

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

Before Commissioners: Pat Wood, III, Chairman;  
Nora Mead Brownell, Joseph T. Kelliher,  
and Suedeen G. Kelly.

Arizona Public Service Company

Project Nos. 2069-003 and 007

ORDER APPROVING SURRENDER OF LICENSE AND REMOVAL OF PROJECT  
WORKS, AND DISMISSING APPLICATION FOR NEW LICENSE

(Issued October 8, 2004)

1. On April 30, 2002, Arizona Public Service Company (APS) filed an application to surrender its license for its 7-megawatt (MW) Childs Irving Project No. 2069, located on Fossil Creek in Gila and Yavapai Counties, Arizona, on lands managed by the U.S. Forest Service. APS proposes to remove most of the project works in conjunction with the license surrender. This order grants the surrender application and dismisses an earlier-filed application for a new license for the project. Our action is in the public interest because surrender of the license and removal of the project works will have environmental benefits that can be achieved without a significant reduction of generation available to the public.

**Background**

**A. Project Description**

2. The Childs Irving Project, located on 344 acres of land in the Coconino (326.8 acres) and Tonto (17.2 acres) National Forests, consists of two developments on Fossil Creek, a tributary of the Verde River. Together, the developments divert water from 14 miles of Fossil Creek and return it to the Verde River about 3 miles upstream of its confluence with Fossil Creek.

3. The upstream Irving Development diverts water at a rate of up to 43 cubic feet per second (cfs) from Fossil Creek by means of a 25-foot-high concrete diversion structure (Fossil Springs dam), which impounds a 680-foot-long reservoir. Fossil Springs dam is located about 0.2 miles downstream from Fossil Springs, the source of perennial flow in

Fossil Creek. The diverted water travels through a 16,578-foot-long flume and a 3,278-foot-long penstock to a powerhouse containing one generating unit with a total installed capacity of 1,600 kilowatts (kW). The powerhouse tailrace returns the water to the flume of the Childs Development. A 6.31-mile-long, 69-kilovolt (kV) transmission line leads to the powerhouse of the Childs Development.

4. The downstream Childs Development includes a 5-foot-high diversion structure (Fossil Creek dam) located on Fossil Creek, 350 feet upstream of the Irving powerhouse. Fossil Creek dam diverts flows from Fossil Creek when the Irving powerhouse is not operating. A 23,190-foot-long conduit, or gravity conveyance system (consisting of concrete box flume sections, steel pipe sections, tunnel sections, and steel flume sections supported on wooden trestles), conveys water from the Irving powerhouse area into a regulating reservoir, the 23-acre Stehr Lake, which was created by two dams, one 12 feet high and the other 20 feet high. Stehr Lake serves as a forebay for a 6,281-foot-long pressure tunnel and a 4,800-foot-long penstock, which are connected by a 1,394-foot-long concrete pressure pipe and a 30-foot-high concrete surge tank. The penstock leads to a powerhouse containing three generating units with a total installed capacity of 5,400 kW. A tailrace discharges water into the Verde River. A 200-foot-long, 60-kV transmission line connects the project to the APS transmission grid.

5. APS operates the project in a run-of-river mode. Although the current license does not require a minimum instream flow release at either development, 0.2 cfs of seepage at the Fossil Springs dam flows into the 4-mile-long Irving bypassed reach under existing conditions, and a 2 cfs discharge into the 10-mile-long Childs bypassed reach occurs at the Irving tailrace.

## **B. Procedural History**

6. The Childs Development was constructed in 1908-09 and the Irving Development in 1914-15. An original license for the project was issued to Arizona Power Company, APS's predecessor, in 1951 for a 50-year term, effective on January 1, 1945 and expiring on December 31, 1994.<sup>1</sup> Since expiration of the original license, the project has been operated under annual licenses, pursuant to section 15(a)(1) of the Federal Power Act (FPA). APS filed an application for new license on December 18, 1992, and a draft environmental assessment (EA) analyzing that application was issued on August 14, 1997. Subsequently, APS entered into settlement discussions with various participants in the relicensing proceeding, and, on February 16, 2000, APS and other participants

---

<sup>1</sup> *The Arizona Power Co.*, 10 FPC 1311 (1951).

requested that the relicensing proceeding be held in abeyance pending their discussion of project decommissioning alternatives.

7. On September 15, 2000, APS submitted an offer of settlement signed by itself, the intervenors in the relicensing proceeding, and several other entities.<sup>2</sup> The settlement agreement provided, among other things, that APS would cease generation at the project and restore full flows to Fossil Creek no later than December 31, 2004, would surrender the project license and decommission the project site, and would complete project decommissioning no later than December 31, 2009. The settlement agreement also provided that, in the event of a Commission order that altered any of its essential terms, the agreement would become null and void, and the relicensing proceeding would be restored to its status prior to the February 16, 2000, request for abeyance. The filing requested that the Commission approve surrender of the license and the Removal and Restoration Plan included in the offer of settlement.

8. On August 1, 2001, APS filed a petition for declaratory order to resolve issues relating to the possible filing of a license surrender application that would incorporate the settlement terms. Following notice and opportunity for comment, we issued, on December 20, 2001, a declaratory order in which we addressed the matters raised in APS's petition.<sup>3</sup> Specifically, we confirmed that, if we modified essential terms of the settlement, or if the objectives of the settlement, including license surrender and project decommissioning, were not achieved, we would be willing to retain or reinstate APS's relicense application and process it without providing a new opportunity for the filing of competitive relicense applications. We also stated that the filing of an application for surrender of a license would not trigger an opportunity for other entities to file license applications in competition with the surrender application. We concluded that, if we accepted surrender of the license, there would be no bar to allowing the surrender to be effective at a future date, so that generation could continue through 2004. We added that, in fact, the surrender could not be effective until all of the surrender conditions, including those that related to project removal, had been satisfied.

---

<sup>2</sup> Besides APS, the signatories were American Rivers, the Center for Biological Diversity, and Yavapai-Apache Nation, all intervenors in the relicensing proceeding, as well as Arizona Riparian Council, Northern Arizona Audubon Society, and The Nature Conservancy.

<sup>3</sup> *Arizona Public Service Company*, 97 FERC ¶ 61,315 (2001).

9. On April 30, 2002, APS filed its application to surrender the license. The application incorporates the terms of the settlement agreement<sup>4</sup> as to continuation of generation through 2004, removal of project facilities, and site restoration. APS requests that we authorize project generation until December 31, 2004, approve the decommissioning proposal established in the settlement, and approve the surrender application effective as of the date project removal and site restoration are completed, intended to be no later than December 31, 2009.

10. Notice of the surrender application was issued on May 10, 2002. Motions to intervene were filed by Gila County, the Forest Service,<sup>5</sup> American Rivers Inc., Southwest Alternative Generation Enterprises (SAGE), Living Rivers, Center for Biological Diversity, Yavapai-Apache Nation, and Prescott Open Trails Association (Prescott).<sup>6</sup> Comments on the application were filed by the Forest Service, the U.S. Fish and Wildlife Service (FWS), Steven Overby and John Malusa, Arizona State Parks, Friends of Arizona Rivers, Ellen S. Soles, and SAGE.

11. On June 4, 2003, Commission staff issued a draft EA, on which comments were submitted by numerous entities and individuals. Staff issued its final EA on March 26, 2004. All references to the EA in this order are to the final EA, unless otherwise noted.

### **C. Surrender Proposal**

12. As stated above, APS proposes to continue to operate the project under the terms of its current license until December 31, 2004, after which it would terminate project operations and return full flows to Fossil Creek, initially by closing the intake at Fossil Springs dam. Over the following five years, APS would gradually remove most of the

---

<sup>4</sup> The application includes the settlement agreement and the Removal and Restoration Plan.

<sup>5</sup> The Forest Service's motion was filed in opposition to the application. However, the Forest Service stated that it supported surrender of the license and project decommissioning but was concerned about certain terms of the settlement agreement and of the surrender and project removal.

<sup>6</sup> The motions to intervene of Living Rivers, Center for Biological Diversity, and Yavapai-Apache Nation were filed late and were granted by notice issued October 9, 2002. The motion to intervene of Prescott Open Trails Association was filed late and was granted by notice issued September 21, 2004.

project works, with completion of the removal of project works and of site restoration no later than December 31, 2009.

13. At the Irving Development, APS proposes to remove the existing above-ground structures and equipment at the Fossil Springs diversion area; the steel flume, including its supporting wooden trestle; the above-grade portion of the Irving penstock and concrete inlet structure; and the Irving powerhouse and related equipment, fencing, power poles, wires, and transformers, as well as all other buildings (of which there are several) at the powerhouse site. APS would seal the Irving flume tunnel, remove the above-grade Hot Water Canyon siphon pipe (including its concrete inlet structure),<sup>7</sup> eliminate the flume road between the Fossil Springs dam and the Irving powerhouse, and restore the roadbed. APS would disconnect and bury a potable water system and septic system that are located at the Irving powerhouse.

14. At the Childs Development, APS would remove the concrete forebay wing walls, the Fossil Creek dam, and the above-grade portions of the gravity conveyance system between the Irving plant site and Stehr Lake.<sup>8</sup> Stehr Lake would be dewatered, the earthen embankments breached, and the lake area returned to natural vegetation. The Stehr Lake outlet works would be removed and the pressure tunnel sealed off at both ends. The concrete pressure pipe from the tunnel to the surge tank would be sealed at both ends and left in place, the surge tank would be removed, and the penstock would be sealed at both ends and left in place. The Childs powerhouse would be left in place as an historic feature, after removal of all electrical, mechanical, and maintenance equipment. The Childs switchyard, located near to the powerhouse, would remain in service. All poles, equipment, and wires not required for customer service would be removed.

15. Although the settlement agreement states that APS would lower the Fossil Springs diversion dam by six feet, the surrender application leaves open the final disposition of that dam for subsequent phases of the proposed project retirement process.<sup>9</sup> In a

---

<sup>7</sup> Both the 115-foot-long Irving tunnel and the Hot Water Canyon siphon pipe are located within the steel flume section that connects the dam and the penstock.

<sup>8</sup> As to both the Childs and Irving Developments, steel support sections for metal pipe valley crossings (bridges) would be removed down to the top of their concrete foundations, and wooden trestles would be removed to grade.

<sup>9</sup> In the surrender application, APS acknowledged that additional information would be required for a full analysis and determination of the most appropriate method of decommissioning the project and requested that we use the comment period on the

(continued)

December 31, 2002, additional information filing, APS provided information for staff to assess several alternatives as to how much of the dam should be removed. However, in comments on the draft EA, filed July 8, 2003, APS effectively modified its proposal by advocating removal of between the top 14 feet of the dam and the entire dam, with the final decision on the extent of dam removal to be made jointly “in the field” by APS and the Forest Service.<sup>10</sup> APS indicated that, for cost and environmental reasons, this alternative would best address both its needs and those of the Forest Service, which it had consulted.

16. The reservoir created by the Fossil Springs dam is almost completely filled with sediment. In its December 31, 2002, additional information filing, APS proposed constructing a cofferdam to divert the streamflow away from the dam during its removal for the partial and full dam removal alternatives. But in an August 25, 2003, additional information filing, APS requested that the cofferdam proposal be withdrawn from consideration. Instead, APS now proposes to construct a diversion channel to convey the 40-cfs base flow around the work area during dam removal and until natural high-flow events transport the reservoir sediments downstream. The sediment immediately behind the dam would be mechanically excavated to a stable working slope to allow the total or partial removal of the dam. Sediment mechanically removed from the streambed would be dewatered and used as fill in the restoration of the Irving site. Concrete removed from the dam would be disposed of in the Irving flume tunnel before sealing the tunnel entrance with concrete and grating or would be placed in designated staging areas for later disposal at Forest Service-approved locations.

17. APS proposes a number of environmental measures in connection with the removal of project works, in addition to the dam removal, flow restoration, and sedimentation control measures described above. These additional measures include: revegetation of land disturbed during project removal; prevention of the spread of noxious weeds; safe storage, handling, and disposal of petroleum hazardous products during removal of Fossil Springs dam; funding the stocking of largemouth bass and bluegill as mitigation for the loss of Stehr Lake; and installation of grates in addition to concrete caps to allow bat access to tunnels while preventing private access.

---

application as a scoping process for determining what additional information would be needed.

<sup>10</sup> This was one of the alternatives for which APS had provided information. The others, which the EA also evaluated, were (1) retention of the entire dam, (2) lowering of the dam by 6 feet and retention of the remaining structure, and (3) removal of the entire structure.

## **Statutory Requirements**

### **A. Section 401 of the Clean Water Act**

18. Under section 401(a)(1) of the Clean Water Act (CWA),<sup>11</sup> any applicant for a federal license or permit for an activity that may result in a discharge into United States waters must obtain from the state in which the discharge originates certification that the discharge will comply with applicable water quality standards. Section 401(d) provides that a certification shall become a condition on any such federal license or permit.

19. The removal of all or part of the diversion dams and the return of full flows to Fossil Creek could result in a discharge under section 401 of the CWA. On November 21, 2002, APS applied to the Arizona Department of Environmental Quality (Arizona DEQ) for water quality certification. On November 20, 2003, Arizona DEQ granted certification, subject to standard administrative conditions, the obtaining by APS of any other necessary permits, and a requirement that project removal and related activities not cause or contribute to long-term adverse impacts to beneficial uses of Fossil Creek. The certification is attached as an appendix to this order and is made a condition of the surrender by ordering paragraph C.

### **B. Endangered Species Act**

20. Section 7(a)(2) of the Endangered Species Act of 1973 (ESA)<sup>12</sup> requires federal agencies, in consultation with (as pertinent here) the Secretary of the Interior, to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of designated critical habitat. Action is defined to include any actions directly or indirectly causing modifications to the land, water, or air.<sup>13</sup>

21. The following federally listed threatened and endangered species may occur in the vicinity of Fossil Creek: the threatened bald eagle, Mexican spotted owl, and Chiricahua leopard frog; and the endangered southwestern willow flycatcher, Yuma clapper rail, razorback sucker, and Arizona agave.<sup>14</sup> FWS has designated the confluence of Fossil

---

<sup>11</sup> 33 U.S.C. § 1341(a)(1).

<sup>12</sup> 16 U.S.C. § 1536(a)(2).

<sup>13</sup> 50 C.F.R. § 402.02(d).

<sup>14</sup> In addition, the yellow-billed cuckoo, a candidate species, and an experimental, nonessential population of the endangered Colorado pikeminnow may be found in the project area. Under section 10(j) of the Endangered Species Act, reintroduced

Creek with the Verde River, within 328 feet of the river, as critical habitat for the southwestern willow flycatcher, and the Verde River from the Childs powerhouse to its confluence with Fossil Creek as critical habitat for the razorback sucker.<sup>15</sup> The threatened loach minnow and spikedace do not now occur in the project area, but FWS has designated the lower 4.7 miles of Fossil Creek as critical habitat for these species.<sup>16</sup>

22. The EA contained the Commission staff's Biological Assessment of the effects of license surrender and project removal on the above species and critical habitat. The staff concluded that license surrender and project removal may affect, but would not be likely to adversely affect, the bald eagle, Mexican spotted owl, southwestern willow flycatcher, Yuma clapper rail, and Chiricahua leopard frog. Staff also concluded that there would be no effect on the Arizona agave, spikedace, and loach minnow. Staff concluded, however, that license surrender and project removal would be likely to adversely affect the razorback sucker and its critical habitat, as well as critical habitat for the southwestern willow flycatcher, spikedace, and loach minnow.<sup>17</sup> On April 2, 2004, the Commission staff sent its conclusions to FWS and requested that agency's Biological Opinion.

23. The FWS filed its Biological Opinion on August 18, 2004. FWS concurred with the Commission staff's conclusion that license surrender and removal of project facilities may affect, but would not be likely to adversely affect, the bald eagle, Mexican spotted

---

populations of a species established outside the current range of that species may be designated as "experimental" and, under some circumstances, further designated "nonessential" experimental. Experimental, nonessential populations are treated as species proposed for listing as threatened for purposes of section 7 consultation under the Endangered Species Act. 50 CFR § 17.83 (2002). Under section 7(a)(4), the Commission is required to confer with FWS regarding species proposed for listing only if the proposed action is likely to jeopardize the continued existence of the species, or destroy or adversely modify its critical habitat.

<sup>15</sup> EA at 47 and 50.

<sup>16</sup> *Id.* at 52.

<sup>17</sup> *Id.* at 55. Staff also concluded that the proposed action may affect, but would not be likely to adversely affect, the candidate species yellow-billed cuckoo, and that the existence of the experimental, nonessential population of Colorado pikeminnow would not be jeopardized.

owl, southwestern willow flycatcher, and Yuma clapper rail.<sup>18</sup> FWS stated that it had set aside the critical habitat designation for the southwestern willow flycatcher, so that consultation on this habitat was no longer required.<sup>19</sup>

24. FWS concluded that the proposed action is not likely to jeopardize the continued existence of the razorback sucker and is not likely to destroy or adversely modify designated critical habitat for razorback sucker, loach minnow, or spikedace. FWS based these conclusions on its determination that cessation of project flow diversions will benefit fish habitat in Fossil Creek and will enable the institution of a multi-agency native fish restoration project for Fossil Creek.<sup>20</sup> FWS concluded that the return of full flows to Fossil Creek will not result in appreciable detrimental effects to the survival and recovery of those three species in the three-mile stretch of the Verde River between the Childs tailrace and the river's confluence with Fossil Creek that would receive correspondingly reduced flows. As to the critical habitat for loach minnow and spikedace, FWS also concluded that sedimentation resulting from removal of Fossil Springs dam should not result in sediment flows greater than the annual average sediment for the watershed upstream of the dam.<sup>21</sup>

25. Under section 7(b)(4) of the ESA, Interior, upon finding that neither an agency action nor the taking of a threatened or endangered species incidental to that action will violate section 7(a)(2), must provide the action agency with an incidental take statement. This statement must specify the impact of such incidental taking on the species, reasonable and prudent measures necessary or appropriate to minimize such impact, and terms and conditions with which the federal agency must comply to implement the reasonable and prudent measures. Section 7(o)(2) provides that any taking of a species

---

<sup>18</sup> FWS did not discuss, or include any conditions to protect, the Chiricahua leopard frog; therefore we assume concurrence with our determination that the proposed action would not be likely to adversely affect that species.

<sup>19</sup> Biological Opinion at 5.

<sup>20</sup> We discuss this fish restoration project, initiated by the U.S. Bureau of Reclamation, in the discussion section of this order, *infra*.

<sup>21</sup> FWS stated that the designation of critical habitat for the loach minnow and spikedace was vacated in its entirety by the U.S. District Court for the District of New Mexico. FWS stated that its responsibility for consultation on the critical habitat for these species would nevertheless continue during the period for appealing the court's decision.

that is in compliance with those terms and conditions shall not be considered a taking of the species concerned.

26. FWS provided an incidental take statement as part of its Biological Opinion. FWS stated that it did not anticipate that the proposed action will result in incidental taking of razorback sucker.<sup>22</sup> FWS authorized the incidental taking of migratory birds and bald eagles if FWS is promptly informed of dead, injured, or sick individuals of any listed species, and if care is taken in handling such animals either for effective treatment or, as to dead individuals, for preservation of biological material. We will require APS to comply with this condition.

27. Under 50 C.F.R. §§ 402.02 and 402.14(j), FWS may also provide conservation recommendations regarding measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat. Such recommendations are advisory only. As a conservation recommendation included in its Biological Opinion, FWS suggested that we encourage APS to include FWS and the Arizona Game and Fish Department (Arizona Game and Fish) in its determinations with the Forest Service of which project roads and bridges to maintain or close. We are requiring APS to include these agencies in its consultation.<sup>23</sup>

### **C. Section 7 of the Wild and Scenic Rivers Act**

28. Section 7 of the Wild and Scenic Rivers Act, 16 U.S.C. 1728, provides that the Commission shall not license the construction of any project works under the FPA on or affecting any river that is designated as a component of the national Wild and Scenic Rivers system. The entire length of Fossil Creek was listed on the Nationwide Rivers Inventory of free-flowing rivers in 1993 and is potentially eligible for inclusion in the

---

<sup>22</sup> The FWS stated that it did not anticipate the taking of any razorback sucker in part because, under APS's proposal, a razorback sucker salvage and release operation would occur when Stehr Lake is drained. We are requiring APS to file a plan for such an operation.

<sup>23</sup> Other conservation recommendations submitted by FWS are directed to the Forest Service and Arizona Game and Fish; we have no authority to require these agencies to take any actions. FWS also recommended that APS monitor the development of fish habitat following the return of full flows. We are not requiring such monitoring, because, after all diverted flows have been returned to Fossil Creek, APS would have no further means of affecting flows. However, we are requiring measures to protect native fish and their habitat from any effects of the removal of project facilities.

Wild and Scenic Rivers system.<sup>24</sup> Forty-one miles of the Verde River, into which Fossil Creek flows and the Childs powerhouse discharges, are designated Wild and Scenic.<sup>25</sup>

29. Because the proposed action is not the construction of a project but the removal of an existing one, it is unlikely that section 7 applies. In any event, the Forest Service, which manages the Verde Wild and Scenic River, has determined that surrender of the Childs Irving Project license will have no direct and adverse effects on the river's free-flowing condition, water quality, or outstandingly remarkable values, and will not invade the area or diminish the scenic, recreational, fish, or wildlife values of the Verde Wild and Scenic River.<sup>26</sup>

#### **D. Section 106 of the National Historic Preservation Act**

30. Pursuant to section 106 of the National Historic Preservation Act,<sup>27</sup> the Commission, as an agency with jurisdiction over federal licensing of hydroelectric projects, must take into account the effects of its actions on properties listed or eligible for listing in the National Register of Historic Places (National Register) and, prior to taking action on a proposed undertaking, afford the Advisory Council on Historic Preservation (Advisory Council) a reasonable opportunity to comment. Such comment generally entails consultation with the State Historic Preservation Officer (SHPO), who administers the state historic preservation program, the Advisory Council, and additional consulting parties, including the license applicant, affected Indian tribes, local governments, and members of the public.

31. The facilities of the Childs Irving Project were listed as a Historic District in the National Register on August 9, 1991. APS identified an additional 48 archeological and historic sites in the project area that are listed, eligible, or potentially eligible for inclusion in the National Register. The Coconino National Forest has identified 12 more archeological sites that lie outside the project area but within the Fossil Creek drainage.

32. APS has prepared a Historic Properties Management Plan (HPMP), which includes, among other things, the following: (1) a plan and timetable for completion of

---

<sup>24</sup> EA at 65.

<sup>25</sup> *Id.* at 66.

<sup>26</sup> Forest Service comments on draft EA. In comments on the final EA, filed June 17, 2004, the Forest Service states that its section 7 determination is unchanged.

<sup>27</sup> 16 U.S.C. § 470f.

Historic American Buildings Survey and Historic American Engineering Record documentation and recordation of all affected contributing elements related to the Childs Irving Historic Facilities District; and (2) measures for mitigation and/or protection of historic properties that may be affected during dam removal and related project removal activities. APS filed its final HPMP on October 7, 2003.

33. On February 24, 2004, Commission staff executed a Memorandum of Agreement (MOA) to carry out the measures included in the HPMP and sent the MOA to the relevant entities for signature. The MOA was signed by the Commission, the SHPO, and the Advisory Council, with APS and the Forest Service as concurring parties.<sup>28</sup> We are requiring APS to implement the MOA as a condition of the surrender.

### **Discussion**

34. Section 6 of the FPA, 16 U.S.C. §799, provides that a license “may be . . . surrendered only upon mutual agreement between the licensee and the Commission after thirty days’ public notice.” Because the FPA does not contain any further statutory standard, the Commission, in acting on a surrender application, applies a broad “public interest” standard, which is not the same as the public interest/comprehensive development standards applied to licensing proceedings by FPA sections 4(e) and 10(a)(1).<sup>29</sup>

35. Surrender of the license would result in termination of generation at the project. However, the project has a rated capacity of only 7 MW. Moreover, APS states that present output is limited to 4.2 MW, due to turbine wear at each development. APS states that the capacity at the Childs Development is further limited by calcium build-up in the penstock that restricts flow to the turbines.

36. The EA concluded that surrender of the license and removal of the project works as proposed by APS would have a number of benefits, particularly to the aquatic and recreational resources of Fossil Creek. These benefits were recognized by federal and

---

<sup>28</sup> The Yavapai-Apache Nation has intervened in the surrender proceeding, stating that Fossil Creek has been important to the Yavapai and Apache peoples for centuries. The Hopi Tribe, which the Forest Service recommended as a concurring party to the MOA, did not intervene. The Yavapai-Apache Nation and the Hopi Tribe were invited to sign the MOA as concurring parties, but neither did so.

<sup>29</sup> *Niagara Mohawk Power Corp. and Fourth Branch Associates (Mechanicville)*, 100 FERC ¶ 61,185 at P 12-13 (2002).

state agencies, including the Forest Service, FWS, the U.S. Bureau of Reclamation (Reclamation), and Arizona Game and Fish, which support the proposal, with some modifications.

37. The EA found that conditions at Fossil Springs are favorable for the formation of the mineral travertine from calcium carbonate. Travertine deposits on objects in river channels can create dams, behind which may form pools and terraces that enhance habitat for fish. Return of full flows to Fossil Creek would increase travertine deposits in the upper portion of the creek, because, under project operation, the calcium carbonate has been diverted from the creek into the the project's water conveyance facilities.<sup>30</sup> The EA found that returning full flows to Fossil Creek would increase the diversity of riverine habitat in the creek by restoring flow to currently dewatered riffles, increasing the depth and width of pools, adding to existing cover and food resources, and creating new pools, backwaters, and side channels from travertine-created instream structures.<sup>31</sup> The EA found that these benefits would extend to the headwater chub and the roundtail chub, which are designated sensitive aquatic species by the Forest Service.<sup>32</sup>

38. The EA concluded that the project area's scenic quality would improve as a result of the removal of most of the project facilities, site restoration, increased streamflow, and travertine deposition, which is expected to create a stairstep pattern of pools or terraces in the upper reaches of Fossil Creek. Returning full flows to Fossil Creek would also create new, year-round water-based recreational opportunities.<sup>33</sup>

39. As we have stated in other proceedings, a licensee is free to surrender its license and cease project operations.<sup>34</sup> While a license surrender need not be accompanied by the removal of project works, the record here indicates that there would be significant environmental benefits to removing the facilities proposed by APS. Therefore, the settlement agreement's provisions for license surrender and removal of most of the

---

<sup>30</sup> EA at 12-16.

<sup>31</sup> *Id.* at 29.

<sup>32</sup> *Id.* at 33-34.

<sup>33</sup> *Id.* at 67-68.

<sup>34</sup> *Niagara Mohawk Power Corp.*, 83 FERC ¶ 61,226, at 62,007 (1998); *Fourth Branch Associates (Mechanicville) v. Niagara Mohawk Power Corp.*, 89 FERC ¶ 61,194 at n.60 (1999); *Niagara Mohawk Power Corp. and Fourth Branch Associates (Mechanicville)*, 98 FERC ¶ 61,227 at 61,903, *reh'g denied*, 100 FERC ¶ 61,185 (2002).

project facilities are in the public interest.<sup>35</sup> Accordingly, we are granting the surrender application, with the modifications discussed below and subject to the conditions specified in this order's ordering paragraphs. Because we are granting the surrender application, we will dismiss APS's earlier-filed application for a new license for the project.

40. SAGE, an energy development and consulting firm, opposes APS's surrender proposal. SAGE contends that it would be possible to assure both continued generation at the project and full restoration of the travertine system. SAGE asserts that the Childs Development is economically viable and recommends that only the Irving Development be decommissioned. Jurich Consulting, Inc., and Prescott also object to the loss of generation.<sup>36</sup> As we noted above, the project generates little power, we cannot require continued project operation, and the removal of the project facilities as proposed by APS would have environmental benefits. The removal of the project facilities, essentially as proposed, is supported by state and federal agencies, including the Forest Service, on whose land the project works are located. The arguments of these entities do not persuade us to deny any part of the surrender proposal.<sup>37</sup>

41. As noted earlier, APS proposes, and the Forest Service supports, removal of the 25-foot-high Fossil Springs dam, ranging from removal of the top 14 feet to complete removal. Reclamation and Arizona Game and Fish recommend that some part of the dam

---

<sup>35</sup> In addition, the Commission's regulations for surrender of licenses, at 18 C.F.R. § 6.2 (2004), provide that, where project works have been constructed on lands of the United States, the licensee will be required to restore the lands to a condition satisfactory to the department having supervision over such lands.

<sup>36</sup> Prescott also objects that the proposal could threaten the use of the public lands for recreational roads and trails. As noted, the EA determined that the proposal would have recreational benefits. In any event, use of Forest Service lands for recreational roads and trails is a matter for Forest Service determination, independent of the surrender of this license and the removal of project facilities.

<sup>37</sup> SAGE identifies itself as a "potential future competitor for the license now held by APS." As we explained in our declaratory order, even if the surrender and removal of project facilities were not accomplished, reinstatement of APS's relicensing application, in accordance with the settlement terms, would not provide a new opportunity for license competition. Such an opportunity was already provided when applications were due prior to expiration of the original license for this project. *Arizona Public Service Company*, 97 FERC ¶ 61,315 at 62,452-53.

be left intact to prevent non-native fish from accessing the native fish community above the dam. The EA concluded that, if the top 14 feet of the dam were removed, the remaining portion of the dam would continue to isolate and protect the upstream native fish community, while full dam removal might not provide such protection.<sup>38</sup> The EA concluded that, if the license were surrendered and APS were to cease generation, removal of the top 14 feet of Fossil Springs dam would represent the best alternative for the protection of resources while providing a stable structure and addressing concerns of the Forest Service regarding ongoing maintenance.<sup>39</sup> In reliance on this analysis, we will require removal of the top 14 feet of the Fossil Springs dam.<sup>40</sup>

42. The Forest Service seeks to maintain viable populations of native species in Fossil Creek through habitat improvement. Currently, several non-native species are found in Fossil Creek.<sup>41</sup> Reclamation proposes to carry out a native fish restoration project in cooperation with the Forest Service, Arizona Game and Fish, and FWS. This project would involve constructing a 5-foot-high concrete barrier on Fossil Creek about 4.5 miles upstream from its confluence with the Verde River. Following this construction, non-native fish between the barrier and the Fossil Springs dam would be eradicated with a piscicide and the reach would be restocked with native fish that would be removed from the stream before the piscicide treatment. Reclamation expected to construct the barrier in the fall of 2004. The Forest Service and FWS recommend that, although APS proposes to return full flows to Fossil Creek by December 31, 2004, APS should not return full flows to the stream until Reclamation has completed its native fish restoration project.

---

<sup>38</sup> EA at 27-28.

<sup>39</sup> Id. at 96-97.

<sup>40</sup> APS and the Forest Service propose that they jointly make a final decision on additional removal of Fossil Springs dam during the project removal process. We will not leave the extent of dam removal unresolved in approving this surrender; therefore this order will require only the removal of the top 14 feet of the dam. APS may request additional dam removal during the dam removal process if it and the Forest Service determine that additional removal would be warranted. However, such a request would be seeking a modification of the terms of the surrender and would require additional Commission approval. Alternatively, additional dam removal could be undertaken after the surrender has become effective and the Commission's jurisdiction has terminated.

<sup>41</sup> EA at 22.

43. In the EA, staff recognized that the success of Reclamation's native fish restoration project could be much greater if carried out prior to the return of full flow to the stream.<sup>42</sup> In a filing of June 17, 2004, the Forest Service submitted its decision to implement this restoration project and stated that, if no appeals of its decision were filed, the project would be completed before APS's deadline for returning full flow to Fossil Creek. Because we cannot be certain that the fish restoration project will be complete before December 31, 2004, we will require APS, after consultation with the Forest Service, Reclamation, and FWS, to submit, for Commission approval, within 60 days of the date of this order, a schedule for returning full flow to Fossil Creek. In addition, consultation with these agencies should identify, as to project removal activities, any existing deadlines specified in the application that may be inconsistent or interfere with the implementation of the fish restoration program, and the schedule should reflect any modifications of those deadlines that may be necessary to avoid this conflict.<sup>43</sup> Project operations and flow diversions shall not cease until the Commission approves the schedule.<sup>44</sup>

44. Stehr Lake has been stocked with a variety of species of non-native fish and currently provides a limited warm water fishery.<sup>45</sup> APS proposes to fund a one-time stocking of largemouth bass and bluegill at Tremaine Lake, in the Coconino National Forest, as mitigation for loss of this fishery. This proposal was supported by Arizona Game and Fish but met with concern from the Forest Service, which indicated it would have to conduct an environmental analysis prior to any stocking activity. The EA concluded that Stehr Lake is not a high quality fishery and that its dewatering would not

---

<sup>42</sup> *Id.* at 30-31.

<sup>43</sup> By letter filed September 29, 2004, Reclamation indicates that, in fact, the existing schedule may not adequately accommodate possible additional delays in implementing the fish restoration project, and it requests a postponement of all project removal and flow return activities until March 15, 2005, with return of full flow occurring not later than April 6, 2005. In a letter filed September 30, 2004, APS states, in response, that it may need slightly more time than Reclamation proposes to accomplish the return of full flow. Our requirement for submission of a schedule for the return of full flow should satisfy the concerns of both APS and Reclamation.

<sup>44</sup> In the event that any other project removal or related activities cannot be accomplished by deadlines specified in the application, APS may request an extension of time from the Commission.

<sup>45</sup> EA at 23.

create a significant fishery loss for which mitigation would be necessary.<sup>46</sup> Therefore, we are not requiring this fish stocking as a condition of the surrender.

45. The Forest Service recommended that APS monitor the development of aquatic habitat after the return of full flow to Fossil Creek and remove Fossil Springs dam after the monitoring shows that habitat for native species has successfully developed. The EA did not recommend requiring APS to monitor fish habitat after full flows are returned to Fossil Creek, because APS would no longer have the means to affect flow after the diverted flows were returned; moreover, staff did not expect significant impacts to result from removal of project works, because removal activities would be conditioned by the Commission's requirements for the protection of native fish and their habitat.<sup>47</sup> Because we agree with staff's analysis, we will not require APS to monitor aquatic habitat.

46. FWS recommended that flow be restored to Fossil Creek incrementally but did not provide a basis for a staged flow return. Staff's analysis showed that the returning flow, about 43 cfs, would be what the native fish community experiences during routine generating outages and within the capacity of the channel.<sup>48</sup> Therefore, we do not adopt this recommendation.

47. The Forest Service recommended that APS transfer and assign to the Forest Service all water rights for Fossil Creek, including water rights for all tributaries and springs, and change the beneficial uses for streamflow to wildlife, including fish and recreation.<sup>49</sup> Transfers of water rights are not within the Commission's jurisdiction but rather are matters for state determination. Therefore, we will not require APS to take these actions.

48. APS proposes to disconnect and bury the potable water system located at the Irving powerhouse. This system is connected to a spring box. In its comments on the draft EA, the Forest Service indicated that it would prefer to have the spring box secured for possible future use. We will require APS to undertake this measure.

49. As noted, APS proposed a number of environmental measures in connection with the removal of the project works. The Commission staff identified a number of other

---

<sup>46</sup> *Id.* at 31-33. This proposal was not part of the settlement. EA at 97.

<sup>47</sup> *Id.* at 29.

<sup>48</sup> *Id.* at 29.

<sup>49</sup> *Id.* at 31.

environmental measures. We adopt these measures, except as discussed above in this order, and will require APS to implement them, as specified in the ordering paragraphs below. The surrender of the license for this project will not be effective until issuance of a Commission notice that all of the conditions have been satisfied. Until then, the project will remain under license.

The Commission orders:

(A) Arizona Public Service Company's application for a new license for the Childs Irving Project No. 2069, filed December 18, 1992, is dismissed.

(B) Arizona Public Service Company's application for surrender of the license for the Childs Irving Project No. 2069, filed April 30, 2002, and as subsequently modified, is granted as indicated in this order. The surrender will become effective upon issuance of a Commission notice that all of the surrender conditions specified below have been satisfied.

(C) The removal of project facilities and project site restoration authorized by this order is subject to and conditioned by the water quality certification issued on November 20, 2003, by the Arizona Department of Environmental Quality, which is appended to this order.

(D) The licensee shall remove the top 14 feet of the Fossil Springs dam, and shall remove or retain the remaining project facilities and restore the project site consistent with the "Childs/Irving Hydroelectric Plants Removal and Restoration Plan" as modified by the "Childs/Irving Hydroelectric Project Proposed Plan for Diversion Structure and Dam Removal," filed on September 15, 2000, and August 26, 2003, respectively, except as otherwise noted in these ordering paragraphs.

(E) The licensee, after consultation with the Forest Service, Bureau of Reclamation, and U.S. Fish and Wildlife Service, shall submit, for Commission approval, within 60 days of the date of this order, a schedule, consistent with implementation of the Bureau of Reclamation's native fish restoration plan, for returning full flow to Fossil Creek. The schedule shall also identify, as to project removal activities, any modifications to existing deadlines specified in the Removal and Restoration Plans that, in consultation with the above agencies, are identified as necessary to accommodate implementation of the native fish restoration program. The licensee shall not cease project operations or return flows to Fossil Creek before Commission approval of the schedule. The licensee shall complete removal of project facilities, site restoration, and all related activities no later than December 31, 2009.

Project Nos. 2069-003 and 007

19

(F) The licensee shall secure the spring box connected to the potable water supply system at the Irving powerhouse for future potential use.

(G) At least 60 days before starting any removal operations, the licensee shall submit one copy of the following documents to the Commission's Division of Dam Safety and Inspections-San Francisco Regional Office Regional Engineer and two copies to the Commission (one of these shall be a copy to the Director, Division of Dam Safety and Inspections): (1) a detailed description of the sequencing of activities for removing the project features, preserving the project facilities, and restoring the site; (2) final contract plans and specifications; (3) a blasting plan, if necessary; (4) a public safety plan, including traffic management, for the period during removal activities; (5) a detailed erosion and sediment control plan based on the "Childs/Irving Sediment and Erosion Control Guidance" filed on December 31, 2002, and on final selection and design of deconstruction staging areas, access locations, and debris disposal areas; and (6) a hazardous waste management plan.

The licensee shall prepare these plans after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, Arizona Department of Environmental Quality, and Arizona Game and Fish Department. The licensee shall include with the plans documentation of consultation, copies of comments and recommendations on the completed plans, and specific descriptions of how the comments are accommodated by the plans. The licensee shall allow a minimum of 30 days for the parties to comment and to make recommendations before filing the plans with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plans. No land-clearing or land-disturbing activities shall begin until authorized by the Regional Engineer.

(H) At least 60 days before starting any removal operations, the licensee shall submit one copy to the Commission's Division of Dam Safety and Inspections-San Francisco Regional Office Regional Engineer and two copies to the Commission (one of these shall be a copy to the Director, Division of Dam Safety and Inspections), of the Quality Control and Inspection Program (QCIP) for the Commission's review and approval. The QCIP shall include the sediment and erosion control plan specified in ordering paragraph (G). The Commission reserves the right to require changes to the QCIP. No land-clearing or land-disturbing activities shall begin until authorized by the Regional Engineer.

(I) Before starting any removal operations, the licensee shall review and approve the design of contractor-designed cofferdams and deep excavations. At least 30 days before starting construction of the cofferdams, the licensee shall submit one copy to the Commission's Division of Dam Safety and Inspections-San Francisco Regional Office Regional Engineer and two copies to the Commission (one of these copies shall be a copy to the Commission's Director, Division of Dam Safety and Inspections), of the approved cofferdam construction drawings and specifications and the letters of approval. The Commission reserves the right to require changes to the drawings and specifications. No land-clearing or land-disturbing activities shall begin until authorized by the Regional Engineer.

(J) At least 60 days before starting any removal operations, the licensee shall submit one copy to the Commission's Division of Dam Safety and Inspections-San Francisco Regional Office Regional Engineer and two copies to the Commission (one of these shall be a copy to the Director, Division of Dam Safety and Inspections), of the Temporary Emergency Action Plan (TEAP) for the Commission's review and approval. The TEAP shall describe emergency procedures in the case of any unintended failure of a water retaining structure during removal activities that could endanger construction workers or the public. The TEAP shall include a notification list of emergency response agencies; a plan drawing of the proposed cofferdam arrangement; the location of safety devices, escape routes, and informational and warning signage; and a brief description of testing procedures. The Commission reserves the right to require changes to the plan. No land-clearing or land-disturbing activities shall begin until authorized by the Regional Engineer.

(K) Within 90 days after completion of project removal and site restoration, the licensee shall submit one copy to the Commission's Division of Dam Safety and Inspections-San Francisco Regional Office Regional Engineer and two copies to the Commission (one of these shall be a copy to the Director, Division of Dam Safety and Inspections) of a final report which demonstrates that the project facilities have been removed and the project site restored in accordance with the approved plans.

(L) At least 60 days before starting any removal operations, the licensee shall file with the Commission, for approval, a detailed, site-specific final revegetation plan. The licensee shall prepare the plan after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, Arizona Department of Environmental Quality, and Arizona Game and Fish Department. The licensee shall include with the plan documentation of consultation, copies of agency comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before

filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-clearing or land-disturbing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Regional Office Regional Engineer and to the Director, Division of Dam Safety and Inspections.

(M) At least 60 days before starting any removal operations, the licensee shall file with the Commission, for approval, a detailed, site-specific final noxious weed control plan. The licensee shall prepare the plan after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, and Arizona Game and Fish Department. The licensee shall include with the plan documentation of consultation, copies of agency comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-clearing or land-disturbing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Regional Office Regional Engineer and to the Director, Division of Dam Safety and Inspections.

(N) At least 60 days before starting any removal operations, the licensee shall file, for Commission approval, a plan to monitor suspended sediment immediately downstream of any instream or any land-based deconstruction activity that may deliver sediment to Fossil Creek or the Verde River. The plan shall provide at a minimum: (1) a protocol for monitoring suspended sediment; (2) procedures for the notification of appropriate construction personnel and the Arizona Department of Environmental Quality if suspended sediment exceeds the state's standard; (3) a provision for (i) immediate cessation of any instream or land-disturbing activity should suspended

sediment levels, as measured immediately downstream of that activity, exceed the state's standard, and (ii) resuming the halted activity only after the state's suspended sediment standard has been met immediately downstream; and (4) an implementation schedule.

The licensee shall prepare the plan after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, Bureau of Reclamation, and Arizona Department of Environmental Quality. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the consulted agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the consulted agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on site-specific information.

The Commission reserves the right to require changes to the plan. No instream, land-clearing or land-disturbing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Regional Office Regional Engineer and to the Director, Division of Dam Safety and Inspections.

(O) At least 60 days before starting any removal operations, the licensee shall file, for Commission approval, a hazardous substances handling and storage plan to be implemented during all project removal activities. The plan shall provide specific measures to prevent, or minimize the effects of, spills and leaks of hazardous substances on aquatic life. The plan shall include at a minimum: (1) protocols for the handling and storage of hazardous substances and the quick and efficient clean-up of any hazardous substance spills; (2) a provision for the proper labeling of all materials and chemical substances before being brought to the site; (3) a provision for written notification by the supplier to the licensee's designee of specific information about all toxic or hazardous materials and chemical substances at least 15 days in advance of their use at the site; (4) a provision for completion of a hazardous material survey; (5) a provision for providing a site management plan, including the locations for hazardous material storage and containment equipment, to all contractors; (6) a provision for storage of fuels and chemicals at least 100 feet from live streams and riparian areas; (7) a provision for refueling all machinery and vehicles at least 100 feet from live streams and riparian areas; (8) a provision for having spill containment equipment readily available at the project; and (9) an implementation schedule.

The licensee shall prepare the plan after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, Bureau of Reclamation, and Arizona Department of Environmental Quality. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the consulted agencies, and specific descriptions of how the consulted agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on site-specific information.

The Commission reserves the right to require changes to the plan. No project removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the hazardous substance plan, including any changes required by the Commission.

A copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Regional Office Regional Engineer and to the Director, Division of Dam Safety and Inspections.

(P) At least 60 days before starting any removal operations, the licensee shall file with the Commission, for approval, a plan to protect, during project removal and site restoration, any plants of the genus *Agave* and the invertebrates that depend upon those plants.

The plan shall, at a minimum, include:

- (1) a description of the methods used to survey for *Agave* plants in the areas that would be disturbed by deconstruction activities;
- (2) a description for techniques to avoid or mitigate any adverse effects on *Agave* plants located in the survey; and
- (3) an implementation schedule.

The licensee shall prepare the plan after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, and Arizona Game and Fish Department. The licensee shall include with the plan documentation of consultation, copies of agency comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment

and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-clearing or land-disturbing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Region Office Regional Engineer and to the Director, Division of Dam Safety and Inspections.

(Q) At least 60 days before starting any removal operations, the licensee shall file with the Commission, for approval, a plan to monitor the success of the development of riparian habitat and the presence, distribution, and abundance of special-status animal species downstream from Fossil Springs dam during project removal and site restoration.

The plan, at a minimum, shall include the following:

- (1) a description of the riparian habitat and special-status animal species monitoring program, including a protocol for determining success;
- (2) a schedule for implementing the monitoring program and for reporting the monitoring results to the Commission and the consulted agencies during project removal and site restoration; and
- (3) provisions for, if necessary, implementing adaptive management measures to ensure that special-status species are able to maintain their populations until the stabilization of the Fossil Springs Botanical Area and Fossil Springs dam area after the dam's removal. Any monitoring and adaptive management activities shall extend no longer than December 31, 2009.

The licensee shall prepare the plan after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, Arizona Department of Environmental Quality, and Arizona Game and Fish Department. The licensee shall include with the plan documentation of consultation, copies of agency comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not

adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-clearing or land-disturbing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Region Office Regional Engineer and to the Director, Division of Dam Safety and Inspections.

(R) At least 60 days before starting any removal operations, the licensee shall file with the Commission, for approval, a plan to restore Stehr Lake to a condition that resembles its natural, pre-project condition after flows to the lake cease.

The plan, at a minimum, shall include:

- (1) contouring the soil to match the surrounding natural grade;
- (2) retaining existing native trees;
- (3) cutting or turning over cattails to reduce future fire hazards;
- (4) planting disturbed areas with native vegetation; and
- (5) monitoring water-dependent trees for mortality during the deconstruction period and removing any dead and hazardous trees at the completion of project removal activities.

The licensee shall prepare the plan after consultation with the U.S. Forest Service. The licensee shall include with the plan documentation of consultation, copies of agency comments and recommendations on the completed plan after it has been prepared and provided to the agency, and specific descriptions of how the agency's comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the Forest Service to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-clearing or land-disturbing activities shall begin until the licensee is notified by the

Project Nos. 2069-003 and 007

26

Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Region Office Regional Engineer and to the Director, Division of Dam Safety and Inspections.

(S) At least 60 days before starting any removal operations, the licensee shall file with the Commission, for approval, a plan to install bat grates at the mouths of the project tunnels to allow bats to use the tunnels for roosts while rendering the tunnels inaccessible to the public.

The licensee shall prepare the plan after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, and Arizona Game and Fish Department. The licensee shall include with the plan documentation of consultation, copies of agency comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-clearing or land-disturbing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Region Office Regional Engineer and to the Director, Division of Dam Safety and Inspections.

(T) At least 60 days before starting any removal operations, the licensee shall file with the Commission, for approval, a plan to avoid aural or visual disturbance of special-status bird species (i.e., sensitive, candidate, and Forest Service Management Indicator Species) in the project area caused by project removal activities.

The plan shall include:

- (1) scheduling no project removal activities near the riparian areas of Fossil Creek and Stehr Lake from February 15 through August 31;

- (2) if project removal activities must occur within 0.25 miles of riparian areas from February 15 through August 31, conducting bird nesting surveys; and
- (3) if nests are identified, establishing 0.25-mile project removal activity buffers around those locations for the duration of the species-specific breeding seasons.

The licensee shall prepare the plan after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, and the Arizona Game and Fish Department. The licensee shall include with the plan documentation of consultation, copies of agency comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-clearing or land-disturbing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Region Office Regional Engineer and to the Director, Division of Dam Safety and Inspections.

(U) At least 60 days before starting any removal operations, the licensee shall file, for Commission approval, a plan to salvage razorback sucker prior to the drying of Stehr Lake and release the captured fish into the Verde River at the Childs plant. The plan shall include, at a minimum, specific methods for identification, capture, holding, transport and release of razorback sucker and an implementation schedule.

The licensee shall prepare the plan after consultation with the U.S. Forest Service, FWS, Arizona Game and Fish Department, and Bureau of Reclamation. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the consulted agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the consulted agencies to comment and to make recommendations before filing the plan with

the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on site-specific information.

The Commission reserves the right to require changes to the plan. No land-clearing or land-disturbing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Regional Office Regional Engineer and to the Director, Division of Dam Safety and Inspections.

(V) At least 60 days before starting any removal operations, the licensee shall file, for Commission approval, a plan to prevent non-native fish in Stehr Lake from washing into Fossil Creek or the Verde River when Stehr Lake is drained. The purpose of the plan is to protect native fish communities in Fossil Creek and the Verde River from further invasion by non-native fish.

The licensee shall prepare the plan after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and Bureau of Reclamation. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the consulted agencies, and specific descriptions of how the consulted agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on site-specific information.

The Commission reserves the right to require changes to the plan. No land-clearing or land-disturbing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Regional Office Regional Engineer and to the Director, Division of Dam Safety and Inspections.

(W) At least 60 days before starting any removal operations, the licensee shall file with the Commission, for approval, a plan for the final disposition of all project roads and bridges, taking into account the U.S. Forest Service's land management objectives.

The licensee shall prepare the plan after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, and the Arizona Game and Fish Department. The licensee shall include with the plan documentation of consultation, copies of agency comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-clearing or land-disturbing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Region Office Regional Engineer and to the Director, Division of Dam Safety and Inspections.

(X) In implementation of the Incidental Take Statement included in the Biological Opinion filed by the U.S. Fish and Wildlife Service (FWS) on August 18, 2004, the licensee, upon finding a dead, injured, or sick individual of a species listed as endangered or threatened under the Endangered Species Act, shall notify the FWS Law Enforcement Office in Mesa, Arizona, within three working days of such finding, and shall provide written notification to that office within five days of such finding. Written notification shall include the date, time, and location of the animal, a photograph if possible, and other pertinent information. The notification shall be sent to the Law Enforcement Office, and a copy of such notification shall be sent to the FWS office in Phoenix, Arizona. The licensee shall exercise care in handling sick or injured animals to ensure effective treatment, and shall exercise care in handling dead animals to preserve the biological material in the best possible state.

(Y) The licensee shall implement the "Memorandum of Agreement Among the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation and the Arizona State Historic Preservation Officer for Managing Historic Properties that may be Affected by Arizona Public Service Company's Surrender for the Childs-Irving Hydroelectric Project in Yavapai and Gila Counties, Arizona (FERC No. 2069-007)", executed on May 24, 2004, including, but not limited to, the Historic Properties Management Plan (HPMP) for the project filed on October 7, 2003. In the event the Memorandum of Agreement is terminated, the licensee shall continue to implement the provisions of its approved HPMP until the licensee fulfills all of the requirements in the

Project Nos. 2069-003 and 007

30

surrender order. The Commission reserves the authority to require changes to the HPMP at any time during the term of the surrender order. A copy of the HPMP shall be sent to the Commission's Division of Dam Safety and Inspections-San Francisco Regional Office Regional Engineer and to the Director, Division of Dam Safety and Inspections within 30 days of issuance of this order.

(Z) Authority is reserved to the Commission to modify the conditions of the surrender as may be required by changed circumstances.

(AA) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days from issuance of this order, pursuant to section 313(a) of the Federal Power Act, 16 U.S.C. § 825(l).

By the Commission. Chairman Wood concurring.

( S E A L )

Magalie R. Salas,  
Secretary.

**ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY CERTIFICATION**

The Arizona Department of Environmental Quality (ADEQ), Water Quality Division has reviewed information concerning the Childs/Irving Decommissioning project, submitted for water quality certification pursuant to Section 401 of the federal Clean Water Act. Section A of this certification describes the activities to be certified. The references listed in Section B were used as the basis for certification. Section C lists the Approval Conditions.

The removal of the Fossil Springs Dam and the return of full flows to Fossil Creek will result in temporary degradation of water quality due to the redistribution of the remaining sediments upstream of the dam. Subject to the Conditions in Section C, this letter certifies that the activities associated with the Childs/Irving Decommissioning Project should not have a long term negative impact to the chemical, physical or biological integrity of Fossil Creek.

**A. Description Of Activities To Be Certified**

1. Arizona Public Service Company (APS) filed an Offer of Settlement with the Federal Energy Regulatory Commission (FERC) on September 15, 2000, signed by APS, American Rivers, the Center for Biological Diversity, the Yavapai-Apache Nation, the Arizona Chapter of the Nature Conservancy, the Northern Arizona Audubon Society, and the Arizona Riparian Council. The filing requested that the FERC approve (1) surrender of the license, and (2) the Removal and Restoration Plan for the Childs-Irving Hydroelectric Project. The Offer of Settlement specifies two deadlines: (1) stopping power generation and restoring full flow back to Fossil Creek no later than December 31, 2004; and (2) completion of site restoration to the satisfaction of FERC and the Forest Service by no later than December 31, 2009.

Arizona Public Service Company is proposing to remove the Fossil Springs Dam, breach the earthen embankments and dewater Stehr Lake, construct a temporary diversion channel to divert the base flow and control sediments during and after deconstruction of the Fossil Springs Dam, and construct a temporary bridge crossing at the Irving Plant site (Power Plant Site Map).

2. The Corps of Engineers has indicated that the proposed activities would

likely fall under three (3) Nationwide Permits (NWP). The NWPs which may be required for this project are Linear Transportation Projects (NWP-14), Stream and Wetland Restoration Activities (NWP 27) and Temporary Construction Access and Dewatering (NWP-33).

3. Fill material will consist of onsite native soils and other construction materials.
4. The applicant is proposing revegetation of all disturbed areas associated with the deconstruction activities. Because the project area encompasses many biotic communities, a wide range of elevation and topographical features, and varying degrees of hydrological associations, different seed mixes will be needed throughout the project area.

**B. Basis For Conditional State 401 Water Quality Certification**

1. State of Arizona Water Quality Standards for Surface Water, Arizona Administrative Code (A.A.C.) Title 18, Chapter 11, Section 108, Narrative Water Quality Standards, Section 109 Numeric Water Quality Standards, Appendix A. Designated Uses for Fossil Springs include: Aquatic and Wildlife warm water fishery (A&Ww), Full Body Contact (FBC), Drinking Water Source (DWS) and Fish Consumption (PC); Designated Uses for Fossil Creek include: Aquatic and Wildlife warm water fishery (A&Ww), Full Body Contact (FBC), Fish Consumption (FU) and Agricultural Livestock watering (AgL) (A.A.C. R-18-11-104).
2. ADEQ Water Quality Division Form 404-015 CWA 401 Certification Application signed November 22, 2002, and received by ADEQ on November 17, 2003, from Mr. John D. Mitchell representing Arizona Public Service Company. Additional documents submitted with the application include the following:
  - a. Applicant's response to Arizona Water Quality Policy for Protecting Water Quality During Facility Construction.
  - b. Maps and design drawings.
  - c. Childs-Irving Hydroelectric Project. Docket No. P-2069-007- Submittal of Additional Information in support of Surrender and Decommissioning.
  - d. Fossil Springs Diversion Channel, Design Report, Paul D. Trotta, P.E., PhD, Chad Cooper, August 13, 2003, Northern Arizona University

**C. Conditions For State 401 Water Quality Certification**

This State Water Quality Certification is issued by ADEQ under the authority of Section 401(a) of the federal Clean Water Act (33 U.S.C. § 1251 et seq.). The Permittee shall follow these conditions and the conditions included in the appropriate Nationwide Permit (NWP) in developing the project. These conditions are enforceable by the U.S. Environmental Protection Agency and the ACOE. Civil penalties up to a maximum of \$25,000 per day of violation may be levied if these certification conditions are violated. Criminal penalties may also be levied if a person knowingly violates any provision of the federal Clean Water Act. The following conditions are in addition to the state 401 conditions developed for NWPs. 14, 27 and 33.

**1. General Conditions**

- a. This Certification is for the activities described in Section A to allow for the Childs-Irving Hydroelectric Project. If substantive changes are made in the proposed project or if construction has not been started by the time specified in the ACOE 404 Permit, the applicant shall notify as follows:

**Arizona Department of Environmental Quality  
Water Quality Division  
Surface Water Permits Unit  
Attention Surface Water Quality 401 Certification  
ADEQ 401 File No. 9005  
1110 West Washington Street (5415B-3)  
Phoenix, Arizona 85007**

ADEQ will then have the option of extending, modifying or denying this Certification.

- b. If the Army Corps of Engineers determines that any portion of this project will require an individual 404 Permit, the applicant must apply for 401 Water Quality Certification for the project to be covered under the Individual 404 Permit.
- c. This certification is void if the construction is not consistent with the activities described in Section A.

- d. Arizona Public Service Company is responsible for the construction and maintenance of the project and any adverse cumulative impacts that it may cause.

2. Necessary Permits

Arizona Public Service Company is responsible for obtaining all other permits certifications and licenses that may be required by federal, state or local authorities. Other approvals include, but are not limited to: construction activities (AZPDES Stormwater Permit), use of reclaimed wastewater for dust control or irrigation (Reclaimed Water Permit), or dewatering of construction sites to a surface water body (AZPDES Process Wastewater Permit).

3. Standard Issues

Any discharge occurring as a result of activities certified for the Childs-Irving Hydroelectric project shall not cause or contribute to long term adverse impacts to beneficial uses of Fossil Creek.

ADEQ CWA 401 Water Quality Certification of these activities does not affect or modify in any way the obligation or liability of any person for any damages, injury, or loss, resulting from an impacted area discharge. The department may modify or withdraw its determination if the information relied upon is inaccurate or not implemented as proposed. If, in the future, the Department determines that the terms and conditions of the Certification have been violated, or discharges from the activities have caused or contributed to long term adverse impacts to the beneficial uses of Fossil Creek, the Director may revoke the Certification. This certification is not intended to waive any other federal, state or local laws.