Keith

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of **NORTH STAR HYDRO, LTD.** For Reconsideration of Denial of Water Quality Certification for the North Star Water Power Project (Mono County, FERC No. 8291-003). Our File No. C-007.	**ORDER NO. WQ 92-07** (§401 Certification)

BY THE BOARD:

North Star Hydro Ltd. (petitioner) filed an application for water quality certification for the North Star Water Power Project under Section 401 of the Clean Water Act. The Executive Director of the State Water Resources Control Board (State Water Board) denied certification based on a determination that the proposed project would result in an increase in water temperature to the detriment of fish in violation of Regional Water Quality Control Plan (Basin Plan) objectives and the antidegradation policy of the Clean Water Act. Petitioner filed a petition for reconsideration of the Executive Director's decision.

I. BACKGROUND

Petitioner has applied for a hydropower license from the Federal Energy Regulatory Commission (FERC). (FERC Project No. 8291-003). Pursuant to Section 401 of the federal Clean Water Act, FERC cannot issue the license unless the State certifies that the project complies with applicable water quality

requirements, or the State waives certification. (33 U.S.C. Section 1341(a).) The State Water Board has authority for certification in California. (Cal. Water Code Section 13160.) This authority may be exercised by the Executive Director of the State Water Board. (23 Cal. Code Regs., Section 3838.) If the Executive Director denies certification, the applicant may petition for reconsideration by the State Water Board. (Id. Section 3867.)

The North Star project first came to the attention of the State Water Board in 1984 when the State Water Board was asked to submit comments to FERC regarding the proposed project. By letter dated September 27, 1984, the State Water Board advised petitioner of the need to establish a water right for the project. The State Water Board also stated that before a water right permit could be issued, the State Water Board must review a document prepared in accordance with the California Environmental Quality Act ("CEQA," Cal. Pub. Resources Code Section 21000 et seq.). Petitioner was reminded of the need to file a water right application several times over the next several years but no water right application was submitted.

Since 1984, there has been considerable correspondence from the State Water Board and the California Regional Water Quality Control Board for the Lahontan Region (Regional Water Board) to the petitioner. In addition, petitioner has had extensive correspondence with FERC and other governmental agencies in connection with the proposed project. For purposes of this order, we will not review in detail the interaction of

the State Water Board and other agencies with petitioner over the years. We do note, however, that the Regional Water Board advised petitioner by letter dated June 24, 1987, of the potential for the proposed project to cause changes in water temperature in violation of the Basin Plan designation of cold freshwater habitat (COLD) as a beneficial use to be protected in the Little Walker River.

By letter dated July 7, 1989, petitioner was advised that its July 19, 1988 application for Section 401 water quality certification was denied without prejudice due to the lack of an environmental document meeting the requirements of CEQA. The petitioner's request to reconsider the denial of Section 401 certification was denied due to it not being filed within the 30 day period allowed by the State Water Board regulations. (Title 23, Cal. Code Regs., Section 3867.)

By letter dated June 1, 1990, petitioner reapplied for Section 401 water quality certification or waiver of certification for the North Star project. By letter dated July 13, 1990, State Water Board staff advised petitioner of actions needed in order to comply with CEQA. Staff requested that petitioner designate a consultant to work with staff in preparing an Environmental Impact Report (EIR). Petitioner never proposed a consultant to prepare the proposed draft EIR, but by letter dated September 7, 1990, petitioner's General Partner, Dr. Roy McDonald advised staff that he would be the "appropriate contact person" in connection with preparation of the EIR. By letter to then State Water Board Executive Director James Baetge

dated April 15, 1991, petitioner complained about staff's delay in preparing a Notice of Preparation of EIR and requested a 90-day extension of the CEQA review process in accordance with Section 15108 of the CEQA Guidelines. (Title 14, Cal. Code of Regs., Section 15108.)

By memorandum dated May 13, 1991, the Department of Fish and Game informed the State Water Board that DFG had completed an analysis of the impact of the project on the cold water fishery of the Little Walker River. A copy of the DFG analysis was enclosed. The analysis concluded that the project would result in elevated temperatures harmful to trout during July and August. Based on that conclusion, DFG determined that the project would not be consistent with the protection and maintenance of the designated beneficial uses of the Little Walker River. DFG was particularly concerned about the impacts of the project because it owns property within the proposed project boundaries which it intends to manage for wildlife and fishery purposes.

On May 31, 1991, State Water Board Executive Director Walt Pettit advised petitioner that the request for Section 401 water quality certification was denied. The reasons cited were that the proposed project would result in an increase in water temperatures which would violate the water quality standards specified in the Water Quality Control Plan for the North Lahontan Region and that the project would result in a change in water quality detrimental to existing beneficial uses in violation of the Federal Antidegradation Policy (40 CFR,

Section 131.12(a)(1)). The letter denying certification was returned to the State Water Board due to a change in address of petitioner. The letter was remailed to a different address on June 7, 1991 and delivered on June 11, 1991. On June 11, 1991, the State Water Board received a letter dated May 30, 1991 advising that the petitioner had changed its address effective immediately. The petition for reconsideration was received by the State Water Board on July 8, 1991.

Section 3867 of Title 23 , Cal. Codes of Regs. States in relevant part:

> "The petition for reconsideration shall be filed within 30 days after the applicant is notified or has knowledge of the action or decision of the executive director. Where notice of the action or decision is in writing and mailed to the applicant, the 30-day period shall commence three days after mailing."

In this instance, it is not clear when the petitioner first had knowledge of the Executive Director's decision denying certification. For purposes of this order, we will assume that the petitioner first had knowledge of the decision on June 11, 1992 which is less than 30 days before the petition for reconsideration was filed. Therefore, we will consider the petition to have been timely filed.

II. ISSUES RAISED BY THE PETITION

Petitioner alleges that the Executive Director should not have denied petitioner's request for a 90-day extension of the CEQA review period and that the decision to deny Section 401 water quality certification or a waiver of certification was improper. These arguments are addressed below.

A. Time Extension for Compliance with CEQA

Although compliance with CEQA is a prerequisite for approval of proposed projects which may have a significant adverse environmental effect, no environmental document is required in order to deny Section 401 certification of a proposed project (Public Resources Code Section 21080(b)(5), State Water Board Order No. WQ 91-09 at n.6). As discussed below, the anticipated effects of the proposed project on water quality and associated beneficial uses provide a sufficient basis for denying water quality certification. In view of the Executive Director's decision to deny certification, no purpose would have been served by granting a 90-day extension of time to comply with CEQA.

In addition, the State Water Board was required to act upon the request for certification within one year of when the application for certification was received. (33 U.S.C. Section 1341(a)(1)). To allow another 90 days for completion of an EIR, (assuming that an EIR could be completed within that timeframe) the State Water Board would have had to deny the application without prejudice to avoid having the certification period expire. It would have made no sense to deny certification without prejudice and require reapplication in a situation where the application for certification should be denied on the merits.

B. Propriety of Denial of Request for Certification or Waiver of Certification

1. Opportunity to comment on DFG memorandum and to propose mitigation measures

Petitioner contends that it lacked the opportunity to comment upon the DFG water temperature analysis and the opportunity to propose mitigation measures. In response, we note first that the issue of adverse effects of the project on water temperature was raised at least as early as June 24, 1987 in a letter to petitioner from the Regional Water Board. In addition, both DFG and the U.S. Fish and Wildlife Service had expressed concern about the low bypass flows proposed by petitioner, but the project was not revised to alleviate those concerns, nor were technical studies done which establish that the concerns were unfounded.

Although the DFG analysis was not available until just before the one year deadline for action on the request for water quality certification, the reconsideration process provides petitioner an opportunity to comment upon that analysis and to submit supporting information. In this instance, State Water Board staff also wrote petitioner and invited petitioner to submit any additional information which petitioner wanted to be considered concerning the technical validity of DFG's water temperature modelling or proposed mitigation measures to maintain pre-project water temperatures. Petitioner did not submit any additional information relative to the problems analyzed in the DFG study.

In summary, we note that petitioner had ample opportunity prior to May 1991 to address the general problems analyzed in the DFG study, but had not resolved those problems. As discussed below, petitioner has since criticized the DFG study in several respects, but has not demonstrated that DFG's conclusions are erroneous or that the mitigation measures which petitioner now proposes would be effective.

2. Sufficiency of DFG Information As Basis for Denial of Request for Certification

Petitioner contends that the DFG water temperature analysis is an insufficient basis for denial of Section 401 water quality certification. In support of this position, petitioner alleges that there were several technical deficiencies in the model including use of "generalized estimates of local climatic conditions", lack of measured data in the modelling, and the lack of validation of the accuracy of the model. In addition, petitioner criticizes the model for not identifying the preferred range of water temperatures, not accounting for shade resulting from an expanded vegetation enhancement program, not evaluating instream flows in August of up to 20 cubic feet per second (cfs), and not taking into account that "the late summer Little Walker River fishery is dominated by mountain whitefish and not trout."[1]

The DFG water temperature analysis utilized the Stream Segment Temperature Model developed by the National Research Center to simulate water temperatures expected for

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1 Mountain whitefish are a salmonid classified in the same family as other species of trout.

different flow regimes. In using the model, DFG relied upon water data regarding elevation and stream characteristics provided by the petitioner's FERC documentation. DFG also utilized climatic data from the U.S. Department of Agriculture climatic maps. The results of DFG's analysis showed an increase in the average water temperature at the proposed powerhouse of 5.9 degrees Farenheit in July and 2.7 degrees in August. Maximum water temperatures were expected to rise by 10 degrees in July to 76.8 degrees. Maximum water temperatures in August were expected to rise by 4.3 degrees to 76.9 degrees. DFG concluded that unsteady hydrological and meteorological conditions will result in actual temperatures varying around the predicted values.

Petitioner has not demonstrated that the use of climatic data from Department of Agriculture climatic maps was unreasonable. The fact that historical water temperature data for the affected stream reach were not available does not mean that no analysis of anticipated water temperature impacts should be undertaken.

The fact that the DFG analysis did not identify the preferred range of water temperature appears to have been more an oversight than a deficiency in the study. Commonly available scientific literature shows that temperatures below 70 degrees provide more suitable trout habitat than would higher temperatures.[2] The United States Fish and Wildlife Service

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2 U.S. Department of Commerce, National Technical Information Service, "Temperature Criteria for Freshwater Fish: Protocol and Procedures" (May 1977). U.S. Department of Interior, Fish and Wildlife Service, "Habitat Suitability Information" (January 1984).

reports that zero growth was observed to occur in the laboratory at 73.4 degrees Farenheit (23 degrees centigrade). Based on several water temperature studies, the Fish and Wildlife Service advises that 77 degrees Farenheit (25 degrees centigrade) should be considered the upper limit suitable for rainbow trout and then only for short periods of time.[3] A maximum predicted water temperature of 76.8 degrees in July and 76.9 degrees in August clearly exceeds the preferred temperature. The water temperature information which petitioner cites from a 1936 Department of Agriculture handbook is consistent with the DFG conclusion that the water temperatures resulting from the proposed project would be harmful to trout.[4]

Petitioner also criticizes the DFG analysis for not accounting for shading which could be provided if the petitioner were to expand its riparian vegetation mitigation proposals. We find this criticism to be unpersuasive for three reasons. First, DFG could only be expected to consider the riparian vegetation mitigation proposals which petitioner had set forth, not to speculate on what the effects might be of an expanded mitigation

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3 U.S. Department of Interior, Fish and Wildlife Service, "Habitat Suitability Information" (January 1984), p. 7.

4 Exhibit A to the petition for reconsideration states that the 1936 U.S. Department of Agriculture, Forest Service Fish Stream Improvement Handbook contains the following information about desired water temperature for trout:

> *"The favorable summer temperature range for trout is from 50 degrees to 75 degrees F... It frequently happens that where streams are warmer than 70 degrees F for a considerable time the environmental conditions are more favorable for other fish than for trout, and, consequently they become so abundant that the trout are reduced in numbers or driven out entirely."*

proposal which had not yet been developed. Second, the DFG analysis indicates that present vegetation shading would be expected to have less effect at low flow levels than at higher pre-project flows, but the temperature model did not make an adjustment in predicted water temperatures upward for that factor. Therefore, if the model had accounted for the effect of shading at varying rates of flow, it may have predicted even higher water temperatures than it did. Finally, even if an expanded vegetative enhancement program were eventually to be successful in increasing shading, the trout fishery could be adversely affected for five to ten years in the meantime.

We also believe it was acceptable for the DFG analysis to model the effect on water temperature of the 8 cfs bypass flow proposed by petitioner. Although flows may frequently be higher than 8 cfs, it was reasonable to assume that, in the summer months, the project would be operating for extended periods during the day in accordance with the proposed minimum bypass flows.

We reject petitioner's criticism of the DFG analysis based on survey data showing that the late summer Little Walker River fishery has more mountain whitefish than other species of trout. The U.S. Fish and Wildlife Service and DFG have both stressed the presence and importance of trout in the Little Walker River. In addition, DFG has purchased property in the area of the project with the stated intention of maintaining habitat for wildlife and numerous species of fish including brown trout, rainbow trout, and brook trout. The Water Quality Control

Plan for the North Lahontan Region (Basin Plan) includes cold freshwater habitat among the designated beneficial uses to be protected. The Basin Plan sets a general narrative objective for water designated as cold freshwater habitat which states that water temperatures shall not be raised above natural levels. The predicted increase in water temperature due to the proposed project would violate this objective and would detrimentally affect beneficial uses specified in the Basin Plan.

In addition to the violation of the Basin Plan objective for protection of cold freshwater habitat, the DFG water temperature analysis shows the proposed project would also violate the federal antidegradation policy which requires that changes in water quality be consistent with the following three-part test:

> "(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
> (2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds...that allowing lower water quality is necessary to accommodate important economic or social development....
> (3) Where high quality waters constitute an outstanding National resource...that water quality shall be maintained and protected." 40 C.F.R. §131.12.

As discussed above, the available information indicates that the level of water quality necessary to protect existing uses would not be retained if the proposed project were constructed. Moreover, under the second prong of the federal antidegradation test, no deterioration of water quality is allowed unless the

State finds that allowing lower water quality is necessary to accommodate important economic or social development. There is no evidence to support such a finding in this instance. To the contrary, DFG states that the project would interfere with the purposes for which the State has acquired property in the affected area.

In summary, we recognize that the DFG analysis of water temperature impacts is subject to certain limitations and that there are limitations associated with the use of any water temperature model.[5] Nevertheless, petitioner has not provided any information which refutes DFG's conclusion that the project will have adverse impacts on water quality and the fishery. We believe that the anticipated adverse effects identified by DFG provide a sufficient basis for denial of Section 401 water quality certification.

III. CONCLUSION

The Executive Director denied water quality certification, based upon the anticipated violation of the Basin Plan objective to maintain cold freshwater fishery habitat and

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5 By memorandum dated August 3, 1992, DFG advised the State Water Board of a more detailed analysis which it recently completed using field data collected during June and July of this year. This most recent DFG analysis concluded that the proposed project would increase maximum water temperatures in the affected reach of the Little Walker River by 8.9 degrees Fahrenheit in July and 3.6 degrees Fahrenheit in August. DFG confirmed its earlier recommendation that water quality certification should be denied because the proposed project would adversely impact water quality and fish populations. Although the numbers from the 1992 analysis differ slightly from the results of the 1991 analysis, both studies predict an increase in water temperature which would be harmful to trout.

based upon the anticipated violation of the federal antidegradation policy. We conclude that the record supports that decision.

IV. ORDER

IT IS HEREBY ORDERED that the petition for reconsideration of the denial of water quality certification for the North Star Water Power Project (FERC No. 8291-003) is denied.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on August 20, 1992.

AYE: W. Don Maughan
Eliseo M. Samaniego
Marc Del Piero
James M. Stubchaer

NO: None

ABSENT: John Caffrey

ABSTAIN: None

Maureen Marché
Administrative Assistant to the Board