131 FERC ¶ 61,036
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Marc Spitzer, Philip D. Moeller,
and John R. Norris.

Erie Boulevard Hydropower, L.P. Project No. 2539-003

ORDER ON REMAND AND REINSTATING NEW LICENSE

(Issued April 15, 2010)

1. On August 10, 2009, the U.S. Court of Appeals for the Second Circuit vacated the Commission's order issuing a new license to Erie Boulevard Hydropower, L.P. (Erie) for the 38.8-megawatt (MW) School Street Project No. 2539, located on the Mohawk River in Albany and Saratoga Counties, New York, and remanded the case for further proceedings.[1] The court directed the Commission: (1) to determine whether an offer of settlement filed by Erie and other parties in the relicensing proceeding constituted a material amendment to the plan of development proposed in the license application, such that the Commission should have offered the public an opportunity to intervene in the proceeding as a result; and (2) if it answered that question in the affirmative, to consider whether a proposal presented by Green Island Power Authority (Green Island) represented a feasible alternative to be considered in the relicensing proceeding. For the reasons discussed below, we find that the offer of settlement was not a material amendment and that, therefore, the Commission need not consider as timely a motion to intervene filed by Green Island. We nevertheless consider Green Island's proposal, and further find that the proposed Cohoes Falls Project does not present a feasible alternative to the School Street Project. Accordingly, we reinstate the license for the School Street Project as issued in our earlier order.

Background

2. A more detailed procedural history appears in our February 15, 2007 order on offer of settlement and issuing a new license for the School Street Project.[2] Briefly, Erie's predecessor, Niagara Mohawk Power Corporation, filed a timely application for

[1] *Green Island Power Authority v. FERC*, 577 F.3d 148 (2nd Cir. 2009).

[2] *Erie Boulevard Hydropower, L.P.*, 118 FERC ¶ 61,101 (2007).

relicensing in 1991, and no other entity filed an application for a new license pursuant to section 15(c)(1) of the Federal Power Act (FPA) in competition for the project by the statutory deadline of December 31, 1991. However, the relicensing proceeding was substantially delayed, primarily because of the state's November 1992 denial of water quality certification for the project, the licensee's appeal of the denial, and subsequent settlement negotiations concerning the certification and relicensing issues. The project's original license expired in 1993, and the Commission authorized its continued operation pursuant to annual licenses. Settlement negotiations ultimately led to an offer of settlement among Erie, the relevant state and federal resource agencies, and other parties, which Erie filed on March 9, 2005, and also led to the state's issuance of water quality certification on October 10, 2006.

3. Meanwhile, beginning in July 2004, Green Island made a series of filings designed to support its development of the Cohoes Falls Project as an alternative to relicensing the School Street Project. Initially, Green Island filed an application for a preliminary permit to study the Cohoes Falls Project, which Green Island conceded would inundate the School Street Project. The Commission rejected the application because it would conflict with the existing project (and was thus precluded by regulation) and because it was an untimely attempt to compete for the School Street Project.[3] Green Island then filed a motion to intervene in the School Street relicensing proceeding on September 7, 2004, seeking to have the Commission partially or completely remove the School Street Dam and decommission the powerhouse so that the Cohoes Falls Project could be developed. Green Island also made various other filings, some jointly with Adirondack Hydro Development Corporation (Adirondack), a party to the relicensing proceeding, seeking to present additional evidence to support its proposal and suggesting various procedural mechanisms by which it argued the Commission could terminate Erie's license for the School Street Project and issue a license for the Cohoes Falls Project as an alternative. The Commission rejected these filings as impermissible attempts to place Green Island's untimely and statutorily-barred competitive proposal before the Commission, and denied Green Island's motion for late intervention on the ground that it had not shown good cause for intervening late, or provided sufficient reason for the Commission to grant intervenor status. Green Island sought rehearing of these determinations, which the Commission denied on November 16, 2006.[4]

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[3] *Green Island Power Authority*, 110 FERC ¶ 61,034, *reh'g denied*, 110 FERC ¶ 61,331 (2005), *petition for review dismissed, Green Island Power Authority v. FERC*, No. 05-1170 (D.C. Cir. Dec. 14, 2005).

[4] *Erie Boulevard Hydropower, L.P.*, 117 FERC ¶ 61,189 (2006).

4. On February 15, 2007, the Commission issued an order approving Erie's offer of settlement and issuing a new forty-year license for the School Street Project.[5] Green Island and Adirondack jointly sought rehearing, which the Commission denied on September 21, 2007.[6] Both entities filed petitions for judicial review of the relicense order, as well as other Commission orders and notices related to the Commission's denial of late intervention and rejection of Green Island's proposal for the Cohoes Falls Project.

5. On August 10, 2009, the U.S. Court of Appeals for the Second Circuit vacated the license order (although not the order denying Green Island's motion for late intervention) and remanded the case to the Commission for further proceedings. The court agreed with the Commission that Adirondack lacked standing to challenge the Commission's orders because it had suffered no injury. However, the court found that the Commission erred in denying Green Island's motion to intervene without first considering whether the offer of settlement was a material amendment of the relicense application. The court found that it was unable to conclude that the error was not prejudicial, because if the amendment was material, the Commission was required to reissue notice of the application seeking interventions and Green Island's motion would have been timely. The court therefore revoked the license and remanded the case to the Commission to consider in the first instance whether the offer of settlement was a material amendment, and, if it was, to consider Green Island's motion as timely filed and analyze it accordingly. The court further found that, in the event that the Commission grants Green Island's motion to intervene, the Commission is statutorily obligated to consider Green Island's evidence regarding the Cohoes Falls Project proposal. In particular, the court found that the Commission must determine whether the Cohoes Falls proposal is a feasible alternative, and, if so, must give it full consideration when determining whether the School Street Project satisfies the "best adapted" standard of the FPA, notwithstanding that the Commission cannot license the Cohoes Falls Project instead of the School Street Project.

Preliminary Matters

6. On October 22, 2009, Green Island filed a motion to expedite the proceeding in response to the court's remand.[7] Green Island asks the Commission to find that Erie's 2005 offer of settlement was a material amendment to the license application and as a consequence, Green Island's motion to intervene is timely; to accept Green Island's Cohoes Falls proposal into the record of this proceeding; and to issue public notice and

[5] *Erie Boulevard Hydropower, L.P.*, 118 FERC ¶ 61,101 (2007).

[6] *Erie Boulevard Hydropower, L.P.*, 120 FERC ¶ 61,267 (2007).

[7] Scenic Hudson joined the motion not as a movant, but to file supporting comments.

invite interventions and comments on the Cohoes Falls proposal as an alternative to the School Street settlement proposal. Green Island also urges the Commission to declare that Green Island's motion to intervene is timely regardless of the status of the offer of settlement, in order to avoid the delay associated with "another round of litigation" over the material amendment issue.[8]

7. Erie filed an answer to the motion on November 6, 2009, stating that Erie does not oppose handling the remand proceeding expeditiously, as long as the Commission follows the multi-step, sequential analytical process that the court prescribed. Erie adds that some of Green Island's requests are either inconsistent with the court's directives or are unnecessary or inappropriate. Erie also agues that, because they are not parties to the remanded relicensing proceeding, neither Green Island nor Scenic Hudson may file a motion under the Commission's rules.

8. On November 23, 2009, Green Island filed a motion for leave to file a response and a response to Erie's answer, arguing that although a response to an answer is not permitted under the Commission's rules, the Commission should allow the filing in this case because Erie's response asks the Commission to follow specific procedures and is therefore a motion to which responses are permitted. Green Island adds that, because Green Island's party status "is the subject of this proceeding, barring [it] from filing a motion seems particularly inappropriate."[9] Green Island also responds at length to Erie's arguments and sets forth its views about what the court required and how the Commission should proceed with the remanded proceeding. Green Island adds that, if the Commission considers Erie's arguments concerning the feasibility of the Cohoes Falls proposal, it should also accept the declaration of James Besha, President of Albany Engineering Corporation, Green Island's consulting engineer for its hydroelectric activities.

9. As discussed in more detail below, Green Island's status as a party to this remanded proceeding is dependent on whether the 2005 settlement was a material amendment of the license application, in which case the Commission would be required to regard its motion to intervene as timely. Instead of determining whether Green Island's and Erie's latest filings were permissible or how to resolve their differing interpretations of what the court required, we believe the better course of action is to conduct our own review of the court's decision and follow its instructions. We therefore dismiss Green Island's motions and response, and Erie's response. We also dismiss Mr. Besha's declaration, because the existing record, including the evidence that Green Island submitted previously in support of its May 15, 2006 draft license application, is

[8] Green Island's motion to expedite at 3 (filed Oct. 22, 2009).

[9] Green Island's answer at 3, n.3 (filed Nov. 23, 2009).

sufficient for us to examine the feasibility of the Cohoes Falls Project as an alternative to relicensing the School Street Project. Moreover, to the extent that any new information presented in the declaration relates to Green Island's ability to develop the Cohoes Falls Project, it is not relevant to our feasibility determination, because, as explained later in this order, we could not issue a license to Green Island for the Cohoes Falls Project in this remanded relicensing proceeding.

Material Amendment Analysis

A. The Court's Decision

10. In the remand order, the court directed us to determine in the first instance whether Erie's 2005 offer of settlement was a material amendment of the plans of development proposed in the relicense application. Under our rules, a material amendment is defined as any fundamental and significant change, including, among other things, a change in the installed capacity, or the number or location of any generating units, if the change would significantly affect the flow regime.[10]

11. Before us and in court, Green Island argued that the applicant materially amended the School Street Project relicense application, and the Commission was therefore required to solicit motions to intervene, at three points in the proceeding: (1) in December 1995, when Niagara Mohawk informed the Commission that it no longer planned to install a proposed 21-MW generator; (2) in May 2001, when Erie changed course and informed the Commission that it planned to install the proposed 21-MW generator; and (3) in March 2005, when Erie filed its offer of settlement. In our order denying rehearing of the relicense order, we found that none of these events constituted a material amendment that would warrant soliciting motions to intervene.[11] With regard to both removing the proposed 21-MW generator in 1995 and reinstating it in 2001, we recognized that these changes in the number and size of generators would necessarily result in a change in flows, because differing amounts of water would spill over the dam when not being used for generation. We concluded, however, that these changes would not significantly affect the flow regime, because the project would still be required to operate in a run-of-river mode and to provide the same minimum flows in the bypassed reach. The court upheld these findings, concluding that they were supported by substantial evidence.[12]

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[10] *See* 18 C.F.R. § 4.35(f)(1)(i) (2009).

[11] *Erie Boulevard Hydropower, L.P.*, 120 FERC ¶ 61,267, at P 16-22 (2007).

[12] *Green Island*, 577 F.3d at 162-63. The court noted that, even if these decisions were arbitrary and capricious, any resulting error would have been harmless, because

(continued)

12. With regard to the 2005 offer of settlement, we found that it was not a material amendment because: (1) it supplemented rather than superseded the relicense application, and thus was not a complete replacement for it; (2) it did not significantly affect interests in a manner not contemplated by the original application, and thus would not require soliciting new interventions; and (3) it was made in response to the requests of resource agencies, and thus fell within one of the recognized exceptions to the material amendment rule.[13] The court found that, although our regulations required us to consider solely whether the 2005 settlement constituted a fundamental and significant change to the license application, we did not address this standard in our analysis, but rather relied on reasons not contemplated by our regulations. Concerning the first two reasons, the court found that they have no bearing on the analysis of whether the 2005 settlement was a fundamental and significant change. Concerning the third reason, the court found it inapplicable, because section 16.9(b)(3) expressly makes all of section 4.35 (including the exceptions) inapplicable to relicensing proceedings, except that the Commission will reissue public notice of the application (inviting comments and interventions) if an amendment described in section 4.35(f) is filed.[14] Thus, we must consider whether the 2005 settlement was a "fundamental and significant change" to the plans of development proposed in the School Street Project relicense application.

B. Background and Prior Application of the Rule

13. The Commission added section 4.35 to its regulations in 1981.[15] Before then, applicants could freely amend their license applications without consequence. The new rule, which applied to all preliminary permit and license applications, required a new filing date for material amendments; that is, changes to a license application that are sufficiently substantial to warrant treating the proposal as a new application, with a new opportunity to file comments, motions to intervene, and competing applications. Treating the proposal as a new application changes its acceptance date for filing and can result in a loss of priority and possible rejection as a late-filed application, as well as a new round of competition. In promulgating the rule, the Commission made it clear that a material amendment must be a change of such magnitude that the proposal should be treated as a

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there was no evidence to suggest that Green Island would have filed a motion to intervene at any time before 2004. *Id.* at 163 n.10.

[13] *Erie Boulevard Hydropower, L.P.*, 120 FERC ¶ 61,267, at P 23-24 (2007).

[14] *Green Island*, 577 F.3d at 163-64.

[15] *See Revisions to Certain Regulations Governing Applications for Preliminary Permit and License for Water Power Projects*, Order No. 183, 46 Fed. Reg. 55245 (Nov. 9, 1981), FERC Stats. & Regs. ¶ 30,305 (1981).

new application, stating: "These changes are of such a fundamental nature as to constitute the proposal of a different project."[16] Thus, a material change is one that in effect would result in a new and different project. Modifications that merely refine an

[16] *Id*. at 55,249, FERC Stats. & Regs. ¶ 30,305 at 31,723. Initially, a material change to the proposed plan of development included a change in the "total estimated average annual energy production or installed capacity of the proposed project." *Id.* at 55,251; *see* 18 C.F.R. § 4.35(b)(i) (1981). In 1985, the Commission extended the rule to exemptions, included several exceptions to the general rule, and further refined the examples of the types of changes to the plans of development that would be considered material. Among other things, the Commission included the exception for changes made to satisfy the requests of fish and wildlife agencies. The Commission also amended the rule to qualify that a change in installed capacity or the number or location of generating units would be considered material "if the change would significantly modify the flow regime associated with the project." *See* 18 C.F.R. § 4.35(b)(1) (1985); *Application for License, Permit, and Exemption From Licensing for Water Power Projects*, Order No. 413, 50 Fed. Reg. 11658 at 11,681 (Mar. 25, 1985), FERC Stats. & Regs. ¶ 30,632 (1985). The Commission did not define or otherwise explain this change in the preamble to either the proposed or Final Rule, and no comments were received on it. *Id.* at 11,682 (Final Rule); *see Application for License, Permit, and Exemption from Licensing for Water Power Projects*, 49 Fed. Reg. 8009 (March 5, 1984), FERC Stats. & Regs., Regulations Preambles ¶ 32,369 at 32,896 (1984) (proposed rule). It was not until 1989, when revising its hydroelectric relicensing rules, that the Commission made section 4.35 inapplicable to relicense applications, except for reissuing public notice of the application if an applicant amended it as defined in section 4.35(f). *See Hydroelectric Relicensing Regulations Under the Federal Power Act*, Order 513, 54 Fed. Reg. 23,756 (June 2, 1989), FERC Stats. & Regs. ¶ 30,854 at 31,420-21 (1989).

As a result of how the rule evolved, the Commission has historically regarded the exceptions to the general rule as informing its decisions concerning whether an amendment should be considered material as defined in section 4.35(f). Otherwise, the definition of a material amendment would vary depending on whether the application was for an original license or a new license, with no apparent reason for the difference. Removal of the exceptions from relicensing was an unintended and illogical consequence of the waiver of the rule for relicensing proceedings in section 16.9(b)(3). Thus, the Commission has continued to consider the exceptions as examples of the types of changes that would not be considered material in original license applications, and by analogy, should not be considered material for relicense applications. *See, e.g., Great Northern Paper, Inc.*, 77 FERC ¶ 61,068, at 61,267 and n.11 (1996); *Central Nebraska Public Power and Irrigation District*, 59 FERC ¶ 61,040 at 61,127, *on reh'g*, 61 FERC ¶ 61,206 at 61,776 n.17 (1992).

existing proposal, even in ways that may have significant impacts, are not so fundamental as to be considered material.

14. With regard to the 2005 settlement agreement, our only concern here is whether the settlement made any material changes to the plans of development.[17] Although section 4.35(f) defines a material amendment to the plan of development as "any fundamental and significant change," all of the examples included in the rule involve significant changes to the project works; that is, the project's physical features used for the generation of hydroelectric power. Specifically, the rule provides as examples of a material amendment (1) a change in installed capacity or generating units that would significantly modify the flow regime; (2) a material change to the dam, powerhouse, or reservoir if the change would modify the area of the reservoir or cause adverse environmental impacts not previously discussed in the original application; or (3) a change in the number of units of development included within the project boundary.[18]

15. Consistent with these examples, the Commission has treated the following proposed changes as material amendments to an applicant's plan of development: relocating a project 1,000 feet upstream;[19] making substantial physical modifications to a proposed project, including creation of a new, 657-acre reservoir rather than a diversion,

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[17] There was no change in the applicant's status, because neither Niagara Mohawk nor Erie is a municipality, and municipal preference does not apply in relicensing proceedings. Although there was a change in the applicant's identity when Erie was substituted for Niagara Mohawk in 1999 as a result of a license transfer, the Commission issued notice of the transfer and provided an opportunity to intervene in connection with it. *See* 18 C.F.R. §§ 4.35 (f)(3) and (4) (2009), respectively.

[18] Under section 3(11) of the FPA, "project" is defined as a "complete unit of improvement or development, consisting of a powerhouse, all water conduits, all dams and appurtenant works and structures (including navigation structures) which are a part of said unit, and all storage, diverting, or forebay reservoirs directly connected therewith, the primary line or lines transmitting power therefrom to the point of junction with the distribution system or with the interconnected primary transmission system, all miscellaneous structures used and useful in connection with said unit or any part thereof, and all water rights, rights-of-way, ditches, dams, reservoirs, lands, or interests in lands the use and occupancy of which are necessary or appropriate in the maintenance and operation of such unit." A license can include one or more units of development. A material change would be adding or removing a proposed unit of development, not simply reconfiguring the proposed developments under different licenses. *See* [cite].

[19] *See Trans Mountain Construction Co.*, 33 FERC ¶ 61,231, at 61,482 (1985) (original license).

an enlarged dam (increased from 6 feet high by 80 feet long to 65 feet high by 490 feet long), a rerouted penstock increased in length from 11,600 feet to 13,450 feet, relocation of the powerhouse, and construction of new access roads;[20] changing the elevation of the dam and surface elevation of water behind the dam;[21] changing the location of the upper reservoir of a pumped storage project;[22] and more than doubling the generating capacity of an exempted project.[23]

16. Conversely, the Commission has not treated the following changes as material amendments to an applicant's plan of development, or has granted a waiver of the rule to allow them: moving the powerhouse site 800 feet upstream to reduce the bypassed reach and avoid the most sensitive part of the stream, because the change was requested by federal and state agencies and Indian tribes;[24] revising a plan of development to reuse the

[20] *See Hy-Tech Company*, 40 FERC ¶ 61,346, at 62,041 (1987) (original license; treated as a new license application and rejected as patently deficient for failure to conduct new pre-filing consultations and file a revised environmental report).

[21] *See Dewey B. Smith*, 33 FERC ¶ 61,362, at 61,714 and n.6 (1985) (exemption; reinstating exemption application with new filing date for amended application).

[22] *See Russell Canyon Corp.*, 58 FERC ¶ 61,288, at 61,923 (1992) (preliminary permit; addressing analogous issue of whether amendment of a preliminary permit would be a material change in the proposed project under 18 C.F.R. § 4.82).

[23] *See Indian River Power Supply, LLC*, 117 FERC ¶ 61,089, at P 9 (2006) (accepting withdrawal of application to amend exemption to increase project size from 700 kilowatts (kW) to 1,620 kW; amendment would have constituted a material change if the Commission had not rejected it).

[24] *See South Fork Resources, Inc.*, 31 FERC ¶ 61,151, at 61,288 (1985) (original license; waiver of section 4.35 was appropriate because proposal to move powerhouse was the result of consultation and negotiation with agencies and Indian tribes for the sole purpose of improving the environmental and aesthetic aspects of the project). This decision preceded Order 533, 56 Fed. Reg. 23148 (May 20, 1991), which added an exception for amendments made to satisfy requests of resource agencies or Indian tribes. *See* 18 C.F.R. § 4.35(e)(4) (2009). Significantly, the applicant in this case also proposed a variety of environmentally beneficial changes as a result of this consultation, including minimum instream flows and habitat enhancement measures; erosion and sediment control measures; installation of fish screens, a fish bypass system, and racks across the tailrace; determination of an appropriate ramping rate; acquisition of replacement land to compensate for the project-related loss of wildlife habitat; and a plan for recreational development. The Commission did not consider any of these proposed measures in its material amendment analysis.

existing project powerhouse and construct a new powerhouse adjacent to it, instead of demolishing existing facilities and constructing a new project, because the change was made in response to Commission staff's request for additional information and to address concerns raised by historic preservation agencies;[25] converting five hydromechanical turbines to hydroelectric turbine generators,[26] changing the operational rule curve of the reservoir to increase project generation,[27] reconfiguring a project and changing its points of diversion to allow a settlement between two competing license applicants,[28] relocating the powerhouse by 10-15 feet and realigning the dam by several feet to accommodate the state's relocation of a new bridge,[29] rebuilding two of four generating units without materially increasing the installed capacity of their generators or the hydraulic capacity of

[25] *See Niagara Mohawk Power Corp.*, 46 FERC ¶ 61,159, at 61,553-54 and n.35 (1989) (relicense; waiver of section 4.35 was appropriate because it was closely analogous to the exemptions from section 4.35 that cover correction of deficiencies and amendments made to satisfy requests of fish and wildlife agencies). This decision preceded Order 513, 54 Fed. Reg. 23806 (June 2, 1989), which made section 4.35 inapplicable to relicensing proceedings except for the requirement to reissue notice of the application.

[26] *See Great Northern Paper, Inc.*, 77 FERC ¶ 61,068, at 61,267 and n.11 (1996) (relicense; waiver of republication of notice of the application was appropriate because, although the conversion increased the installed capacity of the 70.6 MW project by approximately 2.2 MW, the overall power capacity was approximately the same, the project was using the same flows, and there was no material change in the project's environmental effects).

[27] *See City of Rome, New York*, 34 FERC ¶ 61,339, at 61,624 and n.3 (1986) (original license; proposed change in rule curve for reservoir operation was not a material amendment of the application as defined in section 4.35).

[28] *See Puget Sound Power & Light Co.*, 36 FERC ¶ 61,299, at 61,733 and notes 3-4 and 10 (1986) (original license; waiver of section 4.35, including opportunity to file interventions and new competing applications, was appropriate because proposed changes were partly the result of the Commission's issuance of separate permits with the potential to conflict, although Commission reissued public notice soliciting comments).

[29] *See Felts Mill Energy Partners, L.P.*, 80 FERC ¶ 61,075, at 61,264-65 (1997) (original license; changes were not material because they did not affect the length of the impoundment, cause adverse environmental effects, or significantly change the location of the dam or powerhouse in a manner different from the proposed locations in the previously amended application).

their turbines,[30] changing the format of a single application for three projects to become two separate license applications for the same three projects,[31] changing the project boundary to exclude a project's bypassed reach.[32]

17. Every case where the Commission concluded that amendments to the applicant's plan of development were material involved significant changes to the project's physical features.[33] In the other cases cited above, the Commission found that the changes were not significant, notwithstanding that they involved some change to the project's physical features. In light of the examples provided in the rule and the Commission's interpretation of them, changes that do not concern a project's physical features would seldom, if ever, rise to the level of a fundamental and significant change to the plans of development. However, because the rule states that a material amendment includes but is not limited to those examples, we examine all aspects of the 2005 settlement to determine whether they might constitute a fundamental and significant change.

C. Overview of Changes Proposed in the 2005 Settlement

18. As described in the relicense application, the existing School Street Project dam is a 1,280-foot-long, 16-foot-high masonry gravity dam with a crest elevation of 156.1 feet mean sea level (msl). The reservoir has a surface area of approximately 100 acres at a normal maximum water surface elevation of 156.1 feet, with a gross storage capacity at maximum normal pool of 788 acre-feet. A canal conveys water from the dam to the powerhouse. The canal is approximately 4,400 feet long, 150 feet wide, and 14 feet deep. A surface water intake for the city of Cohoes is located along the west side of the canal near the lower gatehouse. The city of Cohoes has a permitted withdrawal capacity of

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[30] *See Puget Sound Energy, Inc.,* 81 FERC ¶ 61,354, at 62,655 n.12 (1997) (original license; existing, unlicensed project).

[31] *See Orange and Rockland Utilities, Inc.,* 40 FERC ¶ 61,222, at 61,765 and n.16 (1987) (original license for existing, unlicensed projects, only one of which was required to be licensed; format revision of this kind would not constitute a material amendment).

[32] *See Duke Power,* 100 FERC ¶ 61,294, at 62,325 (2002) (relicense; excluding bypassed reach from the project boundary was not a material amendment because it would have no impact on the project's flow regime, would not alter project features so as to cause any adverse environmental impacts, would not represent a change in the units or developments within the project boundary, and would not have any other significant consequences).

[33] In two cases, the Commission waived the rule to allow significant changes to the project's physical features that were requested by resource agencies.

23 cubic feet per second (cfs), although the design capacity of the intake structure is 50 cfs. The upper gatehouse incorporates nine timber slide gates and three steel Taintor gates to control the diversion of flow into the canal. The lower gatehouse incorporates five steel headgates to control flow to five penstocks. The powerhouse is 170 feet long by 78 feet wide and houses five generating units and associated equipment and controls. From the powerhouse, water is discharged back into the Mohawk River downstream of the dam. The generating units have vertical shaft Francis turbines rated at 92 feet of head. The installed capacity of the existing School Street Project powerhouse is 38.8 MW. Before relicensing, the project operated as a storage and release pulsing facility. The reservoir typically fluctuated between elevation 156.1 feet and elevation 153.1 feet, providing a usable storage of 270 acre-feet. The hydraulic capacity of the five generating units operating at maximum gate is 5,910 cfs. The average annual energy for the existing project is 177,700 megawatt-hours (MWh), of which 80,000 MWh is generated during on-peak hours.[34]

19. The 4,500-foot-long bypassed reach includes Cohoes Falls, a 65-foot-high natural falls surrounded by steep cliffs and wooded brushland areas. Flows over the falls vary depending on the volume of water not being diverted by the School Street Project, ranging from low flows during the summer months to high flows of over 30,000 cfs during the spring months. In the relicense application, Niagara Mohawk proposed to maintain a minimum flow of 60 cfs in the bypassed reach at all times of the year, and to limit reservoir fluctuations to 1.0 foot. The applicant did not propose to schedule additional flows over 60 cfs through the bypassed reach to provide flows over Cohoes Falls. In 1993, in response to Commission staff's additional information request, the applicant proposed to schedule flows of 500 cfs over Cohoes Falls for an 8-hour period for 3 days to be scheduled during peak summer recreation months of June, July, and the first half of August, in coordination with city or regional special summer events, to compensate for loss in viewing opportunities during March and April resulting from proposed project operations. The applicant proposed to maintain a minimum flow of 60 cfs in the bypassed reach for the remainder of the year.

20. In the relicense application, Niagara Mohawk proposed to add a new reinforced concrete addition to the existing powerhouse containing an additional sixth unit with a hydraulic capacity of about 3,000 cfs capable of generating about 21 MW. The addition would be located on the southeast side of the existing powerhouse and would be about 110 feet long, about 50 feet wide, and about 110 feet high. A new 17.5-foot-diameter steel penstock, about 190 feet long, would be constructed from a new intake at the southeast end of the lower gatehouse to the powerhouse addition. The existing

[34] *See* Final Environmental Assessment, School Street Project No. 2539-003, at 4-5 (September 2001) (Final EA).

powerhouse canal would be deepened by removing about 103,000 cubic yards of rock to expand the canal's hydraulic capacity in support of the sixth generating unit.[35]

21. In the relicense application, Niagara Mohawk proposed the following operational changes and environmental measures: (1) reduce reservoir fluctuations for power generation to one foot; (2) maintain a continuous minimum flow of 60 cfs within the bypassed reach; (3) maintain a continuous base flow of 660 cfs downstream of the powerhouse; (4) automate project operations by installing a programmable logic controller; (5) install a behavioral barrier at the dam to direct downstream migrating fish into the bypassed reach; and (6) construct a picnic area along the west side of the School Street impoundment.[36]

22. The 2005 settlement did not propose any physical changes to the dam or reservoir, and did not change the number of discrete units of development (one) to be included within the project boundary. Instead of a 21-MW generating unit in the new powerhouse addition, the 2005 settlement proposed an optional 11-MW generating unit with a maximum hydraulic capacity of 1,600 cfs and equipped with a "fish-friendly" turbine, located in either a new powerhouse or an addition to the existing powerhouse at the same location as proposed in the relicense application. As was also proposed in the relicense application, a new intake and penstock would be constructed to serve the new unit. The 2005 settlement also proposed to deepen and modify the cross-section of the power canal to increase its hydraulic capacity, in a manner similar to that proposed in the relicense application. Thus, in terms of physical modifications to the licensed project works, the 2005 settlement differed from the relicense application in the following respects: the sixth turbine/generator unit to be added was 11 MW instead of 21 MW, it was to include a "fish-friendly" turbine instead of a Kaplan turbine,[37] it could be housed in either a new powerhouse or an addition to the existing powerhouse, and the settlement gave Erie the option of installing it (subject, of course, to the Commission's authorization).[38]

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[35] Final EA at 5.

[36] *Id*.

[37] Final EA at 40, 65.

[38] The settlement agreement stated: "Within five years of the issuance of a new license, the Licensee may install and begin operation of a new sixth turbine/generator unit at the Street Project." Erie's offer of settlement at 19 (filed Mar. 9, 2005).

1. Proposed Changes to Project Structures

23. Under section 4.35(f)(1)(i), a material amendment to the proposed plan of development includes "a change in the installed capacity, or the number or location of any generating units of the proposed project if the change would significantly modify the flow regime associated with the project." When compared to the relicense application, the 2005 settlement proposed to reduce the project's installed capacity and had the potential to reduce the number of generating units. Specifically, the project's installed capacity would change from 59.8 MW (with a new 21-MW turbine) to either 49.8 MW with the new 11-MW turbine or 38.8 MW without it, and the number of generating units would either remain the same at six with the new turbine or decrease to five without it. As explained below, however, neither the possible reduction in the number of generating units nor the decrease in the project's installed capacity would significantly modify the project's flow regime.

24. The "flow regime" associated with a hydroelectric project is a term that is frequently used in Commission practice but is not defined in either the FPA or the Commission's regulations. Nor have we identified any Commission decisions defining the term. In countless Commission decisions, it is used simply to refer to plans describing the schedule and amount of minimum flows to be provided to a project's bypassed reach.[39]

[39] For example, in *Puget*, the Commission reviewed the applicant's proposal to provide a continuous minimum flow of 130 cfs year round, resource agencies' recommendation for seasonally adjusted minimum flows ranging between 350 cfs and 500 cfs, and four Commission-staff suggested alternative flow regimes ranging from flows of 130 cfs to 200 cfs (staff alternative 1) to 265 cfs to 400 cfs (staff alternative 4). Each flow regime specified the amount of flow to be provided to the bypassed reach at particular times during the year. They differed in the amount of fish habitat that they would provide overall and during different seasons. *See Puget Sound Energy, Inc.*, 81 FERC ¶ 61,354, at 62,657-58 (1997). *See also Philadelphia Electric Power Co.*, 26 FERC ¶ 63,111, at 63,574-75 and 65,387 (1984) (proceeding before an administrative law judge to determine what study should be undertaken to provide the basis for selecting a permanent flow regime for the Conowingo Project No. 405; judge ordered an initial study for five years of the interim flow regime (which required a minimum flow of 5,000 cfs between April 15 and September 15) to establish a baseline, and a second five-year study of a flow regime that varied by season (which required a minimum flow of 10,000 cfs during April through June, 5,000 cfs during July through September, and 3,000 cfs during October through March)). On rehearing, the Commission determined that this study method would require too much time to adequately study a sufficient number of flow regimes, and required that the licensee establish a permanent flow regime (continued)

25. In the sense most relevant here, a "regime" is defined as a "regimen," "a regular pattern of occurrence or action," or "a mode of rule or management."[40] A "regimen" is defined, in turn, as "a systematic plan," "a regular course of action," or a "rule."[41] In Commission practice, therefore, a project's "flow regime" is the set of rules governing how flows are to be managed at and released from the project. While there are a number of factors that can influence the availability of flows, the primary elements that characterize a project's flow regime are its mode of operation and conditions that specify the amount, location, and timing of any required flow releases.

26. For example, a "peaking" project uses a store-and-release method of operation that allows flows to be accumulated or stored in the project reservoir during off-peak demand periods and released later to generate power during times of peak energy demand. Reservoir levels may fluctuate widely in this mode of operation, although the fluctuations can be moderated by minimum flow requirements and ramping rates (rules regarding the allowable rate of change in minimum flow releases to minimize downstream fish stranding). In contrast, a "run-of-river" project uses available flows to generate power in a manner such that inflows to the project are approximately equal to outflows, with a limited amount of allowable fluctuation in reservoir levels.

27. In addition to rules regarding a project's mode of operation, a project may also be required to release flows at various locations for different purposes. Most commonly, a project will be required to release minimum flows to the bypassed reach to benefit fish and wildlife resources. These minimum flows can be either continuous, or can vary by season and can include monitoring and adjustments to accommodate different weather patterns (with different releases required for years with normal, high, or low amounts of rainfall). Flow releases may also be required for navigation, recreation (such as whitewater boating), attraction or migration of fish, movement of fish through passage facilities, improved appearance of a waterfall, or flushing sediments down the river. Collectively, these rules regarding a project's mode of operation and release of flows define the project's flow regime.

28. Available flows in a river may vary by season, and hydroelectric projects are typically sized to make advantageous use of those flows. Hydroelectric turbines have a

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through the use of a habitat-based study using the Instream Flow Incremental Methodology (IFIM) to ascertain the available habitat under various flow conditions. *See Philadelphia Electric Power Co.*, 38 FERC ¶ 61,003, at 61,008-10 (1987).

[40] *Merriam-Webster Online Dictionary* (2010). Retrieved Feb. 17, 2010, from http://www.merriam-webster.com/dictionary/regime .

[41] *Id.*

minimum and maximum capacity, as well as a capacity at which they are most efficient. If available flows are higher than the maximum hydraulic capacity of a project, the excess flows cannot be used for generation and will therefore be released as spill into either the bypassed reach of the river or over the dam to the river downstream. If available flows are less than the maximum hydraulic capacity of a project, the project will generate at less than the maximum hydraulic capacity of the turbines. Depending on how much water is available in the river, minimum flows or other required releases can reduce the amount of water that is available for power generation, or can preclude generation altogether during certain low flow periods when flows are less than the minimum hydraulic capacity of a turbine. For this reason, a project's flow regime (that is, the rules governing a project's mode of operation and required flow releases) determines how much water will be available for power generation. The hydraulic capacity of the turbines, in turn, affects how much of that available water can be used to generate power, and at what efficiency.

29. In order to isolate the effect of the change in installed capacity from other changes proposed in the 2005 settlement, we first examine the effect of only the proposed decrease in installed capacity, assuming no change in mode of operation or required flow releases from the project. We then examine the effect of proposed changes in operation and required flow releases, as discussed in more detail in the next section. In the relicense application, the 59.8-MW project would have a maximum hydraulic capacity of 8,910 cfs. Under the 2005 settlement, the project's maximum hydraulic capacity would decrease to either 7,510 cfs with the new 11-MW turbine or 5,910 cfs without it. For a run-of-river project with a specified minimum flow release, these reductions in installed capacity could occur independently of any proposed changes in minimum flows. The minimum flow requirements would affect the availability of flows for generation, but a change in project size would neither cause nor require a corresponding change in minimum flows. Instead, either of these proposed reductions in turbine capacity would make additional flows available to meet the minimum flow regime, in a manner similar to the proposal to delete the 21-MW turbine that the court reviewed and affirmed in the remand order. For all three project sizes (59.8 MW, 49.8 MW, or 38.8 MW), the parties to the settlement could propose, and the Commission could require, a full range of minimum flows for the project. Thus, reducing the project's maximum hydraulic capacity would have no effect on the project's flow regime (that is, the rules governing flow releases from the project). Decreasing the project's size would increase the amount and frequency of flows that would enter the bypassed reach or be spilled over the dam instead of passing through the turbines for power generation. This would occur because only those flows not required to be released as minimum flows or for other purposes would be available for generation, and any excess flows not usable for generation would be released to the bypassed reach of the river or downstream of the dam. Thus, for a run-of-river project with a specified minimum flow release, a decrease in the project's installed capacity would not significantly affect the project's flow regime and would not

constitute a material amendment, such that the proposal should be considered an entirely new project.[42]

30. Under 4.35(f)(1)(ii), a material change in the location of the powerhouse can constitute a material amendment, if the change would enlarge, reduce, or relocate the area of the reservoir or cause adverse environmental impacts not previously discussed in the original application. The relicense application proposed to expand the powerhouse to add the new 21-MW turbine. The 2005 settlement proposed to add a new 11-MW turbine in either a new powerhouse adjacent to the existing powerhouse or an addition to the existing powerhouse at the same location. In either case, the new powerhouse or powerhouse addition would be about half the size of the addition to the powerhouse planned in the relicense application. Because the construction impacts and location would not change, there is no material difference between expanding the existing powerhouse and constructing a new powerhouse adjacent to it. Expanding the powerhouse or constructing a new powerhouse to add a smaller turbine at the same location as originally proposed would not cause any changes to the area of the reservoir. Either option would result in either the same environmental effects as previously considered in connection with the relicense application or lesser environmental effects if the powerhouse or powerhouse addition were to result in a smaller area of environmental disturbance. Omitting the proposed powerhouse expansion would result in no change to the reservoir or the existing environment. Therefore, these changes to the powerhouse would not constitute a material amendment to the plans of development, as defined in section 4.35(f)(1)(ii).

31. Both the 1991 application and the 2005 settlement proposed to deepen the power canal to expand its hydraulic capacity to accommodate the new turbine. Thus, the settlement would result in no change to the proposed expansion of the power canal if the new turbine is installed, and no change to the environment if the expansion of the canal did not occur. In either case, the settlement would not constitute a fundamental and significant change to the plans of development, such that the proposal should be considered a new project.

32. For downstream migrating fish, the 1991 application proposed to install a behavioral barrier at the dam to direct fish into the bypassed reach and over the falls into a plunge pool. In 1997, the U.S. Departments of Commerce and the Interior filed

[42] Depending on a project's mode of operation and other project-specific factors, a change in installed capacity might significantly affect a project's flow regime. Having found in this case that the proposed changes to the flow regime are not significant, we need not and do not determine in this case what level of change would be required in order to constitute a significant modification of the flow regime associated with a proposed project.

mandatory fishway prescriptions for downstream fish passage under section 18 of the FPA. The 2005 settlement proposed to develop a plan for a downstream fishway to include screening of the bypass flow release mechanism in the project canal near the upper gatehouse at the right end of the dam, an angled bar rack upstream of the lower gatehouse to guide fish to a downstream bypass, and a fish passage pipe or flume near the right end of the new angled bar rack. This downstream fishway would be developed in consultation with Interior and Commerce and would require their approval, as well as the Commission's approval. The settlement also allowed for installation of a "fish friendly" turbine as part of the proposed new sixth generating unit. After a period of effectiveness monitoring, the new turbine could replace the downstream fishway as the primary means of downstream fish passage if it proved to be more effective at safely passing fish, although the fishway would be maintained and operated for fish passage as necessary during any planned outages of the new unit.[43]

33. The proposed change from a vertical Kaplan turbine to a "fish-friendly" design is a minor adjustment to the plans for fish passage, not a material change to the plans of development. Hydroelectric projects can use different types of turbines without fundamentally altering the plans of development, such that the proposal would be considered a new project. Similarly, the fish passage improvements proposed in the 2005 settlement are minor adjustments, not fundamental and significant changes to the plan of development that would warrant treating the proposal as a new project. Under section 18 of the FPA, Interior and Commerce have authority to prescribe mandatory fishways. Therefore, any hydroelectric license application is subject to modification by inclusion of fish passage facilities. An applicant's agreement to install fish passage facilities, or to upgrade proposed fish passage facilities, does not result in a new project. Rather, it is an ordinary alteration of the plan of development. While these types of changes may provide considerable benefits to fishery resources and may have significant costs, they are not fundamental and significant changes to the plans of development that would warrant treating the proposal as a new project.

2. Changes in Project Operation and Other Measures

34. In addition to the decrease in installed capacity, the 2005 settlement also proposed changes to the project's minimum flow releases, aesthetic flows, and other measures, such as streambed modifications and recreation. As further explained below, these changes were minor alterations to the plans of development, rather than fundamental and significant changes that would warrant treating the proposal as a new and different

[43] If the new turbine proved to be less effective at safely passing fish, its intake would be screened with racks and seasonal overlays and the fishway would continue to operate as the primary means of fish passage.

project. They are the types of ordinary and expected changes that routinely occur in hydroelectric licensing proceedings.

35. Commission relicensing proceedings are iterative processes. In the normal course of events, a licensee will file an application, setting forth its proposal for future project operation under a new license, and including information, such as a detailed environmental report, sufficient to make clear what environmental and developmental resources may be affected by the project. When the Commission accepts a relicense application, it issues public notice, seeking comments, motions to intervene, and protests. At that point, entities that may be interested in the outcome of the proceeding have been put on notice of the licensee's proposal, such that if they wish to preserve the opportunity to seek rehearing or appellate review of any Commission order in the proceeding, they must elect to intervene or risk subsequently being found to have given up the right to become a party to the case as a result of having slept on their rights.[44]

36. During the course of a relicensing proceeding, many aspects of the project proposal under examination may change. Many of these opportunities for change are statutorily based, such as fish and wildlife recommendations under FPA section 10(j), fishway prescriptions under FPA section 18, mandatory conditions to protect federal reservations under FPA section 4(e), conditions to protect water quality under section 401 of the Clean Water Act, and conditions to protect threatened and endangered species under section 7 of the Endangered Species Act. For example, state and federal resource agencies, non-governmental organizations, or private citizens typically suggest alternatives to the applicant's original proposal. Often, different ranges of minimum flows, seasonal flows to address fish migration, upstream and downstream fish passage, increases or decreases in recreational proposals, and ways to address flood control or irrigation needs may be suggested. Where, as here, the parties are able to reach consensus on some or all issues in a proceeding, a settlement may be presented for Commission consideration. In almost all cases, the settlement will differ to at least some degree from the proposal set forth in the license application. In other instances, agencies will propose mandatory license conditions, or Commission staff will develop alternatives of its own to address public interest considerations. This exchange of ideas and alteration of the licensing proposal is characteristic of the process.

37. The fact that a licensing proposal changes, whether as a result of action by the applicant, other entities involved in the proceeding, or Commission staff, does not necessarily require the Commission to issue additional public notice and to seek new motions to intervene. If that were so, the Commission would be required to reopen its process with extreme frequency. When interested entities are put on notice of the subject matter and the issues involved in a relicensing case, that is the appropriate time for them

[44] *See California Trout v. FERC*, 572 F.3d 1003 (9th Cir. 2009).

to seek to join the proceeding. They cannot expect – nor does the Commission offer – new chances to intervene whenever the original proposal is altered. Instead, the Commission generally takes this step only when a new proposal materially changes the original proposal, such that it should be considered an entirely new project. So, for example, if an applicant proposed to build a new dam not described in its application or to add an additional development to the licensed project (or to delete one), the proposal will have been changed sufficiently to warrant additional notice and opportunity to participate under our material amendment rule.

38. On the other hand, where alterations to a proposed project only affect, to a limited degree, resources that the public was on notice from the application stage were affected by the project, there is no obligation to reopen the proceeding to intervention. If a licensee originally proposed to release a minimum flow of 100 cfs, and later changed that proposal to 50 cfs (or to 200 cfs), this would not constitute a fundamental and significant change to the proposed plan of development, and there would thus be no reason for the Commission to offer a new chance to intervene. Anyone interested in the amount of water released from the project dam would have been on notice from the beginning of the proceeding that minimum flows were potentially at issue. Likewise, if the licensee had made proposals regarding the number and kind of recreation facilities it proposed to maintain, anyone for whom project recreation was important had already been notified that recreation issues would be considered in the proceeding, and would not be entitled to a second chance to enter the proceeding based on minor changes to the number and kind of those facilities. Indeed, even where later iterations of the project proposal that would not rise to the level of a material amendment would arguably provide less protection for a resource, an entity cannot presume that the outcome of a case will be to its liking and then seek to intervene when that does not prove to be the case.[45]

39. Thus, we must examine the changes proposed in the 2005 settlement in this context, keeping in mind the purpose and intent of the material amendment rule. The 1991 relicense application proposed a continuous minimum flow of 60 cfs, whereas the 2005 settlement proposed a minimum flow release schedule of from 120 cfs to 245 cfs, depending on the season. This was a simple adjustment in the amount of minimum flows that will be provided at different times, and was neither fundamental nor significant from a material amendment analysis standpoint. Thus, in the material amendment context, the changes in minimum flows proposed in the 2005 offer of settlement are ordinary, routine, and expected adjustments to the minimum flow schedule, and are not the sort of fundamental and significant change that would warrant treating the application as one for an entirely new project.

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[45] *Id*. at 1019, *citing S. Cal. Edison Co.*, 100 FERC ¶ 61,327 (2002); *Niagara Mohawk Power Corp.*, 100 FERC ¶ 61,247 (2002).

40. Similarly, minor changes to a project's proposed mode of operation would not constitute a material amendment. The 1991 application described the project's mode of operation as "run-of-river with pondage," allowing a maximum drawdown of the reservoir of one foot for power generation. The 2005 settlement also proposed to operate the project in a run-of-river mode, but limited the maximum drawdown of the reservoir to 0.5 feet for power generation. In either case, outflows would be approximately the same as inflows, with allowable fluctuations in reservoir level within a limited range. When compared with a maximum reservoir fluctuation of one foot, a six-inch reduction in the maximum drawdown would further stabilize water levels and reduce potential effects of allowing the reservoir level to fluctuate.[46] This is a minor adjustment, not a fundamental and significant change that would warrant treating the proposal as an entirely new project.

41. Nor would a proposed increase in aesthetic flows over Cohoes Falls constitute a material amendment of the plans of development. As noted, the original application did not propose any aesthetic flows over Cohoes Falls. In 1993, in response to staff's additional information request, the applicant proposed to schedule flows of 500 cfs over Cohoes Falls for an 8-hour period for 3 days during June, July, and the first half of August. The 2005 settlement agreement proposed aesthetic flows of 500 cfs over the falls on weekends and Federal holidays from May 15 to October 31 during daylight hours. Thus, the settlement proposed the same aesthetic flow releases as the amended relicense application, but would provide them on more days and for a longer period during the year.[47] This increase in the frequency of aesthetic flows over the falls is a minor change, and is more in the nature of fine-tuning than a major alteration of an applicant's plans of development. It does not amend the relicense application in a fundamental and significant manner, such that the magnitude of the change would warrant treating the proposal as a new project. We therefore conclude that it is not a material amendment of the relicense application.

42. The 1991 application did not propose any changes to the bypassed reach. The 2005 settlement proposed to make streambed modifications below the dam to better distribute bypassed release flows. This is a minor change to the plans of development. It could be added or omitted without resulting in a new project and thus would not constitute a material amendment.

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[46] *See* Final EA at 48.

[47] This change would provide more opportunities for viewing the falls at 500 cfs, which Commission staff found is the threshold where aesthetic views are significantly enhanced. *See* final EA at 77.

43. The 1991 application proposed to provide improvements to Overlook Park, including new signs and trash receptacles, and to provide a fishing access and picnic area along the south shore of the reservoir. The 2005 settlement omitted these proposals, in part because the parties entered into an off-license agreement that required Erie to convey its interest in Overlook Park to the City of Cohoes. The 2005 settlement proposed to develop a recreation plan to include a new footbridge across the power canal, two viewing areas, footpaths to the base of the falls and fishing access near the tailrace, a trail system on the island, and signs and exhibits. These are minor changes in proposed recreation measures that would not result in a new project. Therefore, they would not constitute a fundamental and significant change to the plans of development.

44. As discussed above, we have found that each of the changes proposed in the 2005 settlement were not a material amendment of the relicense application. However, because a material amendment is defined as any fundamental and significant change, we find it appropriate to also consider whether the cumulative effect of all of these changes, when considered together, would constitute a material amendment. We conclude that they would not. As explained above, the 2005 settlement did not materially alter any of the physical structures of the project. In addition, the proposed changes to non-developmental aspects of the project were all well within the scope of minor adjustments that typically occur in hydroelectric licensing proceedings. Taken together, these changes did not alter the proposed project in a fundamental and significant way, such that the proposal should be regarded as a new and different project. Rather, although the changes proposed in the 2005 settlement provided significant benefits to the resources involved, they did so without radically altering the overall plans of development for the site. The 2005 settlement proposed to develop the same basic project, with minor adjustments. Accordingly, we find that the 2005 offer of settlement, in its entirety, did not constitute a material amendment of the relicense application.

Feasibility of the Cohoes Falls Project

45. In the remand order, the court directed the Commission to consider in the first instance whether the 2005 offer of settlement materially amended the School Street license application. As discussed above, we find that the settlement was not a material amendment to the license application. Therefore, it would appear that we would not be required to take the next steps, as set forth in the remand order, to consider Green Island's motion as timely filed, analyze it accordingly, consider Green Island's evidence to determine whether the Cohoes Falls Project is a feasible alternative, and, if it is feasible, "give it full consideration when determining whether the School Street Project satisfies the 'best adapted' standard" of sections 10 and 15 of the FPA.[48] However, as the court

[48] *Green Island*, 577 F.3d at 168. The court stated: "[W]e remand this case for FERC to consider in the first instance whether the Offer of Settlement was a material

(continued)

recognized, under *Scenic Hudson* the Commission is "statutorily obligated, pursuant to the 'best adapted' standard set forth in sections 10 and 15 of the FPA, to give full consideration to all feasible alternatives, even where it ultimately cannot license those alternatives."[49] In addition, under the National Environmental Policy Act (NEPA)[50] and as a matter of Commission policy, the Commission examines all reasonable alternatives, regardless of whether they are raised by an intervenor or in comments filed by a person who is not a party to the proceeding. Therefore, to ensure that we have considered all relevant factors that may have a bearing on our decision, we review the evidence to determine whether the Cohoes Falls Project is a feasible alternative to the School Street Project.

46. Our context for doing so bears examining. Because this is not a competitive relicensing proceeding, we could not issue a license to Green Island for the Cohoes Falls Project in lieu of issuing a license to Erie for the School Street Project. Instead, our task is limited to considering whether the Cohoes Falls Project is a feasible alternative and, if so, whether and how it might affect our consideration of whether the School Street Project is "best adapted to a comprehensive plan for developing or improving" the Mohawk River, as required by FPA section 10(a)(1), or is "best adapted to serve the public interest," as required by FPA section 15(a)(2). If, in our judgment, the Cohoes Falls Project would be better adapted, we could either: (1) require changes to Erie's School Street Project to make it best adapted, including possibly requiring Erie to develop the Cohoes Falls Project in lieu of the School Street Project, or (2) deny a new license for the School Street Project, require that the project be retired, and issue a notice inviting new applications to develop the site.

47. In light of this procedural context, we question whether Green Island would have standing to challenge our findings concerning whether the Cohoes Falls Project is a feasible alternative to the School Street Project, or whether consideration of that alternative should prompt us either to require changes to Erie's plans of development or to deny Erie's relicense application. We recognize, of course, that Green Island has standing to challenge our findings on the material amendment issue, because our

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amendment to the license application. If it was, then FERC must consider Green Island's motion to intervene in the relicensing proceeding as timely filed and analyze it accordingly. In the event that it grants Green Island's motion to intervene, FERC is statutorily obligated to consider Green Island's evidence regarding the Cohoes Falls Project proposal." *Id.* at 168-69.

[49] *Id*. at 168, *citing Scenic Hudson Preservation Conference v. FPC*, 354 F.2d 608 (2nd Cir 1965).

[50] 42 U.S.C. § 4331 *et seq*. (2006).

resolution of that issue could affect its status as a party to the remanded School Street relicensing proceeding. We note, however, that throughout these proceedings, Green Island has made clear that its interest is in developing the Cohoes Falls Project itself, not simply in ensuring that the Cohoes Falls Project is considered as an alternative to the School Street Project. At this stage of the proceeding, when competing applications are statutorily barred, Green Island's interest as a potential competitor is not adequate for standing.[51]

48. As outlined above, even if we were to deny a license for the School Street Project and solicit new applications for the site, it is by no means certain that Green Island would then be able to develop its proposed Cohoes Falls Project. Before it could file a license application, Green Island would be required to consult with resource agencies and conduct studies. If the application was accepted, the Commission would be required to issue notice of it, and other entities might file competing applications in response to the notice. Green Island would have to obtain water quality certification from the state certifying agency before the Commission could issue a license for the project. During the licensing proceeding, resource agencies would have an opportunity to recommend or impose license conditions, which could affect project economics. The Commission might ultimately determine that the Cohoes Falls Project should not be licensed, or that a license should be awarded to a competing applicant for a better adapted project. Because we lack authority to issue a license to Green Island for the Cohoes Falls Project in this remanded proceeding, we fail to see how Green Island could be said to have suffered any concrete injury as a result of our findings regarding the feasibility of the Cohoes Falls Project, or that it is likely, as opposed to merely speculative, that any such injury could be redressed by a favorable decision with regard to that issue (i.e., a determination that the Cohoes Falls Project is a feasible alternative to the School Street Project).[52]

49. In any event, as discussed in detail below, we find that the Cohoes Falls Project is not a feasible alternative to the School Street Project. Therefore, it would not cause us to

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[51] *See City of Orville, Ohio v. FERC*, 147 F.3d 979, 986-87 (D.C. Cir. 1998).

[52] These concerns would remain even if Green Island's motion to intervene was considered timely and it was admitted as a party to the proceeding. Under our rules, if a motion to intervene is timely and unopposed, the movant becomes a party without further action of the Commission. *See* 18 C.F.R. § 385.214(c)(1) (2009). Thus, there is no need for the Commission to review the contents of the motion. In order to seek rehearing or judicial review, a party must be "aggrieved" by a Commission order. *See* 18 C.F.R. § 385.713(b) and (c) (2009) and section 313 of the FPA, 16 U.S.C. § 825l(b) (2006). As the court recognized in the remand order, this requirement is coextensive with the requirement that a party be able to establish standing to challenge the order. *See Green Island*, 577 F.3d at 158.

determine that the School Street Project should not be licensed because it fails to meet the "best adapted" standard of sections 10 and 15 of the FPA.

50. A "feasible" alternative is one that is "reasonable, likely" or "capable of being done or carried out."[53] To determine whether the Cohoes Falls Project is a feasible alternative to the School Street Project, we consider its proposed design, construction, operation, generation, environmental and recreational measures, and cost. We find that, although the project appears to be feasible from an engineering standpoint, it is not economically feasible, such that we could consider it a reasonable alternative to the School Street Project.

51. The Cohoes Falls Project would consist of: (1) a new 11-foot-high, 700 foot-long concrete weir; (2) a 200-acre reservoir with a normal water surface elevation of 156.1 feet National Geodetic Vertical Datum (NGVD);[54] (3) a new 150-foot-wide, 300-foot-long concrete intake structure equipped with 0.25-inch opening intake screens; (4) a new 100-foot-diameter concrete underground powerhouse containing two Kaplan type turbines with a total installed capacity of 100 MW; and (5) two new 350-foot-long, 30-foot-diameter tunnels discharging water back to the Mohawk River. Project power would be transmitted through a new 34.5-kilovolt (kV), 300-foot-long transmission line.

52. The concrete labyrinth weir (or new dam) would be a combined dam and overflow structure located approximately 600 feet upstream of Cohoes Falls comprised of multiple V-shaped cycles.[55] The downstream apex of the labyrinth cycles would be curvilinear in plan and irregular in section to provide improved aesthetics to the flow passing over the spillway. The project description states that the aesthetic flow released over the spillway is intended to appear to observers as a natural "waterfall" feature to enhance the overall view of Cohoes Falls. The project intake structure, powerhouse, and discharge tunnels would bypass a reach of the Mohawk River that would be about 750 feet long and would include Cohoes Falls.

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[53] Merriam-Webster Online Dictionary (2010), retrieved March 15, 2010, from http://www.merriam-webster.com/dictionary/feasible .

[54] Green Island used National Geodetic Vertical Datum in its draft application. This is an alternate way of describing the average height of the ocean's surface, and yields the same elevation values as mean sea level, as used in Erie's relicense application.

[55] The multiple V-shaped cycle is a repetitive interconnected design in which, when viewing the proposed dam from above, the distance across each V opening would be about 22.5 feet. *See* Green Island's draft "Application for License, Cohoes Falls Project," Exhibit F, Labyrinth Weir Plan and Section drawing (filed May 15, 2006), included in Green Island's "Offer of Settlement" in the relicensing docket for P-2539.

53. Construction of the Cohoes Falls Project would require removal and decommissioning of existing School Street Project facilities. The existing dam, constructed in 1831 to a crest elevation of 154.2 feet NGVD and raised in 1911 to a crest elevation of 156.1 feet NGVD, would be partially removed. As an alternative, only the newer concrete cap portion would be removed, leaving the 1831 portion of the dam in place. Under either option, the expanded reservoir of the new Cohoes Falls Project dam would completely submerge any remaining portions of the School Street dam. The remaining structures, including the existing School Street powerhouse and lower gatehouse, upper gatehouse, and power canal, would be left in place. The decommissioned powerhouse would be used to create an archaeological interpretive center, including a visitors' center, museum, and cultural resource facilities. The upper gatehouse would be used to make controlled, low-volume releases to the power canal for aesthetic purposes and consumptive use by the City of Cohoes and the Village of Green Island. The existing municipal water intake for the City of Cohoes that is currently located in the power canal would be relocated to the upper gatehouse. Continued municipal water supply would be accomplished using gravity feed bypass piping from this location to the existing water intake structure. The power canal would no longer be maintained under Commission jurisdiction, but would be used and maintained under local jurisdiction as a non-power water conveyance facility.

54. The Cohoes Falls Project would operate in a run-of-river mode, and would generate electricity using flows between 400 cfs (the minimum hydraulic capacity of a single turbine), and 16,000 cfs (the maximum hydraulic capacity of the two turbines). A continuous minimum flow of 500 cfs would be provided to the bypassed reach. Flows of at least 920 cfs would be required for generation, comprising 500 cfs to the bypassed reach, 20 cfs to the canal for municipal consumptive use, and 400 cfs to the powerhouse for generation. At flows above 16,520 cfs, the project would generate at maximum capacity and pass the excess flows over the spillway to the bypassed reach of the river.

55. The Cohoes Falls Project would include downstream passage facilities for Blueback Herring and American Eel. The proposed fish conveyance facilities would incorporate alternative structures that could be selectively used to provide passage either in an overflow weir directly to the river above the falls at elevation 120 feet or by an underground pipe terminating in the tailwater below the falls at elevation 45 feet.

56. In addition to the archaeological interpretive center, the Cohoes Falls Project would include a walkway at river level below Cohoes Falls, a scenic overlook of Cohoes Falls, a public park, designated boat and shoreline fishing access and portage facilities, a kayak course in the Mohawk River and a water park kayak course in the decommissioned power canal, and bicycle and pedestrian trails. To enhance the view of Cohoes Falls and the Mohawk River, several high voltage transmission lines in the vicinity of the existing

powerhouse, Overlook Park, and falls would be placed underground. There would also be a possibility of adding nighttime illumination of Cohoes Falls.[56]

57. Project generation is estimated based on the amount of water expected to be available in the river, turbine unit maximum and minimum hydraulic capacities and efficiencies, minimum flow releases to the bypassed reach and water withdrawal for municipal consumptive use, and the head of the project (reservoir elevation minus tailwater elevation). The amount of available water is estimated by using monthly flow duration curves. These are graphical representations of the natural monthly streamflow of a river in terms of order of magnitude (flow in cfs) and percent of time flow is equaled or exceeded.[57]

58. Using these factors, Green Island estimates that the Cohoes Falls Project would have an average annual generation of 300,000 megawatt-hours (MWh). Commission staff estimates that the project would have an average annual generation of about 287,500 MWH, or 12,500 MWh less than Green Island's estimate. This reduction in generation is the result of staff's determination that tailwater elevations would be higher than Green Island estimated. Green Island included a tailwater rating curve[58] in Exhibit B of its draft application, but did not provide a reference or an explanation of how the curve was developed. Staff developed a tailwater rating curve based on stream flow and water surface elevations recorded at the USGS gage station located downstream of Cohoes Falls.

59. The Cohoes Falls Project would have a maximum hydraulic capacity of 16,000 cfs. The maximum hydraulic capacity plotted on the annual flow duration curve

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[56] The project description indicates that some local residents and Native American groups have raised concerns and objections to this proposal, and that a final decision would be made "only with the concurrence of all stakeholders." *See* Green Island's draft "Application for License, Cohoes Falls Project," Exhibit A, at 3 (filed May 15, 2006).

[57] The flow duration curves were developed using the recorded information from the United States Geodetic Survey (USGS) gauging station number 01357500, which is located in the bypassed reach of the Mohawk River downstream of Cohoes Falls and upstream of the School Street Project powerhouse. *See* Niagara Mohawk's Application for New License for P-2539, Exhibit B, Figures B-3 through B-6 (filed Dec. 23, 1991); *see also* Green Island's draft "Application for License, Cohoes Falls Project," Exhibit B, at 8-11 (filed May 15, 2006).

[58] A tailwater rating curve is a graphical representation that shows how tailwater surface elevation varies with stream discharge (i.e., tailwater elevations increase as river flows increase, and decrease as river flows decrease).

shows that flows would exceed the project's hydraulic capacity about 7 percent of the time. Therefore, the Cohoes Falls Project would fully utilize the maximum project capacity of 100 MW about 26 days annually and would generate about 62,400 MWh of electricity on those days. The project would operate using less than the maximum capacity on the remaining 339 days.

60. Green Island estimates that the total cost to construct the Cohoes Falls Project would be $75,000,000. Green Island includes a summary table in Exhibit D of its draft application, listing the estimated capital cost as including the cost of acquiring land and water rights; power plant structures, facilities, and equipment; roads, bridges, and site amenities; transmission line relocation; a construction contingency allowance; and administration, engineering, legal and construction management during project construction.[59] Green Island's list of estimated costs does not include the cost of acquiring New York State owned land and water rights, which Green Island estimates at $1,000,000, or the cost to decommission and leave in place the existing School Street Project facilities, which Green Island estimates at $1,800,000. Including these necessary costs and updating all cost estimates to 2010 dollars yields a total estimated cost to construct the Cohoes Falls Project of $92,270,800.[60]

61. Green Island's list of estimated costs also does not include an amount for acquiring the School Street Project. Because this is not a competitive relicensing proceeding, Green Island could not acquire the School Street Project by paying Erie the project's net investment, as provided in section 14 of the FPA. Therefore, Commission staff did not include this cost as part of the cost of developing the Cohoes Falls Project.[61]

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[59] Green Island did not include any separate cost information regarding the cost to construct the proposed recreational measures for the Cohoes Falls Project, so we assume these costs are included in the total. If they are not, the total construction cost would be higher.

[60] Commission staff adjusted Green Island's April 2005 cost information to 2010 dollars using the Construct Cost Trends of the U.S. Department of the Interior's Bureau of Reclamation. *See* http://www.usbr.gov/pmts/estimate/cost_trend.html.

[61] We note, however, that if Green Island were to obtain a license for the Cohoes Falls Project, it would have to acquire the School Street Project, and it could not do so by paying Erie the project's net investment. As a result, the economic cost for Green Island to develop its Cohoes Falls Project would actually be much higher than Commission staff's estimate. Green Island notes that Niagara Mohawk reported a net investment in the School Street Project of $3,925,242 in the 1991 relicense application, and that Brookfield Power asserts a net investment value of $7,915,359. *See* Green Island's draft "Application for License, Cohoes Falls Project," Exhibit D, section D.3 (filed

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62. Based on a report of the Idaho National Engineering and Environmental Laboratory (Idaho National Laboratory),[62] the median cost in 2002 of developing new hydroelectric capacity at undeveloped sites, such as the Cohoes Falls Project, was $2,700 per kilowatt (kW), which would be $3,700 per kW in 2010 dollars.[63] Using this estimate, the cost to construct the 100-MW Cohoes Falls Project would be about $370,000,000 in 2010 dollars, which is considerably higher than Green Island's cost estimate.

63. Green Island estimates that the annual operation and maintenance cost for the Cohoes Falls Project, including project administration and insurance, would be $2,263,000 (in 2010 dollars).[64] The Energy Information Administration's cost estimate for operating and maintaining a hydroelectric project using conventional hydropower technology yields a cost estimate that is comparable to Green Island's estimate.[65]

64. Green Island provided the average annual value of project power for the Cohoes Falls Project over a 50-year license, but did not provide a current value for least cost alternative power. According to the New York Independent System Operator,[66] the twelve month average real time market price for the Capital Region, the region of New York State where the Cohoes Falls Project would be located, is $41.00 per MWh.

May 15, 2006). *See also* Niagara Mohawk's Application for New License for P-2539, Exhibit D, at D-2 (filed Dec. 23, 1991). In 2006, based on sales of comparable hydro projects, Erie estimated the value of its School Street Project to be about $90,000,000. *See* Erie's response in opposition to Green Island's motion to present evidence at 6 (filed June 20, 2006).

[62] Estimation of Economic Parameters of U.S. Hydropower Resources (Idaho National Engineering and Environmental Laboratory, June 2003).

[63] Staff used the Bureau of Reclamation's Construct Cost Trends to adjust the cost to develop new capacity at the Cohoes Falls Project to 2010 dollars. *See* n.57, *supra*.

[64] Staff used the U.S. Bureau of Labor Statistics' employment cost index to adjust the operation and maintenance cost to 2010 dollars. *See* http://stats.bls.gov/ncs/ect.

[65] The Energy Information Administration's cost estimates for operation and maintenance are based on a combination of annual generation and installed capacity. *See* http://www.eia.doe.gov/oiaf/aeo/assumption/pdf/electricity.pdf#page=3.

[66] The New York Independent System Operator manages New York's electricity transmission grid and oversees the transactions of wholesale electricity markets. *See* http://www.nyiso.com/public/index.jsp.

65. Using Green Island's cost information,[67] the annual cost of constructing, operating, and maintaining the Cohoes Falls Project would be about $8,966,370, or $31.19 per MWh.[68] The proposed project would generate an estimated average of 287,500 MWh of energy annually. Multiplying this estimate of average annual generation by the cost of alternative power of $41.00 per MWh, we get a total value of the project's power of about $11,787,500. To determine whether the proposed project is currently economically beneficial, we subtract the project's cost from the value of the project's power. Therefore, in the first year of operation, the project would cost about $2,821,130, or $9.81 per MWh less than the likely alternative cost of power.[69]

66. Using Idaho National Laboratory's cost to develop capacity at an undeveloped site, the annual cost of constructing, operating, and maintaining the Cohoes Falls Project would be about $29,143,100, or $101.37 per MWh. The proposed project would generate the same estimated average of 287,500 MWh of energy annually, with a total value of about $11,787,500. Therefore, in the first year of operation, the project would cost about $17,355,600, or $60.37 per MWh more than the likely alternative cost of power.

67. In a competitive relicensing proceeding, section 15(a)(2) of the FPA would require the Commission to determine which proposal is "best adapted to serve the public interest."[70] In making that determination, the Commission would be required to consider the proposals of competing applicants with respect to the following factors, ensuring that insignificant differences with regard to them are not determinative and would not result in the transfer of a project: (1) plans and abilities to comply with the license; (2) plans for the safe management, operation, and maintenance of the project; (3) plans and abilities to provide efficient and reliable electric service; (4) applicant's need for power;

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[67] Staff used Green Island's estimated cost to construct the Cohoes Falls Project without including an amount for acquiring the School Street Project, and used Green Island's estimated cost for project operation and maintenance, adjusted to 2010 dollars. Further, staff used its own estimate of annual generation instead of Green Island's estimate, for the reasons explained above, and used the New York Independent System Operator's Capital region value for the cost of alternative energy in New York State.

[68] The estimated $92,270,800 to construct the 100-MW Cohoes Falls Project results in a cost of about $923 per kW.

[69] This amount does not include the cost of any federal and state resource agency terms and conditions and other plans to mitigate project effects to the environment that could be associated with licensing the Cohoes Falls Project. These measures would increase the annual cost and reduce the annual net benefits of the project.

[70] 16 U.S.C. § 808(a)(2) (2006).

(5) transmission service; (6) cost effectiveness of plans; and (7) other factors that the Commission considers relevant, except that an applicant's plans concerning fish and wildlife shall not be compared. The Commission must consider these factors regardless of whether there is more than one applicant. In the case of an application by an existing licensee, the Commission must also consider two additional factors under section 15(a)(3) of the FPA: the licensee's record of compliance with the existing license; and the licensee's actions which affect the public.

68. However, because this is not a competitive relicensing proceeding, we are not evaluating the licensing proposals of competing applicants. Instead, we are evaluating two mutually exclusive proposals for generating power at the site. We must examine the proposed Cohoes Falls Project to determine whether it is a feasible alternative to relicensing the School Street Project and, if so, what effect it might have on our decision whether to relicense the School Street Project. Thus, we are comparing projects, not applicants, and the factors listed above that focus on an applicant rather than the project would not be relevant for purposes of comparing the proposed plans of development for the two projects.

69. Both the Cohoes Falls Project and the School Street Project would operate in a run-of-river mode, with reservoir fluctuations limited to 0.5 feet for the School Street Project and 0.1 feet for the Cohoes Falls Project. Thus, both projects would use a similar mode of operation, and we do not regard the difference in reservoir fluctuations as significant. The proposed Cohoes Falls Project would provide a continuous minimum flow of 500 cfs over the spillway and Cohoes Falls, or the volume of flow determined to be required for aesthetic purposes.[71] The School Street Project would provide an aesthetic flow of 500 cfs over Cohoes Falls during daylight hours on weekends and federal holidays from May 15 to October 31. At other times, the School Street Project would provide minimum flows to the bypassed reach (including the falls) of 120 cfs from December 1 through March 31, 135 cfs from April 1 to April 15, and 245 cfs from April 15 through November 30. Thus, both projects would provide aesthetic flows of 500 cfs over the falls, but the Cohoes Falls Project would provide them at all times. This is a significant increase in the amount of time that aesthetic flows would be provided over the falls.

70. Both projects would provide a scenic overlook of Cohoes Falls, but the School Street Project would accomplish this as part of an off-license settlement agreement that would transfer the park to the City of Cohoes. Although this difference would affect whether the measure would be considered part of the proposed project, it is not significant in terms of whether the measure would be provided. The Cohoes Falls Project

[71] *See* Green Island's draft "Application for License, Cohoes Falls Project," Exhibit A, section A.3 (filed May 15, 2006).

would also include a level river walk, public park, designated boat and shoreline fishing access and portage facilities, a kayak course in the Mohawk River and a water park kayak course in the decommissioned power canal, bicycle and pedestrian trails, and an archeological interpretive center with a visitors' center and museum. The School Street Project would include a new pedestrian footbridge across the power canal, a new footpath to the base of the falls and to the project tailrace, a new trail system on the island between the power canal and Cohoes Falls, a footpath for fishing access near the project tailrace, access for the disabled, and interpretive signage. Thus, the Cohoes Falls Project would provide a broader range of recreational enhancements than the School Street Project.

71. The Cohoes Falls Project would bury existing distribution grid transmission lines in the vicinity of Cohoes Falls, whereas the School Street Project would not. This would provide additional aesthetic benefits to the area. Because these distribution lines are not under the Commission's licensing jurisdiction, we could not require Erie to provide this benefit in connection with either the School Street Project or the Cohoes Falls Project.

72. The two projects would provide different measures for fish protection and passage. However, under section 15(a)(2)(G) of the FPA, plans concerning fish and wildlife are to be determined in accordance with section 10 (including the procedures of section 10(j) of the FPA) and are not subject to a comparative evaluation. Accordingly, these differences would not be a significant factor in our comparison of the two proposals.

73. In determining whether to issue a license for both new and existing hydroelectric projects, the Commission considers a number of public interest factors, including the economic benefits of project power. Under the policy established in *Mead*,[72] we use current costs to compare the costs of the project and likely alternative power, without attempting to estimate possible future energy process over the term of a license. The basic purpose of our economic analysis is to provide a general estimate of the potential power benefits and the costs of a project, and of reasonable alternatives to project power. This estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed project. We do not deny the issuance of a license on the basis of our own economic analysis of the economic prospects of a long-term project, but leave it to the licensee to decide whether to accept the license and any associated financial risk.

74. In a competitive relicensing proceeding, section 15(a)(2)(F) would require us to consider the cost-effectiveness of each applicant's plans. However, the factors listed in section 15(a)(2) are applicable regardless of whether there is more than one applicant. Therefore, cost-effectiveness is equally relevant to our determination of whether the Cohoes Falls Project is a feasible alternative to the School Street Project, even if we

[72] *Mead Corp.*, 72 FERC ¶ 61,027, at 61,068-70 (1995).

ultimately cannot license the Cohoes Falls Project. As the court recognized in the remand order, section 4(e) of the FPA requires the Commission to give equal consideration to both developmental and environmental purposes in determining whether to issue a license, and sections 10(a)(1) and 15(a)(2) both require that the Commission determine that the project will be best adapted to serve the public interest.[73] Cost-effectiveness is one of the public interest factors that that the Commission considers in making that determination.

75. Our evaluation of the economics of the two proposals shows that the Cohoes Falls Project would cost significantly more than the School Street Project and would also cost significantly more than currently available alternative power. As discussed above, the average cost of alternative power in the region is $41.00 per MWh. The Cohoes Falls Project would generate about 287,500 MWh annually at a cost of $29,143,100, or $101.37 per MWh, with a total value of about $11,787,500. In the first year of operation, if licensed, the Cohoes Falls Project would cost about $17,355,600, or $60.37 per MWh, more than the likely alternative cost of power.[74] In comparison, the School Street Project with the new turbine would generate about 188,500 MWh annually at a cost (adjusted to 2010 dollars) of $6,189,400, or $32.84 per MWh, with a total value of $7,728,500. Therefore, in the first year of operation, the project would cost about $1,539,100, or $8.16 per MWh less than the likely alternative cost of power.[75] Without the new turbine,

[73] *See Green Island*, 577 F.3d at 166-67 (specifically noting the relevance of the factors in section 15(a)(2) in determining whether the project is "best adapted to serve the public interest.").

[74] This represents the annual cost of constructing, operating, and maintaining the Cohoes Falls Project, using the Idaho National Laboratory's construction cost estimate. As explained earlier, we found that Green Island's cost estimate for operating and maintaining the Cohoes Falls Project was comparable to the Energy Information Administration cost estimate.

[75] This represents the annual cost of the new construction, together with the annual cost of operating and maintaining the School Street Project. Erie estimated the annual cost of operating and maintaining the School Street Project would be $1,311,500 (adjusted to 2010 dollars). This is comparable to the Energy Information Administration estimate. In attachment D to the explanatory statement for the 2005 settlement agreement, Erie estimated that the cost to construct the powerhouse, install the new 11-MW turbine generating unit, and excavate the power canal to increase flow to the new unit was about $24.8 million, or about $2,250 per kW (both adjusted to 2010 dollars). In the Idaho National Laboratory Report, the cost to add capacity at an existing dam with hydroelectric facilities is $960 per kW (adjusted to 2010 dollars). Using the latter value, the estimated cost to add a new 11-MW generating unit would be $10.6 million. Erie's

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the School Street Project would be even more economically beneficial, because the costs of constructing the additional capacity would not be incurred.[76]

76. The Cohoes Falls Project would have about twice the installed capacity and would generate about 53 percent more power than the School Street Project. However, power generated from the Cohoes Falls Project would cost about $60.37 per MWh more than the likely alternative cost of power, and power generated from the School Street Project with the new turbine generator would cost about $8.16 per MWh less than the likely alternative cost of power, a savings of over $68 per MWh compared to the Cohoes Falls Project.[77]

77. We recognize that Green Island provided construction cost information suggesting that the Cohoes Falls Project would generate about 287,500 MWh annually at a cost of $2,821,130, or $9.81 per MWh less than the likely alternative cost of power. If we were to use Green Island's construction cost estimate, we might conclude that the Cohoes Falls Project is slightly more cost-effective than the School Street Project. As discussed above, however, we find that Green Island's construction cost is both unreliable and unrealistic. Green Island's estimated cost of $923 per kW to develop the Cohoes Falls Project is extremely low compared to Idaho National Laboratory's median cost of $3,700 per kW to develop new capacity at an undeveloped site, as well as Erie's estimated cost of $2,250 per kW to develop the additional capacity at the School Street Project. Green Island's extremely low estimate makes the Cohoes Falls Project appear economically feasible, with positive net benefits, rather than the significantly negative economic benefits that result from using realistic cost information for project construction. Although Green Island states that its projected construction cost for the Cohoes Falls

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higher cost estimate can be attributed to the additional expenses of excavating the power canal and relocating a municipal water supply intake structure located in the power canal.

[76] As noted in the license order, the School Street Project without the new turbine would have higher net economic benefits than the School Street Project with the new turbine). *See Erie Boulevard*, 118 FERC ¶ 61,101, at P 106 and n.55 (2007).

[77] The Cohoes Falls Project would generate at maximum capacity (16,000 cfs) only about 7 percent of the time. The School Street Project with the new 11-MW turbine would generate at maximum capacity (7,510 cfs) about 21 percent of the time. Although the Cohoes Falls Project would generate more energy than the School Street Project, this generation would not be economically beneficial. The School Street Project with the new 11-MW generating unit would be appropriately sized to more fully utilize the available flow of the Mohawk River a higher percentage of the time, and would cost less in the first year of operation when compared to the cost of the most likely alternative power source.

Project is based on its "consulting engineer's extensive experience,"[78] the suggestion that Green Island's construction costs might be lower than average for the industry is not relevant to our analysis, because we could not issue a license to Green Island for the Cohoes Falls Project. As explained earlier, we are comparing projects, not applicants, so it would be incorrect to assume that Green Island would be the entity responsible for constructing the Cohoes Falls Project. In order to determine whether the Cohoes Falls Project is a feasible alternative to the School Street Project, we must use realistic cost estimates for project construction to ensure a fair comparison of alternatives.

78. Clearly, when analyzed in these terms, the School Street Project is significantly more cost-effective than the Cohoes Falls Project. If the School Street Project did not exist, our *Mead* policy would permit us to license the Cohoes Falls Project notwithstanding our conclusion that the project would cost more than the likely cost of alternative power (assuming, of course, that we had before us a filed application for the project that would meet the licensing standards of the FPA). This is because our policy recognizes that the licensee is ultimately responsible for making a business judgment of whether to accept the license and any associated economic risk. When comparing alternative projects, however, economic feasibility is a public interest factor that the Commission cannot overlook.

79. In *Holyoke*,[79] the Commission compared two competing relicensing proposals. The existing licensee did not propose to expand the generating capacity of the 43.8-MW project. The competing applicant proposed to add a 15-MW generator in a new powerhouse adjacent to the existing powerhouse. Although both proposals would cost more than then-currently available alternative power, the Commission found that the existing licensee's proposal was significantly more cost-effective than the competing proposal. In other respects, the proposals were not significantly different. The Commission therefore concluded that the license should be granted to the existing licensee.

80. A similar conclusion is warranted here. Although the Cohoes Falls Project would generate more power than the School Street Project and would provide continuous rather

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[78] *See* Green Island's motion for leave to file answer and answer at 13 (filed Nov. 23, 2009).

[79] *Holyoke Water Power Co.*, 88 FERC ¶ 61,186, at 61,605 (1999). The Commission noted that, in evaluating competing proposals for an original license for an unconstructed project, a difference in economic benefits of 20 percent or more is considered significant in light of its *Mead* policy. Before *Mead*, a difference in economic benefits of 10 percent or more was considered significant. *Id.* at 61,605 n.33, *citing City of Augusta, Kentucky*, 72 FERC ¶ 61,114, at 61,599-600 n.58 (1995).

than scheduled aesthetic flows to Cohoes Falls, it would be significantly less cost-effective than the School Street Project. In fact, based on our economic analysis, the School Street Project would be economically beneficial (costing less than alternative power), whereas the Cohoes Falls Project would have negative economic benefits, costing significantly more than alternative power. We therefore find that the Cohoes Falls Project is not an economically feasible alternative to the School Street Project. Accordingly, it would not be in the public interest to require Erie to develop the Cohoes Falls Project instead of the School Street Project, or to deny a new license for the School Street Project in order to make way for the possibility of developing the Cohoes Falls Project as an alternative.[80]

81. In addition to its failure on economic grounds, we believe that the Cohoes Falls Project is infeasible as a matter of statute and regulatory policy, because Green Island did not raise that alternative until a stage in the process when the FPA barred consideration of projects that would compete with the School Street Project. We recognize that the court concluded in the remand order that its *Scenic Hudson* decision, applied to the facts here, required the Commission to examine the Cohoes Falls Project as a possible alternative to the School Street Project. However, after careful consideration, we believe that there are distinctions between the facts there and this case that warrant consideration.

82. In *Scenic Hudson*, the alternatives which the Commission determined were presented too late for consideration and which the court subsequently ordered the Commission to examine were proffered by a non-governmental entity, in the interest of seeking the least environmentally-intrusive alternative. In addition, the suggested alternatives were either changes to the project that the Commission could potentially require (an underground powerhouse and increased fish protection devices), or a complete substitution for the project (use of gas-fired turbines) that, although the Commission could not license, was not barred by statute. Here, the Cohoes Falls Project is being put forward not by a third party that simply wishes to promote the public interest, but rather by a competitor that failed to timely file a competing license application. Moreover, the alternative being put forward is one that is statutorily barred at this stage of a relicensing proceeding. It is clear that Green Island's motive is to force the Commission to deny Erie's application or to supplant it with the Cohoes Falls Project, so that Green Island will ultimately receive the project license.[81] In these circumstances, as

[80] Because the Cohoes Falls Project is not a feasible alternative to the School Street Project under the FPA, it is also not a reasonable alternative under NEPA. Therefore, the Commission would not be required to prepare an environmental assessment of the Cohoes Falls Project before taking action on the remanded relicense application for the School Street Project.

[81] *See* Green Island's draft "Application for License, Cohoes Falls Project,"

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we have explained, the only possible way to implement the alternative in this relicensing proceeding would be to require that Erie develop it, notwithstanding that it has not sought authorization to do so. Where an "alternative" is a late-filed proposal by a competitor at a time when competition is not permitted, rather than an effort by a financially disinterested entity attempting to avoid what it sees as unnecessary environmental impacts, there is even more reason not to override the dictates of the FPA and the Commission's licensing regulations.

83. After full consideration of the feasibility of the Cohoes Falls Project as an alternative, we find that the Cohoes Falls Project is not feasible, and that the School Street Project is best adapted to a comprehensive plan for developing and improving the Mohawk River under FPA section 10(a)(1). We further find that the School Street Project is best adapted to serve the public interest under FPA section 15(a)(2). We therefore reinstate the new license for the School Street Project as issued in our relicense order of February 15, 2007, with an effective date of February 1, 2007.[82]

The Commission orders:

(A) The following filings in this proceeding are dismissed on the grounds that they are not necessary to the Commission's resolution of the issues on remand from the U.S. Court of Appeals for the Second Circuit: (1) Green Island Power Authority's motion to expedite, filed on October 22, 2009; (2) Erie Boulevard Hydropower, L.P.'s answer to Green Island's motion to expedite, filed on November 6, 2009; and (3) Green Island's motion for leave to file answer and answer, filed on November 23, 2009.

(B) The new license issued to Erie Boulevard Hydropower, L.P. (licensee) on February 15, 2007, in 118 FERC ¶ 61,101 (2007), is reinstated as issued in that order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Exhibit B, at B.2 and B.6 (filed May 15, 2006).

[82] If there is a need to adjust any of the deadlines included in the license as a result of the time during which the license was suspended, Erie may file an application to amend the license to address them.

Document Content(s)