UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

September 9, 2005

Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, D.C. 20426

Dear Secretary Salas,

The National Marine Fisheries Service (NOAA Fisheries) submits scoping comments and study requests for the licensing of the Allison Lake Hydroelectric Project on Allison Creek near Valdez, Alaska. NOAA Fisheries plans to be an active participant in the licensing process for the duration of this proceeding.

Sincerely,

for James W. Balsiger
Administrator, Alaska Region

Enclosure

cc: Service List

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Green Power Development,LLC	)	Docket No.
	)	
Allison Lake Project	)	Project No. 12530-000
	)	
Scoping comments and Study Request	)	

NATIONAL MARINE FISHERIES SERVICE

SCOPING COMMENTS AND STUDY REQUESTS

FOR

ALLISON LAKE HYDROELECTRIC PROJECT

FERC NO. 12530-001

Introduction

Green Power Development, LLC, has submitted a Pre-Application Document and Scoping Document 1 for a hydropower project on Allison Lake in Valdez, Alaska. The National Marine Fisheries Service (NOAA Fisheries) hereby submits comments and study requests pursuant to the Federal Power Act, 16 U.S.C 791a et seq. Service of process and other communications regarding this motion and the proceedings for relicensing should be made to:

Thomas Meyer, Attorney Advisor
Office of General Counsel, Alaska Region
National Oceanic and Atmospheric Administration
P.O. Box 21109
Juneau, AK 99802
Telephone 907/586-7414x234

National Marine Fisheries Service
Larry Peltz
222 West 7th Avenue, #43
Anchorage, Alaska 99513
Telephone 907/271-3029

Interest of the Petitioner:

NOAA Fisheries, an agency under the Department of Commerce, has primary responsibility for management of the nation's living marine resources. NOAA Fisheries conserves, protects, and manages living marine resources to ensure their continuation as functioning components of marine ecosystems, affords economic opportunities, and enhances the quality of life for the American public. The Federal Power Act, 16 U.S.C. 791a et seq, authorizes NOAA Fisheries to prescribe license conditions necessary to protect, mitigate damage to, and enhance fish and wildlife (including spawning habitat) affected by the development, operation and management of a hydropower project. Additionally, NOAA Fisheries is interested in the protection of marine, estuarine and anadromous fishery resources pursuant to, among other authorities, the Anadromous Fish Conservation Act, 16 U.S.C. 757(a) et seq, the Magnusen-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801 et seq., and the Pacific Salmon Treaty Act of 1985, 16 U.S.C. 3631-3644.

Scoping Comments:

Green Power Development LLC is requesting a permit for development and construction of a new hydropower generation facility on Allison Lake and Allison Creek near Valdez, Alaska. The proposed project would consist of: (1) a natural lake having a surface area of 243 acres with a storage capacity of 13,400 acre-feet and a normal water surface elevation of 1,345 feet mean

sea level, (2) a intake structure, (3) a 10,000-foot-long penstock, (4) a powerhouse containing one generating unit having an installed capacity of 4,950 kilowatts, (5) a 2.5-mile-long transmission line; and (6) appurtenant facilities. The actual project design will depend on engineering studies not yet completed. At this time, a determination has not been made whether he proposed project would be operated as a storage plant or a run-of-river facility.

Allison Creek has been identified by the State of Alaska as being important for the spawning, rearing, or migration of anadromous fishes. In particular, Allison Creek supports pink and chum salmon. NOAA Fisheries has a statutory interest in the conservation of these salmon species.

Based on information provided in the Pre-Application Document, Scoping Document 1 and the Scoping Meeting on August 16, 2005, NOAA Fisheries' primary concerns are instream flows and water temperatures.

The powerhouse appears to be located above the stream reach utilized by anadromous fish. If the project is operated as a run-of-river facility, instream flows will be maintained at close to existing levels. Operation of the proposed project as a storage plant could cause dewatering of salmon habitat unless instream flows are maintained.

If the water intake is at or near the surface of the lake, water temperatures downstream will be similar to ambient temperatures. An intake placed well below the lake surface could

significantly alter the stream temperature and result in conditions unfavorable for salmon production.

Study Requests:

1. Instream Flow Requirements
2. Lake and Stream Temperatures

INSTREAM FLOW REQUIREMENTS STUDY

Goals and Objectives

The goal of this study is to insure adequate stream flow data is assimilated to determine the minimum stream flows needed to maintain existing salmon in Allison Creek.

Relevant Resource Management Goals

NOAA Fisheries supports and recommends maintaining salmon production in Allison Creek at existing levels. Maintaining adequate water flows at critical periods throughout the year is necessary for continued salmon production. A database of historic flows is necessary to establish instream flow levels that maintain salmon production while the project is operating.

Background and Existing Information

The Pre-Application Document (PAD) contains flow data for a 5 year period (1981-1985). Based on discussions with other agency personnel (Dennis Gnath, Joint Pipeline Office), Alyeska Pipeline Terminal has flow data for a much longer time period. The Alyeska data set would greatly enhance the existing database and

provide better information for establishing minimum instream flows for Allison Creek.

Project Nexus

Knowledge of monthly Allison Creek water flows is critical for maintaining salmon production. Adequate flows must be maintained in Allison Creek to support spawning, incubation and rearing of salmon. Minimum flows in the winter are particularly critical to insure salmon eggs and alevins are not dewatered and killed. Expanding the database in the PAD will provide better information for setting the minimum flows and maximizing water available for power production. Without a larger database, NOAA Fisheries and other agencies may take a conservative approach when recommending instream flow levels, resulting in recommended flows that could be larger than necessary to insure adequate minimum flows for salmon production.

Proposed Methodology

NOAA Fisheries recommends that the applicant contact Alyeska and/or other sources and obtain all existing flow data for Allison Creek. The existing database should be expanded and the table in the PAD for historic flows can be expanded.

Level of Effort and Cost

The level of effort and cost associated with this study would be minimal and will not make the cost of licensing this project

prohibitive.

LAKE AND STREAM TEMPERATURE STUDY

Goals and Objectives

The goal of this study is to collect and/or assimilate lake and stream temperature data to assure the project maintains stream temperatures necessary to support salmon production.

Relevant Resource Management Goals

NOAA Fisheries supports and recommends maintaining salmon production in Allison Creek at existing levels. Water temperatures are a critical component for maintaining salmon production. Any significant changes in water temperature caused by the project could negatively impact salmon production.

Background and Existing Information

The PAD refers to minimal temperature data stored on the project website. The existing data are not adequate to determine if temperature changes in Allison Creek will occur if the penstock intake is located below the lake surface. A minimum of 1 and preferably 2 years of data are necessary to assess temperature impacts.

Project Nexus

Knowledge of Allison Lake and Allison Creek temperature data is critical for determining project impact on salmon production.

Significant temperature changes could negatively impact downstream salmon production. The Cooper Lake Hydropower Project is a prime example of temperature changes having a negative impact on salmon production. The Cooper Lake Project cut off the flow of warm lake surface water from Cooper Lake to Cooper Creek. The temperature in Cooper Creek dropped by as much as 5 degrees C. during some months, resulting in a significant decline in salmon use of Cooper Creek.

Proposed Methodology

A thermograph should be placed in Allison Creek and monitored for a 12 to 24 month period. Thermographs should also be placed in Allison Lake near the outlet at the lake surface, 1 meter, 5 meters, 10 meters and 20 meters. The Allison Lake data should be adequate for constructing lake temperature profiles and determining any potential temperature changes resulting from the project. Alternatively, the applicant could collect monthly lake temperature profiles using a handheld thermometer with a metered temperature probe.

Level of Effort and Cost

The cost of a thermograph for stream monitoring is minimal. The cost of thermographs for lake monitoring is greater, but still reasonable. Total cost for temperature monitoring and data assimilation is reasonable for this project.

Pursuant to its statutory responsibilities to conserve, protect, and manage living marine resources, and based on preliminary information that the Allison Lake Hydroelectric Project could impact those resources, NOAA Fisheries hereby submits scoping comments and study requests. Furthermore, NOAA Fisheries will be an active participant in this proceeding to reserve its authority to prescribe or recommend future terms and conditions necessary for the protection of anadromous fish.

Respectfully submitted for NOAA Fisheries this 9 day of September, 2005, in Juneau, Alaska.

Robert D Mecum

for James W. Balsiger
Administrator, Alaska Region

CERTIFICATE OF SERVICE

I hereby certify that I have this day served upon the Federal Energy Regulatory Commission, by Federal Express, a Motion to Intervene in this matter plus eight copies to its place of business located at 888 First Street, N.E., Washington D.C., 20426.

Mary B Goodb

Program Support Assistant
NOAA Fisheries Habitat Conservation Division, Alaska Region

Enclosures: 8 copies