹⁹ However, other remedies exist that the BPA could pursue in order to address its over-generation problem without curtailing wind power production in a manner that runs counter to FERC's requirements.

Of the potential remedies, five are notable: (1) supporting dam removal on the Columbia River to free up transmission capacity that could then be filled with increased wind power generation;²⁰⁰ (2) supporting efforts to increase State mandated TDG levels, thereby allowing additional water to be spilled over the tops of dams during high flow events;²⁰¹ (3) increasing its water storage capacity through aquifer replenishment and pumped storage mechanisms;²⁰² (4) upgrading and expanding its transmission system to allow for more energy to be placed on the system at any given time and to accommodate the continued growth of the wind power industry;²⁰³ and (5) implementing a fair compensation mechanism that compensates wind power producers for the actual amount of money lost during curtailment periods. Some of these proposals are more feasible than others, yet all are legitimate alternatives to the BPA's current curtailment policy, Oversupply Protocol P, that continues to preference BPA hydropower and provides wind power producers with unfair,

199. See Order Granting Petition, *supra* note 11, ¶ 78.

200. See Associated Press, *Wind Power Briefly Exceeds Northwest Hydro Power*, SEATTLE TIMES (Oct. 24, 2012, 7:09 AM), http://seattletimes.com/html/localnews/2019509822_apornorthwestwindpower.htm (showing that enough wind power is generated to fill diminished capacity that would result from dam removal); AM. WIND ENERGY ASS'N, *supra* note 80, at 1 (noting that Washington wind power can currently supply sixty-four percent of the State's energy needs); SAVE OUR WILD SALMON, REVENUE STREAM: AN ECONOMIC ANALYSIS OF THE COSTS AND BENEFITS OF REMOVING THE FOUR DAMS ON THE LOWER SNAKE RIVER 8-9 (2009), <http://www.wildsalmon.org/images/stories/PDFs/revenuestream8.pdf> (discussing how dam removal will not inhibit the ability to meet power needs).

201. Salmon Protest, *supra* note 41, at 5-6.

202. See BPA'S RESPONSE TO COMMENTS, *supra* note 121, at 14-16 (noting that aquifer replenishment could eventually be an option if feasible aquifers are presented to the BPA; additionally, pumped storage is viable and would continue to be researched by BPA as an option to address its over generation problem).

203. See Order Granting Petition, *supra* note 11, ¶ 35; Press Release, Bonneville Power Admin., Wind Power on BPA System Sets Another New Record: The Renewable Resources Passes 4000 Megawatts (Mar. 22, 2012, 12:00 AM), <http://www.bpa.gov/news/newsroom/Pages/Wind-power-on-BPA-system-sets-another-new-record.aspx>.

discriminatory transmission service.²⁰⁴

Although the above actions are feasible alternatives to the BPA's current curtailment policy, some are more viable than others. For instance, dam removal is extremely expensive, time consuming, and requires action by Congress, which is unlikely given today's political climate.²⁰⁵ Aquifer replenishment and pumped storage would also require political action and potential sites must be identified, evaluated, and prepared for such a large project with environmental implications of its own. However, the other alternatives—supporting efforts to increase Washington's maximum TDG level, investing in upgrades to its transmission system, and implementing a fair compensation mechanism that fully compensates wind power producers affected by continued curtailment—are reasonable positions that would help solve the BPA's over-generation and discriminatory transmission system access problems.

A. *Support Efforts to Increase Washington's Maximum TDG Level*

States set TDG levels that limit BPA's ability to spill water over the tops of dams, as required by the Clean Water Act.²⁰⁶ Currently, Washington's maximum TDG level is lower than Oregon's by five percent.²⁰⁷ To avoid problems stemming from the differing standards, the BPA operates the FCRPS in accordance with Washington's lower level.²⁰⁸ However, environmental groups and government agencies contend that Washington's limits are too low and that higher TDG levels would benefit endangered fish species and reduce the amount of power that the BPA must curtail during high water

204. See Sickinger, *supra* note 51, at 3.

205. It is interesting to note that wind power could provide the energy necessary to account for the lost production from removed dams as wind power output recently exceeded the amount of hydropower generated and transmitted on BPA's transmission system for the first time. See *Wind Power Briefly Exceeds Northwest Hydro*, *supra* note 200. Moreover, a recent resource assessment conducted by the National Renewable Energy Lab estimates that Washington wind power could provide sixty-four percent of the State's current energy needs. See AM. WIND ENERGY ASS'N, *supra* note 80, at 1.

206. Salmon Protest, *supra* note 41, at 4.

207. *Id.*

208. *Id.* at 5.

events.²⁰⁹ In fact, a study conducted by the BPA shows that a higher TDG standard would reduce the need to curtail wind power “by between twenty-five and 100 megawatt months,” which is the equivalent of “six to seventeen percent less displacement of wind energy than under the lower TDG standard.”²¹⁰ Conservation groups like Save Our Salmon and American Rivers recently petitioned Washington’s Department of Ecology and the State Legislature to increase the State’s maximum TDG standard to equal Oregon’s, which would allow the BPA to spill additional water and limit its curtailment practices.²¹¹ Increased spillage has even garnered the support of Judge Redden, an Oregon Federal District Court Judge overseeing the Columbia River BiOp process, who has ordered the BPA several times to spill excess water over its dams, even at the expense of hitting maximum TDG levels, in order to comply with the BPA’s obligations under the Endangered Species Act.²¹²

However, the BPA opposed these groups’ efforts, even though Oregon’s higher standard represents best available science and would allow the BPA to curtail less wind power.²¹³ Supporting the effort to increase Washington’s TDG standard is a cost-effective and efficient way to reduce the BPA’s reliance on curtailment policies admonished by FERC while still fulfilling its environmental obligation to protect endangered fish. In the future, the BPA should collaborate with these conservation groups’ lobbying efforts to change Washington’s maximum allowable TDG level to at least equal Oregon’s.

209. *Id.*

210. BONNEVILLE POWER ADMIN., BPA AND FISH PASSAGE CENTER STUDY EFFECTS OF CHANGING TOTAL DISSOLVED GAS STANDARDS 2 (Apr. 2011).

211. Salmon Protest, *supra* note 41, at 5.

212. See, e.g., Nat’l Wildlife Fed’n, et. al. v. Nat’l Marine Fisheries Serv., et. al., No. CV 01-640-RE, 2005 U.S. Dist. LEXIS 29509, (D. Or. Dec. 29, 2005); Nat’l Wildlife Fed’n, et. al., v. Nat’l Marine Fisheries Serv., et. al., No. CV 01-640-RE, 2007 U.S. Dist. LEXIS 38010, (D. Or. May 23, 2007); Nat’l Wildlife Fed’n, et. al., v. Nat’l Marine Fisheries Serv., 839 F. Supp. 2d 1117 (D. Or. 2011).

213. Nat’l Wildlife Fed’n, et. al. v. Nat’l Marine Fisheries Serv., et. al., No. CV 01-640-RE, 2005 U.S. Dist. LEXIS 29509, 4–5 (D. Or. Dec. 29, 2005).

B. *Upgrade and Expand the BPA's Transmission System Capacity*

The Federal Columbia River Transmission System Act (FCRTS) requires the BPA to provide sufficient transmission capacity within its Balancing Authority Area.²¹⁴ Specifically, the FCRTS requires the BPA to “operate and maintain the Federal transmission system within the Pacific Northwest and . . . construct improvements, betterments, and additions to and replacements of such system,” as are necessary to “integrate and transmit the electric power from existing or additional Federal or non-Federal generating units.”²¹⁵ Currently, the BPA's transmission system cannot accommodate all of its own federally generated hydropower during high flow events, let alone accept current and future non-federal generated wind power, leading to the implementation of its curtailment policies.²¹⁶ The failure to operate a transmission system with sufficient capacity to accept this power contradicts the BPA's obligations under the FCRTS requiring it to “integrate and transmit” power from “existing or additional Federal or non-Federal generating units.”²¹⁷ It also conflicts with statements made by the Obama Administration, which noted that the Department of Energy will require Power Marketing Administrations, like the BPA, to take steps to upgrade the transmission grid in order to better incorporate renewable energies such as wind power.²¹⁸

Nevertheless, the BPA continues to contract with wind power producers to accept additional capacity onto its already stressed system.²¹⁹ By the end of 2013, the BPA expects to

214. *See generally* Federal Columbia River Transmission System Act of 1974, 16 U.S.C. § 838b (2006).

215. *Id.* § 838b, b(a) (emphasis added).

216. *See* BPA'S NARRATIVE EXPLANATION, *supra* note 37, at 3–6.

217. 16 U.S.C. § 838b(a) (2006).

218. *See* Salmon Protest, *supra* note 41, at 11; *see also* Letter from Steven Chu to Bonneville Power Administration (March 16, 2012), *available at* <http://energy.gov/downloads/memorandum-secretary-chu-power-marketing-administrations-role-march-16-2012>.

219. *See* 2010 ANNUAL REPORT, *supra* note 19, at 14; *see also* BONNEVILLE POWER ADMIN., TRANSMISSION SERVICES, PLANNING & PROJECTS, WIND PROJECTS: CURRENT WIND PROJECTS, <http://transmission.bpa.gov/PlanProj/Wind/> (page last modified Oct. 26, 2012).

have 5000 megawatts²²⁰ of wind power connected to its transmission system, which will increase to over 7000 megawatts by 2017.²²¹ The BPA does not have the sufficient capacity on its transmission system to deliver this power reliably. The Administration should abide by the mandates set forth in the FCRTS to construct “improvements, betterments, and additions,” necessary to “integrate and transmit” the wind power it has already contracted to transmit in addition to the future wind power projects the BPA plans to integrate into its transmission system.²²²

The BPA is beginning to invest in transmission system upgrades to expand capacity in order to support wind power integration through several recent projects: (1) two 500-kilovolt power lines that will offer 3000 megawatts of transmission service to wind power producers;²²³ (2) the new Central Ferry Substation located in Garfield County in southeast Washington, which connects Puget Sound Energy's 343 megawatt Lower Snake River Wind Project to the BPA's transmission system;²²⁴ and (3) upgrades to high power transmission lines that run to California.²²⁵ Although an improvement, these projects provide nowhere near enough increased transmission capacity to accommodate existing and future wind power in Washington. The BPA must continue to invest heavily in upgrades to its transmission system.

Although transmission system upgrades are expensive, the BPA does have outlets available to help defray transmission system upgrade costs, most notably the Northwest Power Act (NWPA). Section 7(g) of the NWPA allows the BPA to recover costs associated with its fish and wildlife protection obligations through adjustments to existing rates.²²⁶ In addition, the BPA

220. Press Release, *supra* note 203, at 1.

221. BONNEVILLE POWER ADMIN., *Forecast of Renewable Projects Connected to BPA Grid based on Existing Queue and Recent Trends*, BPA.GOV http://transmission.bpa.gov/PlanProj/Wind/documents/Renewable_Forecast_Graph_2017.pdf (Oct. 1, 2012).

222. 16 U.S.C. §§ 838b, b(a), 838d.

223. Press Release, *supra* note 203, at 2.

224. *Id.*

225. See Sickinger, *supra* note 51, at 4.

226. See generally Pacific Northwest Electric Power Planning and Conservation Act § 7(g), 16 U.S.C. § 839e, (1994). See also Wind Protest, *supra* note 119, at 17–18.

is entitled to a credit against its obligation to repay the Federal Government for expenditures made protecting fish and wildlife,²²⁷ countering the Administration's argument defending its need to implement curtailment programs like the Redispatch Policy and Oversupply Protocol P. Rather than continue curtailment, the FCRTS and NWPA provide the BPA with valid options it can pursue to meet its fish and wildlife protection obligations, fulfill its duty to provide sufficient transmission capacity for federal and non-federal power sources, and comply with FERC's order demanding the BPA provide fair, comparable, and non-preferential access to its transmission system.

C. *Implement a Fair Compensation Mechanism for Ongoing Curtailment Practices*

Curtailing wind power will always be controversial and will continue to attract the ire of the renewable energy industry.²²⁸ However, the BPA could quell opposition to ongoing or future curtailment policies by wholly compensating renewable energy generators for their displaced power. For instance, Oversupply Protocol P, without its accompanying fifty-fifty Cost Allocation, provides relatively fair compensation for wind power producers' lost production during curtailment. By paying these generators for the actual amount of RECs and PTCs lost, a majority of revenue is recouped. In addition, the BPA should reimburse all wind power producers for penalty costs incurred for failing to deliver power during curtailment. Moreover, the BPA must compensate facilities for any physical or operational losses caused by a forced shut down. Finally, and most importantly, the BPA should not implement a cost-sharing mechanism that equally allocates curtailment costs between the BPA and those entities whose energy it forcibly displaces. Instead, the BPA must allocate costs based on a true cost-causation basis and pay generators for the amount of power that would have been placed on the transmission system, but

227. *Id.*

228. See, e.g., Wind Protest, *supra* note 119; Complaint, *supra* note 7; Comments of Northwest & Intermountain Power Producers Ass'n and Electric Power Supply Ass'n in Support of Complaint, Iberdrola Renewables, Inc. v. Bonneville Power Admin., No. EL11-44-000 (Fed. Energy Regulatory Comm'n, July 19, 2011).

for curtailment. Conversely, the BPA could simply incur the costs for its curtailment policy and aggressively seek to recoup these expenses under section 7(g) of the NWPA.

Oversupply Protocol P is a discriminatory curtailment policy that fails to address the major concern articulated in FERC's order—that the BPA discriminates against non-federal power producers by giving federal hydropower preferential treatment.²²⁹ Oversupply Protocol P, which continues to curtail non-federal wind power, merely perpetuates the BPA's previous Redispatch Policy that was explicitly invalidated by FERC.²³⁰ The BPA's continued reliance on discriminatory actions directed at non-federal wind power producers is especially troublesome considering that alternative actions exist that would negate the need to curtail wind power. To comply with FERC's order, the BPA must stop curtailing non-federal wind power and implement alternative programs to deal with its problem of excess hydropower generation during high water flow events.

229. See Order Granting Petition, *supra* note 11, ¶ 78.

230. *Id.*