

PUBLIC



825 NE Multnomah, Suite 1500
Portland, Oregon 97232

ORIGINAL

June 12, 2007

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

**Subject: American Fork Hydroelectric Decommissioning Project
Project Plans for Review**

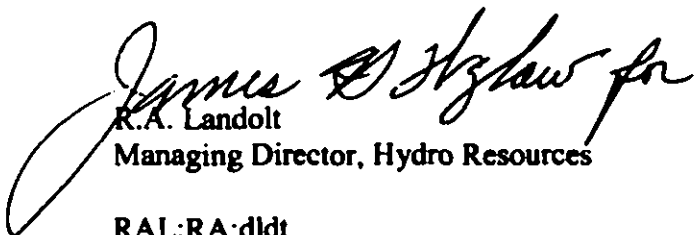
Dear Ms. Bose:

Enclosed for Commission review and approval are bound sets of the various plans required by decommissioning Order 108 FERC 61,130, issued August 4, 2004. Please refer to the attachments' cover page for a complete listing. Comments from the state and federal resource agencies following the prescribed 30-day review period are enclosed, as well as PacifiCorp's responses to them. The current decommissioning drawings and specifications also accompany the plans.

We request an expeditious review by the Commission for approval of the enclosed documents in order to maintain our project schedule. The original and one copy of this letter with two bound sets of attachments are enclosed. The letter is considered public information. The bound documents are individually classified in the following table. However, since they comprise a single bound set a portion of which is classified critical energy infrastructure information (CEII), the set is therefore classified CEII. We are also submitting two copies of this letter and two bound sets of attachments to the Portland Regional Engineer.

Should you have questions or need to discuss this further, please contact Bob Atwood at 503-813-6696 or Frank Edelman at 801-220-2566.

Sincerely,


R.A. Landolt
Managing Director, Hydro Resources

RAL:RA:dldt

Enclosure Classification Table

Letter - Public

Wetland Protection Plan - Public

Spill containment and Prevention Plan - Public

Agency comments; PacifiCorp responses - Public

Decommissioning Plans and Specifications - CEII

Cofferdam Drawings and Specifications - CEII

Erosion Control Plan - Public

Public Safety and Traffic Control Plan - Public

Quality Control Inspection Program - Public

Implementation of MOA: SHPO and FERC - Privileged

Transmission Line Relocation Proposal - CEII

Temporary Construction Emergency Action Plan - CEII

PUBLIC

This letter is considered Public Information.

Its attachments are considered Critical Energy Infrastructure Information - DO NOT RELEASE.

Kimberly D. Bose, Secretary

June 12, 2007

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cc: Patrick Regan, P.E., Regional Director
Federal Energy Regulatory Commission
101 SW Main, Suite 905
Portland, Oregon 97204

Kimberly D. Bose, Secretary

June 12, 2007

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*American Fork Hydroelectric Decommissioning Project
Project Plans for Review*

Internal Distribution

icc: Atwood, Bob; Davies, Eve; deTar, Diana; Edelmann, Frank; Hydro Document Services;
Jewkes, Roy; Kolkman, Jack; McCune, Kimberly; Shrier, Frank; Wazlaw, James

DMS: American Fork; Compliance; FERC, decommissioning, Order, plans, drawings



825 NE Multnomah, Suite 1500
Portland, Oregon 97232

**American Fork Hydroelectric Project
FERC No. 696
American Fork Project Decommissioning**

**Project Plans for Commission Review and
Approval**

Erosion Control Plan
Wetland Protection Plan
Public Safety and Traffic Control Plan
Spill containment and Prevention Plan
Cofferdam Drawings and Specifications
Implementation of MOA between SHPO and FERC
Temporary Construction Emergency Action Plan
Quality Control Inspection Program
Transmission Line Relocation Proposal
Decommissioning Plans and Specifications

Also included

Documentation of agency comments and PacifiCorp responses to comments.

**Addressing Requirements
of the
Federal Energy Regulatory Commission Decommissioning Order
Order 108 FERC 61,130, Issued August 4, 2004**

June 11, 2007

**This document set is considered Critical Energy Infrastructure Information –
DO NOT RELEASE.**



825 NE Multnomah, Suite 1500
Portland, Oregon 97232

WETLAND PROTECTION PLAN

**American Fork Hydroelectric Project
FERC No. 696
American Fork Decommissioning**

Addressing Paragraph G of the FERC Decommissioning Order 108 FERC 61,130

In Consultation with:

**USDA Forest Service
USDI Park Service
Utah Division of Wildlife Resources, Department of Natural Resources**

April 2007

Wetland Protection Plan

American Fork Hydroelectric Project

FERC No. 696

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1.0 INTRODUCTION

PacifiCorp Energy (PacifiCorp) is the licensee and operator of the American Fork Hydroelectric Project (Project), which is regulated by the Federal Energy Regulatory Commission (FERC) as Project No. 696. On August 4, 2004, the FERC issued PacifiCorp an Order (108 FERC 61,130) granting the surrender of the Project's license and its removal. The Order also approved the settlement agreement that established conditions of PacifiCorp's voluntary Project decommissioning. In addition to PacifiCorp, the following state and federal agencies (agencies) were signatories to the SA:

- U.S. Department of Agriculture – Forest Service (FS)
- U.S. Department of Interior – National Park Service (NPS)
- U.S. Department of Interior – Fish and Wildlife Service (FWS)
- Utah State Historic Preservation Office (SHPO)
- Utah Department of Transportation (UDOT)
- Utah Trout Unlimited (UTU)
- American Whitewater
- Utah Division of Wildlife Resources

The FERC Order establishes PacifiCorp requirements for decommissioning. In particular, paragraph G of the Order requires PacifiCorp to file with the FERC a Wetland Protection Plan (Plan) following consultation with appropriate agencies.

Project Location and Setting: The American Fork hydroelectric project is located on National Forest System lands within a rugged and narrow canyon in Utah County, Utah, along the American Fork Creek a few miles east of the City of American Fork. Winding through the canyon is the narrow, two lane, State Highway No. 92 also known as American Fork Canyon Road. The federal lands within the American Fork canyon include national wilderness lands managed by the USDA Forest Service and the Timpanogos Cave National Monument lands managed by the National Park Service. This publicly owned land attracts many thousands of visitors annually, especially during the summer, for hiking, picnicking, and to visit the Timpanogos Cave complex. The hydroelectric facilities are small and are relatively un-noticed by many of the public.

2.0 DECOMMISSIONING REQUIREMENTS

Scope & Schedule: The facilities include a concrete dam that is four feet high and 30 feet wide, a water conveyance system comprised of nearly 12,000 feet of 28 inch diameter steel pipe located predominantly high on the canyon north wall, and a powerhouse complex that includes a small cottage and garage. These facilities are scheduled to be decommissioned during a four- month period starting in August 2007. This work will include the following activities:

- Demolish and removal of the concrete dam to an off site location.
- Demolish and removal of the water intake structure located at the dam.
- Demolish, remove and recycle the visible portions of the steel pipe flowline.
- Remove and recycle the generating equipment from inside the powerhouse.
- Restore the powerhouse structure and convey ownership to USDA Forest Service.
- Demolish and dispose of the operator's cottage and garage to an off site location.
- Restore the American Fork Creek adjacent to and downstream of the powerhouse.
- Construct a small public parking area and rest room adjacent to the powerhouse.
- Grade and re-vegetate all disturbed areas.

The decommissioning of the American Fork hydroelectric facilities will occur in three areas:

- **Powerhouse Area:** Much of the work in the area of the powerhouse will be behind the existing chain-link fence that runs along the north side of highway 92. In addition to restoration of the powerhouse structure, a temporary water bypass system will be installed to allow decommissioning work to be conducted in the dry within the dewatered creek bed.
- **Dam Location:** The American Fork dam is located in an area adjacent to the south side of highway 92 approximately 2.5 miles east of the powerhouse location. A temporary water bypass system will be installed to allow the dam and intake structure to be removed in the dry.
- **Flowline Pipe Removal:** The work necessary to cut and prepare the pipe for subsequent helicopter removal will be in remote areas high on the north wall of the American Fork Canyon. While water borne erosion caused by this activity is not an issue, the ground disturbance caused by the pipe removal is to be minimized to reduce the downhill movement of soil and rock materials.

3.0 WETLAND PROTECTION PLAN

The project wetland protection plan is comprised of the following elements:

1. Summary of Wetland Protection Plan:

- Construction will take place downstream of, and have no direct nor indirect effects on the small riparian wetland complex upstream from the diversion dam site.
- No other wetlands within or adjacent to the project construction site have been identified.
- All impacts to wetlands will be avoided, thus eliminating the need for additional wetland protection measures.
- Construction of the berm called for in the surrender orders has been determined to be unnecessary (see details below), and would, if built, result in unintended detrimental impacts to the upstream wetland complex, and therefore has been eliminated from the current Removal Plan, per agency stakeholder agreement.

The plan for the removal of the American Fork Creek Dam originally contained measures to protect a wetland located upstream from the hydro – power diversion dam. The pond created by the diversion dam, combined with an adjacent spring, as well as groundwater flows through the coarse river sediments, historically sustained the wetland hydrology of this small riparian wetland adjacent to American Fork Creek. The elimination of impounded waters from behind the diversion dam in 2004 has caused areas formerly inundated by the forebay, and adjacent to the upstream complex, to drain. While the diversion dam and pond were assumed, in part, to sustain the hydrology of the riparian wetland, subsequent field investigation has revealed that the hydrology is sustained by the adjacent spring, the groundwater flows from upstream, as well as by the deep-rooted nature of the riparian community. In the original project description for the wetland protection plan, a berm was to be built to protect and maintain the hydrology of the riparian wetland. Based on this new information, the impacts of the planned berm would be greater than simply maintaining the present channel configuration.

The present plan contains protective measures that will prevent disturbance of the wetland and wetland hydrology. Because dam removal will have no effect on the riparian wetland, no additional wetland mitigation or protection is required.

2. Plans and Technical Specifications:

The wetland area to be protected by avoidance during decommissioning activities at the dam is shown on plan drawings Nos. 116032, Sheets 100, 102.

3. Quality Control Inspection Program (QCIP): A Quality Control Inspection Program meeting the requirements of the Federal Energy Regulatory Commission (FERC) has been prepared for this project. Section 2E of the QCIP addresses Erosion Control and Environmental Compliance and is, therefore, considered part of the project wetland protection plan.

4. State and Federal Project Permits:

The American Fork decommissioning project will have State and Federal permits containing, in part, requirements for a State stream alteration permit. Because the US Army Corps of Engineers has determined that the proposed work will not involve the discharge of dredged or fill material into wetlands along the American Fork River, Section 404 permit requirements outlined in their 2004 letter have been retracted (see attached 2007 letter). A State 401 water quality certification has also been obtained for this project. Compliance with the requirements of these project permits are an important component of the project wetland protection plan. Copies of these permits will be kept on site for inspection and reference as work proceeds.

5. Plan Monitoring and Modification: The implementation and effectiveness of this Wetland Protection Plan will be monitored during the performance of the project. Based on actual field conditions adjustments will be made as considered necessary to improve the effectiveness of the wetland protection measures. Formal monitoring, as specified in the relevant Surrender Order, will not take place based on the determination of the Army Corps of Engineers and the other project stakeholders to eliminate the berm which would have deposited fill material in the riparian wetland complex upstream of the diversion dam site. Annual photo monitoring of the wetland complex will be conducted for a year after construction to ensure the riparian complex remains in its current state. Baseline photos will be taken prior to the beginning of construction in summer of 2007; final comparison photos will be taken one year after project completion, and will be submitted to the FERC and stakeholders no later than 31 March 2009. No additional monitoring or replacement mitigation efforts are anticipated to be necessary as all wetland impacts will be avoided.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

April 20, 2007

Regulatory Branch (200450385)

Eve Davies
PacifiCorp
1407 West North Temple, Suite 210
Salt Lake City, Utah 84116

Dear Ms. Davies:

This concerns the proposed American Fork Dam Removal, FERC Project No. 696-013-Utah along the American Fork River. The project is located along the Alpine Loop Road (State Route 92) in the American Fork Canyon, Utah County, Utah.

Based on the information you have provided, we have determined that the proposed work will not involve the discharge of dredged or fill material into wetlands along the American Fork River. The permitting requirements outlined in our letter dated September 27, 2004, are hereby retracted. Due to our limited resources and the exceptional review and oversight provided by our State counterparts, you may apply for a General Permit 40 (Joint Section 404 - Stream Alteration Permit) administered by the Utah Division of Water Rights to satisfy your Section 404 permitting requirements.

Please refer to identification number 200450385 in any correspondence concerning this project. If you have any questions, please contact me at the Utah Regulatory Office, 533 West 2600 South, Suite 150, Bountiful, Utah 84010-7744, email james.m.mcmillan@usace.army.mil, or telephone 801-295-8380, extension 17.

Sincerely,

A handwritten signature in black ink, appearing to read "James McMillan".

James McMillan
Senior Project Manager

Copy furnished:

Chuck Williamson, Department of Natural Resources, Division of Water Rights, 1594 West North Temple, Suite 220, Salt Lake City, Utah 84114-6300



825 NE Multnomah, Suite 1500
Portland, Oregon 97232

SPILL CONTAINMENT AND PREVENTION PLAN

Addressing Paragraph H of the FERC Decommissioning Order 108 FERC 61,130

**American Fork Hydroelectric Project
FERC No. 696**

Prepared by:

PacifiCorp

In Consultation with:

**USDA Forest Service
Uinta National Forest
USDI Park Service**

April 2007

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1.0 INTRODUCTION

PacifiCorp Energy (PacifiCorp) is the licensee and operator of the American Fork Hydroelectric Project (Project), which is regulated by the Federal Energy Regulatory Commission (FERC) as Project No. 696. On August 4, 2004, the FERC issued PacifiCorp an Order (108 FERC 61,130) granting the surrender of the Project's license and its removal. The Order also approved the settlement agreement that established conditions of PacifiCorp's voluntary Project decommissioning. In addition to PacifiCorp, the following state and federal agencies (agencies) were signatories to the SA:

- U.S. Department of Agriculture – Forest Service (FS)
- U.S. Department of Interior – National Park Service (NPS)
- U.S. Department of Interior – Fish and Wildlife Service (FWS)
- Utah State Historic Preservation Office (SHPO)
- Utah Department of Transportation (UDOT)
- Utah Division of Wildlife Resources
- Utah Trout Unlimited (UTU)
- American Whitewater

The FERC Order establishes PacifiCorp requirements for decommissioning. In particular, paragraph H of the Order requires PacifiCorp to file with FERC a Spill Containment and Prevention Plan (Plan). To prevent impacts to aquatic habitats and species, the Plan establishes procedures and best management practices (BMPs) designed to prevent discharges of petroleum products and concrete dust from entering American Fork Creek.

Decommissioning tasks will require the use of heavy equipment operating near water. Multiple forms of petroleum fuels and lubrications are required for the proper functioning of heavy equipment. Examples include, gear oil, motor oil, hydraulic oil, bearing grease, and diesel fuel. Precautions will be taken to minimize the risk of both direct contamination from a spill to water and indirect contamination from a spill to soil that is subsequently transported to water by stormwater runoff. Nonetheless, the Plan will also establish containment and clean-up procedures in the event of a spill.

Procedures are also provided to minimize the risk of concrete dust entering American Fork Creek. Several existing concrete structures will be demolished and removed from the site. Concrete dust will be generated during the demolition and removal processes. Procedures will be implemented to minimize dust suspension and mobilization by air and water. Concrete dust control will be coordinated with the Soil Erosion Plan (Paragraph F of the FERC Order) to reduce the risk of concrete dust entering American Fork Creek through storm water runoff.

The Plan was developed in consultation with the agencies. Section 5.0 of the Plan describes the consultation process. Following agency consultation, the Plan, was filed with FERC 60 days prior to commencement of land-disturbing decommissioning activities.

1.1 Goals and Objectives

The Plan's overarching goal is to comply with the license surrender and Project decommissioning Order. Upon implementation, the plan will establish procedures and BMPs to minimize the risk of decommissioning-related discharges of concrete dust and petroleum products entering American Fork Creek.

The following objectives are addressed by the Plan:

- Describe decommissioning requirements
 - Facilities descriptions
 - Decommissioning overview
- Specify procedures and BMPs for petroleum spills
 - Establish Contractor responsibilities
 - Identify spill hazards
 - Specify spill response procedures and BMPs
 - Specify spill notification requirements
- Specify procedures and BMPs for concrete dust control
 - Establish Contractor responsibilities
 - Identify dust producing hazards
 - Specify dust control procedures and BMPs
- Document agency consultation during development of the Plan

1.2 Plan Structure

The Plan is arranged into five sections:

- Section 1.0 describes the Plan's goals, objectives, and structure
- Section 2.0 summarizes decommissioning requirements and Project area
- Section 3.0 provides spill procedures to minimize the potential for petroleum products to enter American Fork Creek
- Section 4.0 provides control procedures to minimize the potential for concrete dust to enter American Fork Creek
- Section 5.0 summarizes agency consultation that occurred during Plan development

2.0 DECOMMISSIONING REQUIREMENTS

2.1 Project Description

Originally constructed in 1906-07, the American Fork Hydroelectric Project is situated on American Fork Creek in Utah County, Utah. The Project consists of a diversion structure, flowline, powerhouse facility, and powerline,

The concrete overflow-type diversion dam is 4.5 feet tall by 29.75 feet wide with steel slide gates. A flowline intake structure is built into the right side of the diversion dam with two trash

racks and is controlled by a Tainter gate. A wooded control building is also present at the diversion structure and contains controls equipment.

The 11,666-foot-long flowline originates at the diversion dam and delivers water to the powerhouse. The flowline gravels both above and below ground and traverses very steep terrain. The flowline and has experienced multiple failures typically due to rock fall and landslides.

The 2,700 square feet powerhouse is constructed of masonry brick and contains a single Pelton horizontal synchronous turbine with a Wagner step-up transformer generator. The installed capacity is 1.5 megawatts. A small fenced substation outside the powerhouse contains an oil-filled transformer. A 275-foot-long primary power line connects the Project's powerhouse to PacifiCorp's interconnected distribution system. An operator's house, garage, and shed are also present near the powerhouse.

2.2 Diversion Structure

The diversion dam, Tainter gate, trash racks, control building and equipment, and concrete foundations will be demolished during the decommissioning. All demolished materials will be removed from federal lands for disposal. The stream channel will be reconstructed and disturbed riparian and upland areas will be revegetated.

2.3 Powerhouse Facility and Power Line

The powerhouse will be repaired and ownership conveyed to the U.S. Government. However, the spillway; transformer pad; and operator's house, garage, and shed will be removed. The retaining wall protecting the powerhouse from undercutting will be modified as necessary, Utah State Route 92 will be protected, and the site will be generally rehabilitated. The power generation equipment and appurtenances will be removed or retained per U.S. Forest Service direction. The Projects primary power line will be relocated outside of the Lone Peak Wilderness Area.

2.4 Flow Line

Exposed sections of the flowline, supports, and venting will be removed. The ends of flowline sections left on site will be capped. Sections of flowline left under or next to Utah State Route 92 and below the intake structure will be filled with concrete grout. About 550 feet of penstock will be retained in place for historical purposes.

3.0 PETROLEUM SPILL PROCEDURES

3.1 Procedure Responsibilities

PacifiCorp's primary contractor (Contractor) performing decommissioning work is responsible for implementing and complying with the Plan's Petroleum Spill Procedures and BMPs. The Contractor is responsible for instructing their employees about the Plan's requirements and

maintaining readily available copies of the Plan onsite. Furthermore, the Contractor will provide sufficient manpower, equipment, and materials necessary to expeditiously and appropriately respond to a petroleum product spill.

The Contractor will promptly report all petroleum product spills to PacifiCorp. PacifiCorp is responsible ensuring that the Plan is properly implemented and correcting deviations from the Plan.

3.2 Identified Spill Hazards

Sources of petroleum products were evaluated during Plan development. Mobile construction equipment and supporting vehicles operating near American Fork Creek were identified as the Primary spill hazards associated with decommissioning activities. Spill prevention, containment, and recovery BMPs are instituted for each identified hazard.

Four primary sources of petroleum product spills were identified:

- Equipment leaks
- Storage container leaks
- Refueling spills
- Equipment failure

Multiple construction-related petroleum products will likely to be present at the decommissioning site:

- Hydraulic fluid
- Brake fluid
- Power steering fluid
- Motor oil
- Crankcase oil
- General Lubrications
- Gasoline
- Diesel

3.3 Spill Prevention

The Contractor is responsible for implementing BMPs designed to prevent petroleum product spills. Specifically, spill prevention BMPs are arranged into five categories:

- Employee training, direction, and oversight
 - Prior to start of project work, Contractor will train their employees and subcontractors on requirements of this Plan and proper implementation of spill prevention BMPs.

- Contractor will direct employees and subcontractors when implementing spill prevention BMPs as needed throughout the project.
- Contractor will provide oversight to ensure spill prevention BMPs are implemented appropriately and effectively.
- **Daily equipment and vehicle inspections**
 - Spill prevention will be accomplished with routine inspections and maintenance.
 - Equipment systems containing petroleum products will be visually inspected each day prior to the start of work.
 - An identified leak will be repaired and the leaked material will be recovered prior to placing the equipment into service.
 - Key components and parts of the petroleum product containment system (e.g., hydraulic hoses and fittings) will also be visually inspected for wear and fatigue.
 - Suspect or leaking components and parts will be repaired/replaced prior to placing the equipment into service.
- **Water entry inspections**
 - No equipment leaking a petroleum product will be permitted to perform in-stream work.
 - In addition to daily inspections, equipment will be visually inspected for petroleum product leaks immediately prior to entering or working in water.
 - An identified leak will be repaired and the leaked material will be recovered prior to placing the equipment into service.
- **Fueling station establishment and daily inspections and fueling BMPs**
 - Bulk gasoline and diesel fuel will be stored at a designated fueling station located as far from a free water source as practicable, and ideally greater than 150 feet.
 - An identified fuel leak will be remedied and the leaked material will be recovered immediately upon the leak detection.
 - Offsite fueling stations should be used as much as practical.
 - Spill response equipment and materials will be located at the fueling station and fuel spills will be cleaned up immediately.
 - Vehicles and equipment fuel tanks should not be filled to capacity.
 - Wheeled vehicles and equipment should only be fueled at the designated fueling station.
 - Tracked mobile equipment may be fueled outside of the designated fueling station, but at least 50 feet from water.
 - Fuel dispenser nozzles will be equipped with automatic shutoffs.
 - Fueling operations will not be unattended.
- **Petroleum product bulk storage**
 - Bulk petroleum (e.g., motor oil, hydraulic fluid, and chassis grease) products not in-service will be centrally stored in leak-proof containers at the fueling station.
 - Contractor will provide secondary spill containment (e.g., containment pallets) of adequate volume for the largest single stored petroleum product container.

- Each petroleum product container stored at the fueling station will be visually inspected for leaks each day prior to the start of work.
- An identified leak will be remedied and the leaked material will be recovered immediately upon the leak detection.
- Storage containers for petroleum products will have labels displaying contents and constructed of materials compatible with the stored product.
- Material Safety Data Sheets (MSDS) and copies of this Plan will be maintained at the fueling station for petroleum products maintained onsite.

3.4 Spill Response

Spill response includes 1) pre-spill preparation, 2) detection and response planning, 3) containment and recovery, and 4) cleanup:

- **Pre-spill Preparation**
 - Prior to start of project work, Contractor will train their employees and subcontractors on requirements of this Plan and proper implementation of spill response procedures and equipment.
 - Spill response training should include a functional test in response to a spill scenario.
 - Contractor will direct employees and subcontractors when implementing spill response procedures.
 - Contractor or qualified PacifiCorp employee will provide oversight to ensure spill response procedures are implemented appropriately and effectively.
 - Contractor will obtain and maintain 2 spill kits according to specification in Table 1.
 - A complete spill kit will be stationed at the diversion dam and the powerhouse facilities for rapid deployment in the event of a spill.
 - Contractor will pre-identify suitable locations for spill containment and recovery.
 - Two rows of oil absorbent spill booms will be placed across American Fork Creek downstream of the work area during any period of in-water work with oil-filled equipment.
 - PacifiCorp will periodically inspect the Contractor spill kits prior to project commencement and boom placement prior to in-water work.
- **In-water Spill Detection and Response Planning**
 - Upon detection of oil reaching water or soil within 10 feet of water, Contractor will stop work, assess the situation, and formulate a response plan.
 - Contract will consider personal safety as the overriding goal during response planning and use appropriate Personal Protective Equipment.
 - The spill response plan will include an identification of the spill source, direction of travel, rate of travel, and potential containment/recovery locations.
 - Select locations for spill containment and recovery where stream hydrodynamics will move petroleum products to slower water suitable for recovery.

- Contractor will deploy personnel with spill containment and recovery equipment immediately after formulating the spill response plan.
- Contractor will dispatch a spotter to monitor the downstream progression of the spill leading edge and assess additional containment needs.
- Contractor will contact PacifiCorp's Hydro Control Center and Compliance Technician (see Section 3.5 below) while implementing the spill response plan.
- **In-water Spill Containment and Recovery:**
 - Upon developing a response plan, Contractor will immediately execute the plan by dispatching spill response personnel and appropriate spill containment/recovery equipment.
 - Contractor will provide and have immediately accessible the spill containment and recovery equipment listed in Table 1.
 - The spill response should focus on curtailing a spill, containing petroleum product that has reached water, minimizing the volume of already spilled product entering water, and isolating the source of the spill.
 - When possible, stop the spill source by a closing valve or uprighting an overturned container, or limit a spill by plugging a leak.
 - Stop use of machinery causing a spill and remove the equipment if possible from the proximity of a water source.
 - Contractor will deploy spill equipment (e.g., floating booms and soaks) per *manufactures recommendations to contain spilled petroleum product that has entered water.*
 - Deploy oil absorbing booms downstream of the spill source. Ideally, booms are pre-deployed prior to beginning in-water work.
 - Firmly anchor both ends of oil-absorbent booms to a sturdy static object during deployment.
 - Position booms such that the entire face of the boom has contact with the water surface.
 - Replace deployed booms when 50-75% of the boom becomes submerged. Deploy replacement booms slightly downstream prior to removing oil-saturated booms being replaced.
 - Deploy oil-absorbent pads upstream of booms to recover oil gathering upstream of the booms. Replace pads as they become discolored.
 - Continuously monitor boom saturation and position status.
 - Adjust, add, and replace booms and pads as necessary to prevent oil from passing downstream of containment points.
 - Apply pads to absorb oil that collects along the shoreline and vegetation.
 - Continue to deploy oil-absorbent booms and pads until all visible signs of the spill have been removed or a spill response crew dispatched by the HCC has arrived.
- **Land-based Spill detection and response planning, and containment and recovery:**
 - Upon detection of oil reaching soil, Contractor will stop work, assess the situation, and formulate a response plan.
 - Consider personal safety as the overriding goal during response planning.

- The spill response plan will include an identification of the spill source, direction of travel, rate of travel, and potential containment/recovery locations prior to entering water.
 - Notify PacifiCorp's Hydro Control Center and Compliance Technician (see Section 3.5 below).
 - Contractor will immediately deploy personnel with spill containment and recovery equipment immediately after formulating the spill response plan.
 - The spill response should focus on containing petroleum product to prevent contact with water and then on isolating the source of the spill.
 - If appropriate, contractor will construct earthen berms or trenches and deploy absorbent spill equipment to contain a spill prior to petroleum product entering water.
 - Contractor will minimize traffic in the spill area to preclude the transport of contaminated soil.
 - Prior to clean-up, contaminated soil should be protected from stormwater runoff during precipitation as practical without affecting containment/recovery efforts.
- **Spill Clean-up:**
 - Used oil-absorbent booms and pads will be placed in a lined drum for later proper disposal.
 - Contaminated soil will be scooped, collected, bagged and placed in a drum for proper disposal.
 - Store used oil-absorbent booms and pad and contaminated soil in labeled drums.
 - Disposal of used booms and pads and contaminated soil will be coordinated with PacifiCorp's Compliance Technician.

3.5 Spill Notification

While simultaneously responding to a spill, Contractor will contact the Hydro Control Center (HCC) if any of the following criteria apply:

- The spill has contacted water
- The spill has the potential to contact water
- The spill is greater than 5 gallons
- The onsite personnel require assistance for appropriate oil spill cleanup

The HCC will be contacted by phone at the following two numbers:

- 877-562-9928
- 360-225-4410

Note: limited cell phone coverage exists at the Project. Contractor will have a plan to dispatch personnel to nearest reliable source of phone communications.

Contractor should be prepared to provide the following information to the HCC upon making notification of a spill:

- Name
- Phone number at the spill site
- Date and time of spill
- Location of spill
- Source and cause of spill
- Type of spilled material
- Approximate quantity of spilled material
- Spill contact type = water, soil, or both
- Environmental threats from spill
- Personal injury related to spill
- Weather conditions
- Status of spill assessment and response

In addition to the HCC, Contractor will notify Jared Lucero, PacifiCorp's Compliance Technician in Utah:

- 801-629-7681
- 801-710-9265

Although HCC notification for spills of less than 5 gallons to soil is not required, Contractor must report all spills to PacifiCorp's Utah Compliance Technician. In addition, PacifiCorp may require a detailed report identifying the cause of a spill. The Plan may be adjusted to include additional measures to prevent a similar spill reoccurrence and revise response procedures.

4.0 CONCRETE DUST CONTROL PROCEDURES

4.1 Procedure Responsibilities

PacifiCorp's primary contractor (Contractor) performing decommissioning work is responsible for implementing and complying with the Plan's Concrete Dust Control Procedures and BMPs. The Contractor is responsible for instructing their employees about the Plan's requirements and maintaining readily available copies of the Plan onsite. PacifiCorp is responsible ensuring that the Plan is properly implemented and correcting deviations from the Plan.

4.2 Identified Dust Hazards

Potential sources of concrete dust and transportation mechanisms were considered during Plan development. Several structures containing concrete will be demolished during decommissioning:

- Diversion dam and spillway

- Operator's house
- Operator's garage
- Transformer pad

Concrete dust might be created during structure demolition, loading, and transport. Dust generated might then be transported to American Fork Creek by air or storm water runoff. Therefore, the Plan provides dust abatement and stormwater runoff procedures in the Soil Erosion Plan (Paragraph F of the FERC Decommissioning Order) to address airborne and waterborne sources of concrete dust, respectively.

4.3 Dust Control

The Contractor is responsible for implementing BMPs designed to prevent concrete dust from entering American Fork Creek. Prior to start of project work, Contractor will train their employees and subcontractors on requirements of this Plan and proper implementation of dust control BMPs. Contractor will direct employees and subcontractors when implementing dust control BMPs as needed throughout the project.

Concrete dust will be managed with practices designed to minimize dust creation and with the application of water to concrete rubble as needed during demolition, loading and hauling. Because liquid dust control measures can wash sediments into waterways, the water-based dust control procedure will be integrated with stormwater runoff BMPs specified in the Soil Erosion Plan.

Contractor will provide all necessary equipment to minimize the production of concrete dusts. Water should be applied with a pressurized distribution system with spray nozzles that ensure even distribution. All water distribution systems should be equipped with a positive means of shutoff. At least one mobile water distribution system will be available at all times when concrete dust might be generated. Only a minimum amount of water will be applied to concrete rubble as necessary to eliminate the production of concrete dust and minimize erosion.

Concrete rubble should be handled as little as practicable to further reduce dust production. Ideally, concrete rubble generated during demolition should be loaded directly into trucks for transport off federal lands and proper disposal. Trucks will be covered when transporting material that might produce concrete dust. When temporary storage is necessary, concrete rubble should be piled as far as practical from flowing water and in an area that does not readily drain to American Fork Creek. Erosion and sediment control BMPs, such as sediment fencing, will be installed around piled concrete rubble to prevent sediment-laden stormwater runoff from being transported to American Fork Creek. Contractor will inspect installed erosion and sediment control BMPs daily.

Table 1. Contractor-provided spill equipment required onsite during decommissioning activities for the American Fork Hydroelectric Project.

ITEM DESCRIPTION	SIZE	PART NO.	QNT.	PKG.	LOCATION
Bag, Equipment - Black	STD	Y-BG101	2	Ea.	Barrel 3
Bag, Equipment - Mesh	Large	Y-BG106	2	Ea.	Barrel 1
Drum, Steel, Unlined - Open Head	55 gal.	DRM340	4	Ea.	Spill Area
Life Jacket (PFD)	OZFA	Y-FE116	2	Ea.	Equip. Bag 1
Helmet, Rescue - Water	LG	Y-FE335	0	Ea.	Equip. Bag 4
Throwing Bag, Rope	75'	Y-FE090	2	Ea.	Equip. Bag 1
Spotlight	2M CP	Y-SL076	1	Ea.	Spill Area
Whistle, Emergency - Orange	STD	UA026	2	Ea.	Equip. Bag 2
Respirator - P100 Organic	OZFA	HM007	10 PC	20/box	Equip. Bag 2
Boot Covers	L/XL	WPL693	2	Ea.	Equip. Bag 3
Gloves, Chemical - PVC	OZFA	WPL390	10	Ea.	Equip. Bag 2
Gloves, Disposable - Nitrile	XL	WPL362	1	50/box	Equip. Bag 2
Absorbent, Loose - Universal	40 lbs.	PLP213-1	5	Ea.	Spill Area
Chemical Suits	XL/XXL	WPL665	1	12/case	Barrel 3
Booms, Absorbent - Oil Only	8" X 10'	BOM304	10	4/bag	Spill Area
Broom, Floor - Coarse	24"	CLN278	2	Ea.	Barrel 2
Spill Pads - Oil Only, Hvy Weight	16" X 20"	MAT440	2	100/box	Spill Area
Socks, Absorbent - Oil Only	3" X 48"	SKM210	2	12/box	Spill Area
Liner, Drum, - 8 mil, tie off	55 gal.	DRM927	1	50/box	Barrel 4
Drain Mat	36" X 36"	PLR202	1	Ea.	Barrel 1
Scoop, Plastic (Shovel)	11" X 14"	TLS327	2	Ea.	Barrel 2
Engineer's Hammer	4 LB.	MMEN4	1	Ea.	Equip. Bag 3
Utility Knife	5-1/2"	10-099	1	Ea.	Equip. Bag 3
Post Driver	STD	129999	1	Ea.	Barrel 3
Fence Post - T type	5 FT.	147454	12	Ea.	Barrel 3
Polypropylene Rope	3/8"	ROPEPOLY3/8	600 FT.	600/roll	Barrel 3
Round Nose Shovel	LH	TLRGT	1	Ea.	Barrel 2
Square Nose Shovel	LH	TLSGT	1	Ea.	Barrel 2
Combination Wrench-12 point	15/16"	M6130	1	Ea.	Equip. Bag 3



825 NE Multnomah, Suite 1500
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SOIL EROSION CONTROL PLAN

**American Fork Hydroelectric Project
FERC No. 696
American Fork Decommissioning**

Addressing Paragraph F of the FERC Decommissioning Order 108 FERC 61,130

In Consultation with:

**USDA Forest Service
USDI Park Service
Utah Division of Wildlife Resources, Department of Natural Resources**

April 2007

Soil Erosion Control Plan

American Fork Hydroelectric Project

FERC No. 696

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1.0 INTRODUCTION

PacifiCorp Energy (PacifiCorp) is the licensee and operator of the American Fork Hydroelectric Project (Project), which is regulated by the Federal Energy Regulatory Commission (FERC) as Project No. 696. On August 4, 2004, the FERC issued PacifiCorp an Order (108 FERC 61,130) granting the surrender of the Project's license and its removal. The Order also approved the settlement agreement that established conditions of PacifiCorp's voluntary Project decommissioning. In addition to PacifiCorp, the following state and federal agencies (agencies) were signatories to the SA:

- U.S. Department of Agriculture – Forest Service (FS)
- U.S. Department of Interior – National Park Service (NPS)
- U.S. Department of Interior – Fish and Wildlife Service (FWS)
- Utah State Historic Preservation Office (SHPO)
- Utah Department of Transportation (UDOT)
- Utah Division of Wildlife Resources
- Utah Trout Unlimited (UTU)
- American Whitewater

The FERC Order establishes PacifiCorp requirements for decommissioning. In particular, paragraph F of the Order requires PacifiCorp to file with the FERC a Soil Erosion Control Plan (Plan) following consultation with appropriate agencies.

Project Location and Setting: The American Fork hydroelectric project is located on National Forest System lands within a rugged and narrow canyon in Utah County, Utah, along the American Fork Creek a few miles east of the City of American Fork. Winding through the canyon is the narrow, two lane, State Highway No. 92 also known as American Fork Canyon Road. The federal lands within the American Fork canyon include national wilderness lands managed by the USDA Forest Service and the Timpanogos Cave National Monument lands managed by the National Park Service. This publicly owned land attracts many thousands of visitors annually, especially during the summer, for hiking, picnicking,

and to visit the Timpanogos Cave complex. The hydroelectric facilities are small and are relatively un-noticed by many of the public.

2.0 DECOMMISSIONING REQUIREMENTS

Scope & Schedule: The facilities include a concrete dam that is four feet high and 30 feet wide, a water conveyance system comprised of nearly 12,000 feet of 28 inch diameter steel pipe located predominantly high on the canyon north wall, and a powerhouse complex that includes a small cottage and garage. These facilities are scheduled to be decommissioned during a four- month period starting in August 2007. This work will include the following activities:

- Demolish and removal of the concrete dam to an off site location.
- Demolish and removal of the water intake structure located at the dam.
- Demolish, remove and recycle the visible portions of the steel pipe flowline.
- Remove and recycle the generating equipment from inside the powerhouse.
- Restore the powerhouse structure and convey ownership to USDA Forest Service.
- Demolish and dispose of the operator's cottage and garage to an off site location.
- Restore the American Fork Creek adjacent to and downstream of the powerhouse.
- Construct a small public parking area and rest room adjacent to the powerhouse.
- Grade and re-vegetate of all disturbed areas.

The decommissioning of the American Fork hydroelectric facilities will occur in three areas:

- **Powerhouse Area:** Much of the work in the area of the powerhouse will be behind the existing chain-link fence that runs along the north side of highway 92. In addition to restoration of the powerhouse structure, a temporary water bypass system will be installed to allow decommissioning work to be conducted in the dry within the dewatered creek bed.
- **Dam Location:** The American Fork dam is located in an area adjacent to the south side of highway 92 approximately 2.5 miles east of the powerhouse location. A temporary water bypass system will be installed to allow the dam and intake structure to be removed in the dry.
- **Flowline Pipe Removal:** The work necessary to cut and prepare the pipe for subsequent helicopter removal will be in remote areas high on the north wall of the American Fork Canyon. While water borne erosion caused by this activity is not an issue, the ground disturbance caused by the pipe removal is to be minimized to reduce the downhill movement of soil and rock materials.

3.0 SOIL EROSION CONTROL PLAN

The project erosion control plan is comprised of the following elements:

1. Summary of Soil Erosion Control Plan:

- Construction will occur during the time of year when flows and precipitation are typically minimal.
- All in channel work will be performed in the dry while diverting creek flows.
- Temporary cofferdams will use synthetic liner material for stability and for erosion control.
- Constructed slopes will be at typically stable angles.
- Ground disturbance will be minimized.
- All areas disturbed by the construction activities will be re-vegetated.
- Silt barriers will be placed in advance of construction and will be maintained and adjusted as necessary during and after construction until vegetation is established.
- Weed control will be completed as necessary after construction for the first year, until new vegetation is established.

2. Plans and Technical Specifications:

The project plans and specifications contain the details of the erosion control measures. Listed below are the specific drawings and specification sections showing these measures:

- PacifiCorp Drawing No. 116032,
Sheets 100, 102, 110, 111, 112, 140,
- PacifiCorp General Construction Specification No. 130683.70.0176
Section 1A – General Description and Scope of Work
Section 1E – Construction Sequence and Water Management Plan
Section 2C – Clearing, Grubbing, and Stripping
Section 2D – Cofferdams
Section 2F – Riprap

3. Quality Control Inspection Program (QCIP): A Quality Control Inspection Program meeting the requirements of the Federal Energy Regulatory Commission (FERC) has been prepared for this project. Section 2E of the QCIP addresses Erosion Control and Environmental Compliance and is, therefore, considered part of the project erosion control plan.

3. State and Federal Project Permits:

The American Fork decommissioning project will have State and Federal permits containing, in part, requirements for erosion and sediment control (e.g., Stormwater Pollution Prevention Plan, SWPPP). Compliance with the requirements of these project permits are an important component of the project erosion and sediment control plan. Copies of these permits will be kept on site for inspection and reference as work proceeds.

4. Plan Monitoring and Modification: The implementation and effectiveness of this Erosion Control Plan will be monitored during the performance of the project. Based on actual field conditions adjustments will be made as considered necessary to improve the effectiveness of the erosion control measures.



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PUBLIC SAFETY AND TRAFFIC CONTROL PLAN

**American Fork Hydroelectric Project
FERC No. 696
American Fork Decommissioning**

Addressing Paragraph I of the FERC Decommissioning Order 108 FERC 61,130

In Consultation with:

**Utah Department of Transportation
USDA Forest Service
USDI Park Service**

April 2007

Public Safety and Traffic Control Plan

American Fork Hydroelectric Project

FERC No. 696

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Figure 3 – Figure 6c-3 Example of a One-Lane, Two-Way Traffic Taper

1.0 INTRODUCTION

PacifiCorp Energy (PacifiCorp) is the licensee and operator of the American Fork Hydroelectric Project (Project), which is regulated by the Federal Energy Regulatory Commission (FERC) as Project No. 696. On August 4, 2004, the FERC issued PacifiCorp an Order (108 FERC 61,130) granting the surrender of the Project's license and its removal. The Order also approved the settlement agreement that established conditions of PacifiCorp's voluntary Project decommissioning. In addition to PacifiCorp, the following state and federal agencies (agencies) were signatories to the SA:

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- Utah State Historic Preservation Office (SHPO)
- Utah Department of Transportation (UDOT)
- Utah Division of Wildlife Resources
- Utah Trout Unlimited (UTU)
- American Whitewater

The FERC Order establishes PacifiCorp requirements for decommissioning. In particular, paragraph I of the Order requires PacifiCorp to file with the FERC a Public Safety and Traffic Control Plan (Plan) following consultation with appropriate agencies.

Project Location and Setting: The American Fork hydroelectric project is located on National Forest System lands within a rugged and narrow canyon in Utah County, Utah, along the American Fork Creek a few miles east of the City of American Fork. Winding through the canyon is the narrow, two lane, State Highway No. 92 also known as American Fork Canyon Road. See the attached maps. The federal lands within the American Fork canyon include national wilderness lands managed by the USDA Forest Service and the Timpanogos Cave National Monument lands managed by the National Park Service. This publicly owned land attracts many thousands of visitors annually, especially during the summer, for hiking, picnicking, and to visit the Timpanogos Cave complex. The hydroelectric facilities are small and are relatively un-noticed by many of the public.

2.0 DECOMMISSIONING REQUIREMENTS

Scope & Schedule: The facilities include a concrete dam that is four feet high and 30 feet wide, a water conveyance system comprised of nearly 12,000 feet of 28 inch diameter steel pipe located predominantly high on the canyon north wall, and a powerhouse complex that includes a small cottage and garage. These facilities are scheduled to be decommissioned during a four- month period starting in August 2007. This work will include the following activities:

- Demolish and removal the concrete dam to an off site location.
- Demolish and remove of the water intake structure located at the dam.
- Demolish, remove and recycle the visible portions of the steel pipe flowline.
- Remove and recycle the generating equipment from inside the powerhouse.
- Restore the powerhouse structure and convey ownership to USDA Forest Service.
- Demolish and dispose of the operator's cottage and garage to an off site location.
- Realign and restore the American Fork Creek adjacent to and downstream of the powerhouse.
- Construct a small public parking area and rest room adjacent to the powerhouse.
- Grade and re-vegetate of all disturbed areas.

The decommissioning of the American Fork hydroelectric facilities will require the use of heavy, construction equipment to remove the dam and renovate the powerhouse area. A helicopter will be required to remove the steel flowline pipe from its remote and inaccessible location.

Hazard Identification: The hydro decommissioning work will be occurring in three areas within the American Fork Canyon:

- **Powerhouse Area:** Much of the work in the area of the powerhouse will be behind the existing chain-link fence that runs along the north side of highway 92. This area will be kept secure to prevent the public from entering this location. The primary impact to the public will be trucks entering and exiting the road at this location and the resulting truck traffic on the road.
- **Dam Location:** The American Fork dam is located in an area adjacent to the south side of highway 92 approximately 2.5 miles east of the powerhouse location. While not directly impacting the roadway, the adjacent dam demolition activities could divert the attention of the driving public. Large truck traffic will be entering and exiting the site when dam concrete debris is taken to disposal.
- **Flowline Pipe Removal:** The work necessary to cut and prepare the pipe for subsequent helicopter removal will be in remote areas most of which are not open to public access and hiking.

3.0 PUBLIC SAFETY MEASURES

The following public safety measures are planned and will be undertaken based on the characteristics of the project location, the high public use of the immediate area and the nature of the decommissioning work:

1. Public Awareness and Information – There is a west public entrance and toll booth located at the mouth of the American Fork Canyon that can be used to inform and caution the public about the construction activities going on in the canyon and the possibility for delays. This information can take the form of a brochure that would be handed to each entering vehicle as well as posted signs at the toll booth. While most of the incoming traffic to the canyon is from the west, some vehicles could enter from the remote areas east of the canyon. Accordingly signs will be posted informing the public traveling from this direction.

At the powerhouse and dam locations signage along the road will warn and inform the public of potential hazards being approached. See the traffic control plan below for details. When flowline steel pipe is helicopter out late in the fall season, signage and information will be updated to inform the public of what and when this will be taking place.

2. Work Scheduling to Avoid Impacts – Most of the hydro decommissioning activities are scheduled to start immediately after Labor Day weekend and will extend into mid-November 2007. Work in the powerhouse area and the preparation work for removing the steel flowline pipe may start in late July because of the remoteness of these areas from the public. A fall schedule has been recommended by both the USDA Forest Service and the National Park Service for the purpose of avoiding the peak tourist period in the American Fork Canyon.
3. Lights on for Safety – Project vehicle lights will be illuminated during all hours of operation for safety and visibility. Additionally this will be recommended to the traveling public as well to increase visibility of all vehicles traveling the American Fork Canyon.
4. Traffic Control and Signage: In addition to public awareness and intelligently scheduling work around public use patterns in the canyon, a plan for safely controlling traffic is a major component of this public safety plan. Below is the Traffic Control Plan for this project.

4.0 TRAFFIC CONTROL PLAN

During the American Fork Hydroelectric decommissioning project traffic control measures will be implemented on state highway No. 92 (American Fork Canyon Road) located within the American Fork canyon as required by the project activities being conducted and will meet the standards of the Manual of Uniform Traffic Control Devices (MUTCD). The traffic control plan will include the following components:

1. Traveler Information: In addition to the public information and awareness measures described above, Utah Department of Transportation's new 511 Traveler Information System and CommuterLink website will be used to inform the traveling public of conditions and delays that might result on American Fork Canyon Road (Highway 92) as a result of this project.
2. Work Zone Standards: Traffic controls in work zones will meet the requirements of the Federal Highway Administration's Manual of Uniform Traffic Control Devices (MUTCD). Traffic control personnel will be trained and experienced individuals in construction traffic control.
3. Temporary Traffic Control Plan: In addition to following MUTCD standards indicated above, a temporary traffic control plan will be used periodically as activities at the powerhouse and dam removal areas require and will use a "Flagger Method of One-Lane, Two-Way Traffic Control. This temporary traffic control plan is illustrated in Figure 6C-3 taken from Part 6 of the Manual on Uniform Traffic Control Devices. This plan will be used for situations where there will be a temporary lane restriction as well as for the situation of trucks entering and leaving the roadway.
4. Work Coordination and Safety Meetings: In order to reduce or avoid impacts to traffic and in the interest of public safety, the contractor will conduct each morning a briefing with all project workers to review and coordinate the days activities, to conduct a safety briefing ("tailboard") specific to that days' work activities and to plan ahead for activities that will impact traffic as well as the safety of the traveling public and project personnel working on site.
5. Worker Safety and Training: Project personnel will receive awareness training on how to work next to motor vehicle traffic in a way to promote their personal safety and that of the traveling public. Workers will wear high-visibility safety vests when working around operating construction equipment and while in or near the American Fork Canyon Road.
6. Plan Modifications: Modifications to the traffic control plan may be appropriate during the course of the project due to changed conditions or a determination of better methods of safely and efficiently handling road users.

7. Emergency Plan of Action: In the event of any accident or injury, involving a vehicle or not, first aid will be rendered and appropriate resources called and authorities notified. All project employees will be trained on the project specific action plan before starting work.

Figure 1 – Vicinity Road Map
American Fork Hydroelectric Decommissioning Project
American Fork, Utah
2007

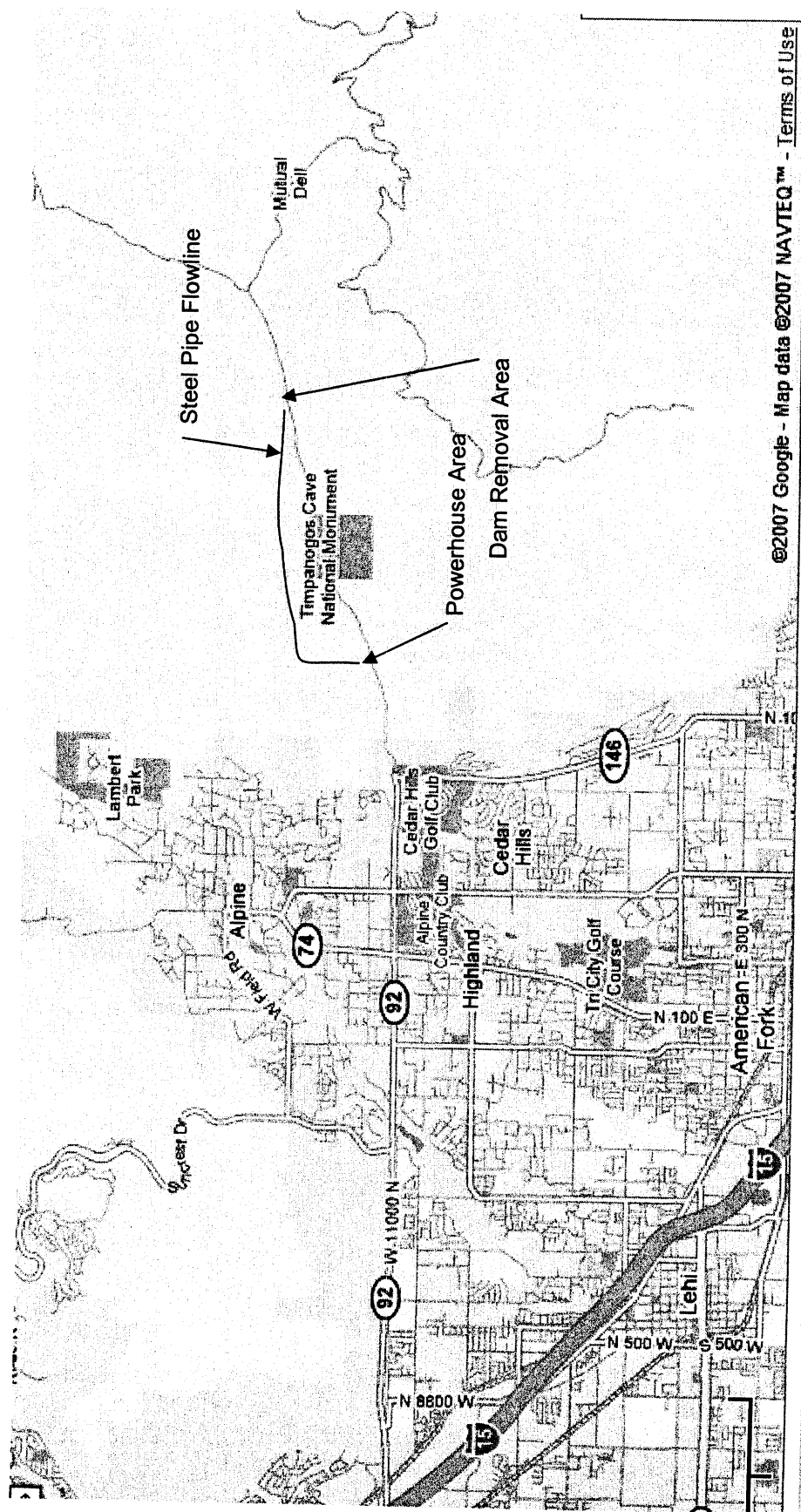
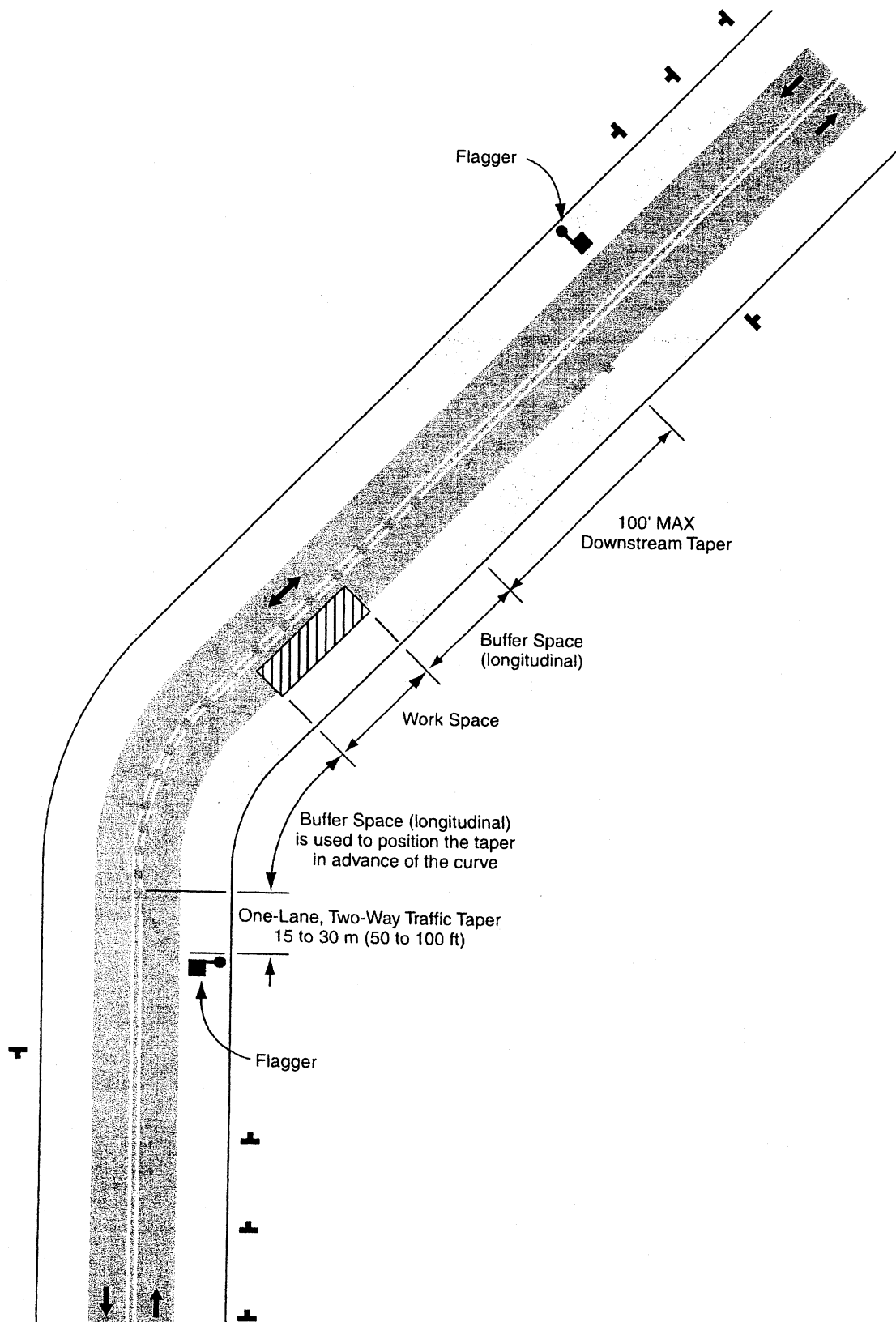


Figure 2 – Project Location Map
American Fork Hydroelectric Decommissioning Project
American Fork, Utah
2007



Figure 6C-3. Example of a One-Lane, Two-Way Traffic Taper

FIGURE 3
AMERICAN FORK DECOMMISSIONING





PORTLAND, OREGON

**AMERICAN FORK HYDROELECTRIC PROJECT
FERC PROJECT NO. 696
AMERICAN FORK DECOMMISSIONING**

QUALITY CONTROL INSPECTION PROGRAM

100% Submittal Issue



June 8 , 2007

**ENCLOSURES CONTAIN CRITICAL ENERGY INFRASTRUCTURE
INFORMATION**

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A. Introduction

This report has been prepared in accordance with the February 1993, Quality Control Inspection Program (QCIP) described in Chapter VII of the Federal Energy Regulatory Commission's (FERC) *Engineering Guidelines for the Evaluation of Hydropower Projects*.

A.1 Purpose

PacifiCorp intends to decommission the American Fork Hydroelectric Project, FERC No. 696.

A.2 Background

PacifiCorp owns and operates the American Fork hydroelectric project and will remove the project in accordance with the Surrender Order issued by the Federal Energy Regulatory Commission dated August 4, 2004. The removal is scheduled to be completed by December 31, 2007.

Black & Veatch Corporation (B&V), headquartered in Kansas City, Missouri, has been contracted by PacifiCorp as the design firm for the American Fork Decommissioning project.

JR Merit Inc., headquartered in Vancouver, WA, has been contracted by PacifiCorp as the General Construction Contractor, who will construct the project in accordance with the General Construction Specification titled American Fork Decommissioning, General Construction Specification No. 130683.70.0176.

_____, headquartered in _____ will serve as PacifiCorp's resident construction manager on the project.

The goal of the QCIP is to describe the personnel responsibilities, the methods, documentation, and types of quality control testing that will be performed to assure the project is constructed in accordance with the General Construction Specification. Both PacifiCorp and B&V are the responsible parties for the QCIP.

A.3 Description of Structures and Type of Construction

The American Fork Hydroelectric Project is owned and was operated by PacifiCorp until December 2004. It is located on the American Fork Creek in Utah County, Utah and consists of the following features:

- A 4.5-foot-high by 29.7 foot-long concrete overflow type diversion dam .
- A 6-foot-wide concrete intake structure containing one tainter gate, coarse and fine trash racks and small wood clapboard gate house.
- An 11,666-foot-long flowline comprised of 28 inch diameter steel pipe.
- A 2700 square-foot masonry brick powerhouse.
- One horizontal Pelton turbine with 950 – kilowatt generator and appurtenances.
- A Wagner step up transformer having a rated capacity of 1000-kVA.

The work consists of decommissioning the American Fork project as indicated in the Project Plans and Specifications. The major work items are:

- Demolition and removal of the dam and intake structure.
- Demolition and removal of the above ground and visible flowline pipe totaling approximately 4400 linear feet. Leave in place the approximate 550 feet of steel penstock pipe immediately uphill from the powerhouse.
- Restoration of the powerhouse structure.
- Demolition and removal of the step up transformer.
- Demolition and removal of the operator's residence and garage.
- Realignment of American Fork Creek immediately downstream of the powerhouse.
- Construction of a small parking area and rest room immediately downstream of the powerhouse.

A.4 Specialized Construction Techniques and Equipment

Due to the rugged and steep terrain as well as the wilderness classification of the federal lands that the flowline is located on, the exposed flowline pipe must be removed using helicopter. Prior to airlifting the pipe out, the pipe must be cut, rigged and staged ahead of time.

The removal of the dam and the realignment of American Fork Creek near the powerhouse will require careful water and soil management to minimize erosion and sediment releases into the river.

B. Organization and Staffing Responsibilities

B.1 Responsibilities of Various Organizations

The Construction Management Organization Chart for the project is presented in Appendix J.1.

PacifiCorp is the project owner. PacifiCorp's project manager is Robert Atwood of the Portland, Oregon office. PacifiCorp will contract with companies to decommission the Cove Development as indicated on the Project Plans and Specifications. Except for the contractual relationship, PacifiCorp is independent of all of the project suppliers and contractors.

Black & Veatch Corporation (B&V) has been hired directly by PacifiCorp as the project designer, and is independent of the Contractor(s) and Suppliers. B&V has no financial interest or relationship with any other party to the project. The B&V home office will provide engineering support during construction under the supervision of B&V Engineering Project Manager, Monte Nigus.

PacifiCorp is independent of the Contractor. PacifiCorp will perform construction inspection activities to assure conformance with the project specifications using both qualified employees as well as contracted services. This position will be that of resident Construction Manager.

The Contractors work shall include but not necessarily be limited to those tasks identified in the General Construction specifications.

The Contractors and suppliers will have no authority or control over implementation of the QCIP, or financial relationships with any organization that has responsibility for implementing the plan. The Contractor is responsible for its own QA/QC plan, which is independent of this QCIP.

B.2 Number of Staff and Availability Required

The Construction Manager is PacifiCorp's full-time field representative responsible for implementing the QCIP. PacifiCorp and B&V personnel will support the Construction Manager as required.

B.3 Titles, Duties and Responsibilities of Staff

The key Project personnel and their responsibilities are listed below.

- Project Manager - Robert Atwood, PacifiCorp
- Engineering Project Manager - Monty Nigus, B&V
- Construction Manager - TBD
- Construction Inspectors - None

Project Manager, PacifiCorp. Robert Atwood, the Project Manager, is responsible for coordinating project design and construction for PacifiCorp. The Project Manager will have oversight responsibility for assuring that the Construction Manager implements the QCIP. He will be based in Portland, make periodic inspection trips to the site, and have the authority to stop work on any aspect of the construction.

Engineering Project Manager, B&V. Monty Nigus, the B&V Project Manager, is responsible for oversight and coordination of project design and construction support services for B&V. The Engineering Project Manager will advise and support the Construction Manager with the implementation of the QCIP. He will be based in Kansas City.

Construction Manager. _____, the Construction Manager, will be responsible for implementation of the QCIP to verify the construction is in conformance with the plans and specifications, and is consistent with industry standards and practices. He will be based at the construction site. The following activities will be performed by him or under his direction.

- Set up and maintain QCIP documentation system, including daily inspection records, nonconformance reports, monthly project reports, and quality assurance/quality control (QA/QC) reports, and log of construction activities.
- Perform and document all inspection activities. He will have the authority to stop work due to adverse quality conditions.
- Conduct inspection of materials received at the site.
- Coordinate activities between the Contractor and other parties to the construction.

- Manage for compliance with the various other project plans and permits including, but not limited to the :
 1. Soil Erosion Control Plan
 2. Wetland Protection Plan
 3. Spill Containment & Prevention Plan
 4. Traffic Control & Public Safety Plan
 5. Federal, state & local project permit conditions
- Order all measures which, in his opinion, are necessary for the safety and protection of the public, existing facilities, and constructed facilities.

Construction Inspectors. When necessary, inspection services will supplement and support the work of the onsite Construction Manager. They will have the authority to stop work through the Construction Manager due to adverse quality conditions.

B.4 Specialty Inspectors

This section is not applicable for this project.

B.5 Lines of Communication and Authority

The lines of communication and authority are illustrated in the Construction Management Organization Chart presented in Appendix J.1.

B.6 Approval and Rejection of Work

The approval and rejection work will be the responsibility of the Construction Management Team shown in the Organization Chart in Appendix J.1. Specifically, the on site Construction Manager will use the General Construction Specification as the guide for determining the acceptability of the work; however, judgment may supplement the General Construction Specification requirements when the quality of the work would be equal to or greater than that presented in the General Construction Specification. The professional resources and support of the members of the Construction Management Organization will also be actively engaged through out the project.

B.7 Authority to Stop Work

The Project Manager, Project Engineer, and Construction Manager will have the authority to stop work due to nonconformance with the Project Specifications. Any B&V

or PacifiCorp employee has authority to stop work due to adverse quality conditions through one of these three individuals.

B.8 Statement of Independence

All parties, including PacifiCorp, the project engineer (B&V), and the General Construction Contractor (JR Merit), are independent of one another. The Engineer and the General Construction Contractor are under separate contracts with PacifiCorp to provide services associated with the construction of the project.

B.9 Résumés

Appendix J.3 presents the résumés of key project personnel.

C. Inspection Plan and Field Practices

C.1 Inspection Criteria

The inspection criteria are set forth in the General Construction Specification. Appendix J.5 presents the Materials Testing Schedule and referenced documents.

C.2 Knowledge of Contract Plans and Specifications

The personnel responsible for quality control inspections shall study the plans, specifications, and other contract documents (such as addenda, bulletins, and other revisions) so that a complete understanding of all aspects of the General Construction Contractor's work is achieved. This study will assist the inspectors in making observations during inspections and in reviewing the General Construction Contractor's schedule, equipment, activities, testing, and documentation.

C.3 Inspection Equipment and Resources

The independent inspection and testing firm will supply the necessary sampling and testing personnel and equipment for concrete and construction materials testing.

C.4 Contractor Operations

The General Construction Contractor's operations with regard to quality control are independent of the QCIP and are fully described in the project specifications and drawings. It is not the intent of this manual to address the quality control inspection and testing functions performed by the General Construction Contractor. PacifiCorp's engineer (B&V) will be available during construction to respond to technical issues that arise and to provide clarifications regarding the project design and specifications.

C.5 Coordination with Contractor's Schedule

The General Construction Contractor will be required to provide a 24-hour notice when inspection by the Construction Manager is needed before proceeding with construction, for example, prior to any field testing. Weekly construction coordination meetings will be held between PacifiCorp and the General Construction Contractor, and notification of pending inspections will be part of the meeting agenda.

C.6 QCIP Operations

The General Construction Contractor is contractually responsible for performing his work to the quality level established by the contract under which the work is performed. PacifiCorp is responsible for monitoring the General Construction Contractor's work quality. The resident Construction Manager is responsible for immediately advising the General Construction Contractor of nonconforming work so the work can be corrected.

The QCIP activities consist of overall verification that the construction is in conformance with the drawings and specifications, documentation of inspections, correction of errors and deficiencies, and field testing. As an inspector of materials, the Construction Manager determines whether materials proposed for use in the work are in conformance with the contract requirements, and, in the event substitutions are necessary, decides which materials are suitable through communications with the B&V Project Engineer and PacifiCorp. The frequency and types of inspections are described in Section C.7 and Appendix J.5.

The resident Construction Manager is responsible for documenting the quality control inspections and results. The types of documentation are described in Section D of this report.

The Construction Manager shall be familiar with the General Construction Specification and construction drawings and will know when and where to perform inspections.

The authority to stop work due to adverse quality or safety conditions is the responsibility of the Construction Manager. Any B&V or PacifiCorp employee has authority to stop work due to adverse quality through the Construction Manager.

Quality control communications will be between the Project personnel listed in Section B.3 and the General Construction Contractor's superintendent. The General Construction Contractor is required to have a superintendent at the site, who can receive directives regarding quality issues. A meeting should be held early in the construction to determine if other General Construction Contractor supervisory staff members can receive directives regarding quality conditions.

C.7 Frequency of Inspections

An inspection schedule has been established for this project as a guide for inspection activities and level of inspection necessary to assure compliance with the contract documents. The frequency of inspection and documentation is based on the inspection level assigned for each construction activity. Certain terms are used in the schedule, and are defined in the following subparagraphs.

Table C-1 presents the inspection level categories developed for the construction project and defines the amount of detail required to inspect a specific construction activity. Level A implies the most detailed inspection, while Level C is less detailed. The inspection levels required for each construction activity are defined in Table C-2. Inspection frequencies are included in the General Construction Specification.

Inspection Checklist. Inspection checklists have been developed for each major construction activity addressed in this manual and are presented in Appendix J.6. The checklists are intended to provide a guide to the Construction Manager relative to what aspects of each activity require inspection and to provide a means of documenting each specific inspection that is made. A separate file shall be opened for each construction activity applicable to the project. All completed inspection checklists for a given activity shall be filed in one file. See Section D.4 for filing procedures.

Testing. No quality control testing is planned for the American Fork Hydro Decommissioning Project. Project quality and quality control will be based on visual observations by the resident Construction Manager. The Construction Manager will monitor construction to determine compliance with the General Construction Specification.

Table C-1 Inspection Level Definitions

<u>Inspection Level</u>	<u>Definition</u>
A	The indicated category shall be inspected each time the construction activity is occurring in accordance with the Quality Control Inspection Checklist. Each inspection shall be documented by a separate completed checklist at the time of the inspection.
B	The indicated category shall be inspected in accordance with the Quality Control Inspection Checklist. The quantity and selection of checklist activities shall be determined by the Construction Manager. Each inspection shall be documented by a separate completed checklist at the time of the inspection.
C	General inspection surveillance of the indicated category shall be provided. The level of inspection effort shall be determined by the Construction Manager. Each inspection shall be documented in the Daily Log of the Construction Manager.

Table C-2 Construction Inspection Requirements

<u>Item</u>	<u>Level of Inspection</u>
Erosion Control & Drainage	B
Coffer Dam Construction & Water Diversion	B
Contractor Environmental Protection Practices	B
Flowline Demolition & Removal	B
Dam Removal	B
Cottage Demolition & River Re-alignment	B
Re-Vegetation Work	B

C.8 Documentation and Follow-up Action

Inspections and the use of the construction checklists can result in the issuance of a Nonconformance Report. See Section D.2 for discussions on nonconformance documentation and follow-up action.

In a project using an independent sampling and testing firm, testing reports will be maintained in the project records in accordance with Section D.4.

Inspection documentation for other construction activities is discussed in Section D.3. Forms used to document the inspection activities are presented in Appendix J.6.

C.9 Training

While no classroom training will be needed for this project there will be onsite training regarding knowledge and awareness of soil erosion and disturbance, wetland protection, and cultural and historic resources. Additionally, each morning before work starts there will be a safety meeting to identify the days work, its potential safety hazards and to discuss remedial measures. The Construction Manager will be responsible for seeing this training is conducted onsite.

D. Documentation

D.1 Daily Inspection Reports

The PacifiCorp Construction Manager will maintain a Daily Log. The Daily Log is a factual recording of events affecting the project. The log book shall be factual and written with the presumption that everything in it may be recalled publicly. A Daily Work Report form is presented in Appendix J.6.a.

Daily entries should begin with the date of the entry and end with the author's initials or signature. Entries should be written in ink and be continuous with no lines skipped; lines are not to be skipped between daily entries. Any error made in an entry should be crossed out with only a single line through the entry; errors should not be totally crossed out or erased. Pages should not be torn out of the log book or left blank.

Daily entries should include, but are not limited to, the following information.

- Weather and ground conditions.
- All directions given to a contractor that are not documented elsewhere.
- A description of any rejected work, material or equipment, together with the reasons for rejection.
- A brief description of the work activities of the day, including the commencement or completion of any major unit of work.
- Description of delays in the construction.
- Description of disputes involving contractors, subcontractors, the Owner, or the Engineer.
- A brief description of any accident the inspection staff observes or is involved in.
- Description of a work item for which there is reason to believe a claim for extra compensation may be filed.
- The names of any visitors.
- A record of any telephone calls, with a brief description of the conversation.
- General observations of any activities that seem significant at the time.

Only one log book should be maintained by the Construction Manager at one time. Completed log books should be filed in the project files. The log books are important documents and are often used in the settlement of disputes, to reconstruct events after the

fact, and may be used in litigation. Entries should be made in the log book on a daily basis while the subject matter is fresh in the author's mind.

D.2 Nonconformance Reports

A Nonconformance Report (NCR) and procedure have been developed to provide a standard document format and procedure for communicating with the General Construction Contractor regarding construction quality nonconformance and required corrective action. A nonconformance is defined as a deficiency in characteristic, documentation, or procedure which renders the contractor's work unacceptable with respect to the quality requirements of the contract documents. A NCR form is presented in Appendix J.6.b.

A NCR shall be issued to the General Construction Contractor when he presents any portion of his work as complete and a serious deficiency exists or a deficiency trend is occurring in subsequent similar work. NCRs are not to be utilized for documenting contractor acknowledged incomplete "Punch List" type work items or for problems relating to project design.

The Construction Manager is responsible for initiating NCRs. The NCRs shall be numbered sequentially and filed in accordance with Section D.4. The NCRs shall be reviewed weekly by the Construction Manager to determine contractor compliance with corrective action requirements and identify the need for any follow-up action. In the event of contractor failure to comply with the corrective action requirements of a NCR, either unsatisfactory work or failure to meet the time requirements, the following procedure will be implemented.

- The Construction Manager and Project Manager will jointly prepare a formal contract correspondence letter with a copy of the original NCR attached advising the contractor of his failure to meet the corrective action requirements.
- The letter will establish a date for when the corrective action must be satisfactorily completed and state that in the event of contractor failure to satisfactorily complete the corrective action by this date, the corrective action work will be performed by others with all associated costs will be to his contract.
- The letter shall state any other actions that PacifiCorp may take under the terms of the contract as a result of failing to resolve the NCR.

- Copy distribution of all such follow-up NCR correspondence shall be the same as the original NCR and shall be filed in the appropriate NCR file.

D.3 Other Periodic Reports

Other periodic reports which document quality control issues are described in the following subparagraphs.

Coordination Meetings. The Construction Manager and the General Construction Contractor shall jointly conduct daily safety and construction coordination meeting. The main topics of the meeting will be project SAFETY as it relates to the specific work planned for that day, scheduling issues, coordination of work and supply activities, and quality control issues.

Documentation of the meeting discussions shall be written in sentence and paragraph form with a new numbered sentence or paragraph for each item of business. The conclusion for each item discussed shall be recorded. The construction coordination meetings shall be divided into four sections as follows.

- (1) **Exceptions.** The contractor shall be given an opportunity to take exception to the minutes of the previous week's meeting. If exceptions are taken, the item should be corrected. If no exceptions are taken, it should be so stated.
- (2) **Old Business.** Items discussed in previous meetings are carried under this section and shall be carried there until the item is resolved or eliminated.
- (3) **New Business.** New items of business are carried under this section.
- (4) **Safety meeting discussions** will be documented on a Company form entitled, "Hydro Resources Tailboard Form".

The minutes of the meeting shall be prepared in memorandum form, and shall be published as soon as possible after the meeting. The Construction Manager and General Construction Contractor's Superintendent shall each sign the minutes prior to distribution. Distribution shall be as follows:

PacifiCorp	-	2 copies (Bob Atwood-1;)
Meeting Attendees	-	1 copy each (e.g. General Construction Contractor)

The original minutes shall be filed in the on site files in accordance with the file procedure described in Section D.4.

Monthly Construction Progress Report. The PacifiCorp Project Manager shall prepare a construction progress report for each month of the construction. A final construction report shall be prepared which summarizes all aspects of the project construction. The outline for the construction progress report is presented in Appendix J.6.c. Distribution of the reports shall be as follows:

PacifiCorp	-	5 copies (Internal distribution & filing)
FERC	-	3 copies (Transmitted to FERC-PRO by PacifiCorp)
B&V Home Office	-	1 copy (M. Nigus)

Inspection Forms. An inspection form has been developed for each construction item addressed in the inspection matrix illustrated in Table C-2. A copy of the inspection forms are presented in Appendix J.6.d. The forms are intended to provide a guide to the inspector relative to what aspects of each work item require inspection and to provide a means of documenting each specific inspection that is made. A separate file shall be opened for each construction item applicable to the project. All completed inspection checklists for a given work item shall be filed in one file. Section D.4 provides the filing procedures.

Test Reports. Certain construction work items may require testing as part of the quality control and assurance specified in the General Construction Specification. The sampling and testing laboratory will provide test reports to document the testing. All testing reports should be filed in accordance with the filing procedures described in Section D.4. This is not applicable for this project.

D.4 Maintenance of Records

General Correspondence. All documents, correspondence, and data pertaining to the project should be identified and filed in accordance with PacifiCorp Record Keeping Procedures.

Manufacturer's Drawings. Manufacturer's shop drawings should be maintained and filed in numerical order according to the shop drawing number. Superseded shop drawings should be discarded and replaced with the revised drawings leaving only the latest issue in the files.

Contract Design Drawings and Specifications. Unless otherwise changed by the Construction Manager, at least two field sets of contract design drawings and

specifications will be maintained: one set will be maintained as a record set, and the other will be maintained as a work set.

D.5 Photographs

Photographs of significant project activities shall be taken throughout the construction period using a digital camera with the data and time imprinting feature turned on. The date and time shall be accurately set to the local time at the project. Picture resolution shall be set to provide image dimensions of 640 x 480 pixels. Potential claim work items shall be photographed to provide future reference.

File names for the photographs may be as automatically generated by the digital camera, but each day's images shall be put in a folder identified: American Fork Decom-
yyyymmdd, where yyyy is the year, mm is the month, and dd is the day.

E. Training

While no classroom training will be needed for this project, all project personnel will be trained and qualified to perform their respective jobs and responsibilities and have, as a minimum, a basic knowledge of job safety and procedures that are customary to the construction industry.

Additionally, there will be onsite training regarding knowledge and awareness of soil erosion and disturbance, wetland protection, and cultural and historic resources. Each morning, before work starts, there will also be a safety meeting to identify the days work, its potential safety hazards and to discuss remedial measures. The Construction Manager will be responsible for seeing this training is conducted onsite.

E.1 Study Materials

This section is not applicable for this project.

E.2 Classroom Instruction

This section is not applicable for this project.

E.3 On-the-job-training and Supervision

This section is not applicable for this project.

E.4 Proficiency Testing and Certification

This section is not applicable for this project.

E.5 Résumé Update

This section is not applicable for this project.

F. Material Testing

F.1 Testing Schedule

No quality control testing is planned during construction of this Project.

F.2 Testing Standards

Appendix J.5 presents a list of the material testing and testing standards associated with this project. The referenced testing standards provide a full description of the tests.

F.3 Inspection and Testing Organization

(LATER) will be the independent inspection and testing firm.

F.4 Adequacy of On-site Laboratory

No on-site testing laboratory is anticipated for this project.

F.5 Adequacy of Off-site Laboratory

Should testing become necessary for this project, the adequacy of the off-site laboratory personnel and their testing equipment shall be reviewed by the Construction Manager. Items which shall be reviewed and noted in the Daily Log include testing personnel qualifications, testing equipment calibration, and test reports.

F.6 Evaluation of Testing Data and Actions Required

Quality Control testing is not planned during construction of this Project. Should testing be found necessary, the following would apply: When the results of testing lie outside the range established in the General Construction Specification, the Project Engineer and testing laboratory will be consulted to reach an informed conclusion or judgment regarding such test results. Every field test which lies outside the range shall be documented in the daily log along with the justifications for acceptance or rejection.

F.7 Documentation

The sampling and testing laboratory shall be responsible for supplying the documentation of the material testing. The documents shall be filed in accordance with the procedures described in Section D.4.

G. Erosion Control and Environmental Compliance

G.1 Environmental Compliance Plan

The construction will comply with all applicable laws, acquired permit conditions, and governing agencies.

Disposal of Solid Construction Waste. All solid construction waste will be legally disposed of by the Contractor. The PacifiCorp Construction Manager will be on site full-time to see that these procedures are followed.

Pollution Control. The Contractor will prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris, and other substances resulting from construction activities. No sanitary wastes will be permitted to enter any drain or watercourse other than sanitary sewers. No sediment, debris, or other substance will be permitted to enter sanitary sewers, and reasonable measures shall be taken to prevent such materials from entering any drain or watercourse. The PacifiCorp Construction Manager will be on site full-time to see that these procedures are followed.

G.2 Erosion and Sediment Control Plan

An erosion control plan is contained within the General Construction Specifications and Drawings. This plan has been submitted to the appropriate permitting agencies and is part of the Federal and State permit requirements.

G.3 License Requirements

Pursuant to the FERC project license, the contractor will be required to take reasonable measures to prevent soil erosion or other forms of water pollution into adjacent waterways.

G.4 Specialized Plans, Permits and Approvals

In addition to FERC approval of the project plans, specification, this QCIP, those other plans listed in section B.3 above, PacifiCorp has and must continue to consult with Federal and State resource agencies and interest groups regarding this project. Project specific permits have also been acquired and will be available to the FERC and copies will be maintained on site.

G.5 Frequency of Inspection

Inspection regarding erosion control will be conducted by the Construction Manager on a daily basis.

G.6 Documentation and Corrective Actions

An erosion control form is provided in Appendix J.6.d. The Construction Manager shall use the NCR procedure discussed in Section D.2 with regard to documenting environmental deficiencies associated with erosion control on the project.

G.7 Environmental Deficiency Report

As discussed in Section G.6, the NCR procedure shall be utilized to document environmental deficiencies.

H. Schedule

H.1 Start and Finish Dates

The following milestone completion dates have been established for the Cove Decommissioning Project at the Bear River Hydroelectric Project and may be subject to revision upon award of the Construction Contract. The Contractor's construction schedule is presented in Appendix J.8.

- Award Construction Contract June 29, 2007
- Start De-Construction Activities.....Aug. 6, 2007
- Complete Flowline RemovalNov. 5, 2007
- Complete Restoration of Powerhouse AreaNov. 16, 2007
- Complete Dam RemovalNov. 16, 2007
- Complete Relocation of Power Poles.....Nov. 16, 2007
- Complete Final Grading & Re-Vegetation.....Nov 30, 2007

H.2 Anticipated Construction Sequence

1. Mobilize.
2. Install sediment and erosion control measures.
3. Remove haz mats from cottage and powerhouse.
4. Construct water diversion structure at dam.
5. Dam demolition and removal.
6. Reclaim and re-vegetate the dam area.
7. Concurrent with dam removal; conduct powerhouse restoration.
8. Following dam removal, conduct creek realignment adjacent to powerhouse and construct parking lot, trail, and restroom.
9. Concurrent with item Nos. 5 & 8; cut and prep. 4400 lf. of flowline pipe including sealing pipe ends.
10. Concurrent with dam removal and stream realignment; relocated power poles.
11. Concurrent with power pole relocation; airlift out flowline pipe. (use common aircraft if necessary)
12. Seed and mulch all disturbed areas and adjust erosion control measures as necessary.

H.3 Staged and Phased Construction

The project lends itself to three construction staging areas:

Stage 1: Dam Area – Water diversion, dam demolition and removal, restoration.

Stage 2: Powerhouse Area – Structure demolition, creek realignment, and powerhouse restoration.

Stage 3: Flowline Area – Pipe preparation and removal, transmission pole relocation.

While each of these three stages will have overlapping activities, all work will be accomplished in the August through November time frame. It is during this time frame that flows are lowest in the American Fork Creek and the tourist volume is trending downward.

The project schedule should be consulted for details of the work schedule.

I. Planned Use of Consultants

I.1 Areas of Inspection and Review

Black & Veatch Corporation (B&V) is the project engineer and as such will periodically visit the site when requested to observe key construction activities. B&V will also be available to provide construction engineering services, if required, during the field execution of the project.

I.2 Consultant Names and Résumés

SWCA, Inc. will provide professional services to assist the Company with its execution and compliance with the requirements of the memorandum of agreement between the Utah State Historical Preservation Officer and the Federal Energy Regulatory Commission.

For résumés, see Appendix J.3.

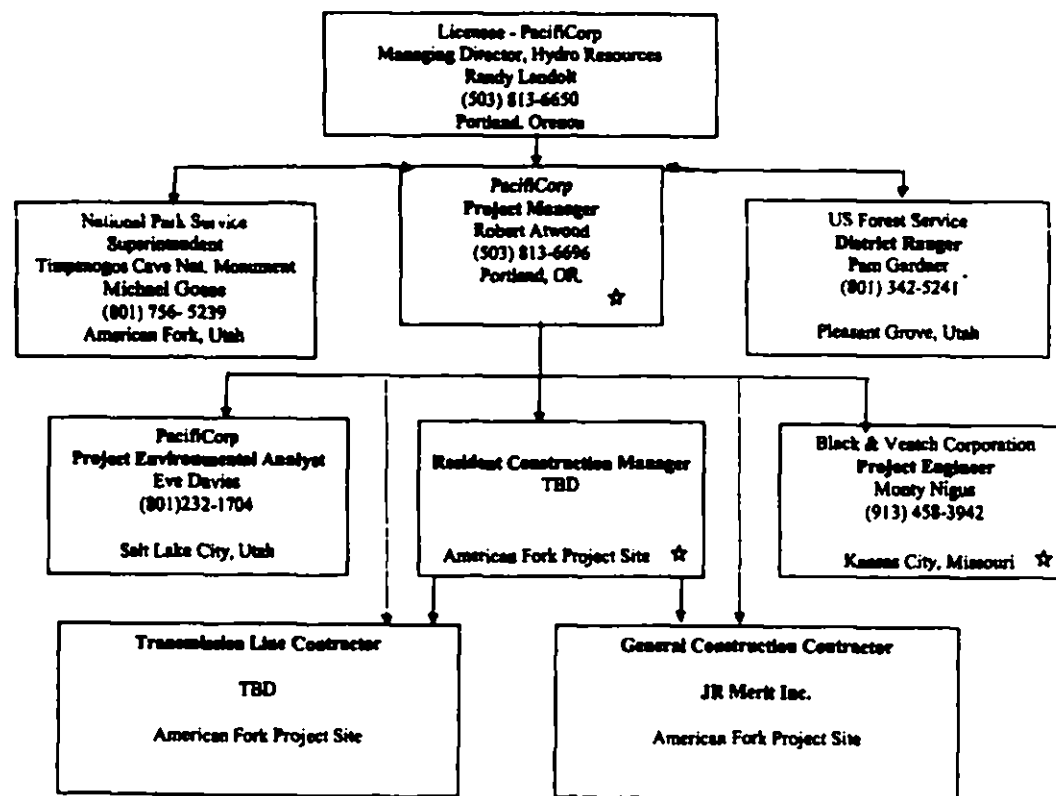
Appendix J.1
Organization Chart

Appendix J.1



American Fork Hydroelectric Project
FERC Project No. 696

American Fork Decommissioning
Construction Management Organization Chart



☆ Indicates authority to stop work on any aspect of the decommissioning. Others shown above have authority to stop work through one of these three individuals.

Appendix J.3
QCIP Personnel Résumés

Robert A. Atwood
PacifiCorp
Sr. Project Manager

825 NE. Multnomah Ave. - 1500 LCT
Portland, Oregon 97232
503.813.6696

Summary:

- Professional Goal is to be recognized by my customers as an effective manager of projects.
- Motivated, results oriented project manager with 23 years of diversified experience in the management of multi-disciplined projects & programs within PacifiCorp.
- Progressive experience in the areas of project management including scoping, scheduling, estimating & controls; contracts administration; engineering supervision, and management of regulatory & permitting issues and requirements.
- Service oriented and good-natured with a strong preference for a supportive working environment where teamwork and open communication is practiced.

Experience:

PacifiCorp

1979 to Present

Sr. Project Manager - Hydro Resources

August 1999 to Present

Responsible for all aspects of capital project management including planning, estimating, scoping, scheduling, economic evaluations, budgeting, project approval processing, accounting, contract management and completion reporting. All assigned projects have been or are currently being managed within or below the authorized schedule and funding levels.

Manager - Business System Integration Project

Nov. 1997 to August 1999

Served as supervisor of system testing for this 2 year long, high intensity, fast track project that configured and implemented SAP to PacifiCorp requirements. Specialized in the Work Management module of SAP.

Manager - Hydro Licensing & Compliance

Nov. 1989 to Nov. 1997

Leadership and management of a small staff responsible for the regulatory compliance and relicensing requirements for 33 hydroelectric projects located in 7 states having a total generating capacity of over 1000 MW.

Power Plant Engineer

Nov. 1979 to Nov. 1989

Provided field & office engineering and project management services in a variety of positions during this period for many of PacifiCorp's coal fired power plants. For 3 years served as a resident engineer at the Jim Bridger Power Plant in Wyoming planning & executing diverse O&M and capital projects. Returning to Portland, Or. in 1986 conducted co-generation investigations relative to the needs of external industrial customers.

Consulting Project Engineer

1975 to 1979

Provided consulting geotechnical engineering and project management services to coal industry clients in the western Pennsylvania area.

Unit Commander - US Army

1972 to 1974

Active duty officer in the Corp of Engineers responsible for 40 men and heavy equipment performing a variety of construction projects. Also served as a military construction inspector in remote areas of Alaska.

Education

BS,	Civil Engineering;	Clarkson College of Technology, Potsdam, N.Y.	1971
MS,	Civil Engineering;	Clarkson College of Technology, Potsdam, N.Y.	1975
	Continual Professional Seminars and Conferences		



LAMONT A. NIGUS, P.E.

KANSAS CITY OFFICE

Project Manager

Specialization:

*Hydraulic Structures,
Hydropower Projects, Dams,
Water Conveyance Systems,
Civil/Structural Engineering*

Education:

B.S., Civil Engineering, University of Missouri,
1972

Professional Registration:

Engineer (PE), Oregon, 1994
Engineer (PE) Civil, Idaho, 1990
Engineer (PE) Structural, Idaho, 1990
Engineer (PE), Wisconsin, 1987
Engineer (PE), Missouri, 1978

Professional Associations:

American Society of Civil Engineers
National Society of Professional
Engineers, Member
Missouri Society of Professional
Engineers, Member

Year Joined Black & Veatch:

1973

Total Years of Experience:

34

Language Capabilities:

English

Mr. Nigus is a project manager for the Hydropower Department in the Firm's America's Division of the Water Sector Business. He has served as project engineer, project civil engineer, and civil design engineer. His project experience has included hydropower, dam, tunnel, water resource, and port and harbor facilities. Responsibilities have included project management and administration, project planning and arrangements, feasibility studies and economic analyses, detailed design and tender documents, equipment procurement, construction support, permitting and FERC licensing, hydrologic/hydraulic analyses, stability analyses, foundation studies, and design of structural steel and concrete systems.

Representative Project Experience

2007 - Present

Merwin Hydroelectric Project

PacifiCorp

Aerial, Washington

Independent Consultant - Independent Consultant for the Part 12 dam safety inspection and report, including Supporting Technical Information document and Potential Failure Mode Analysis workshop.

2006 - Present

Swift No. 1 Hydroelectric Project

PacifiCorp

Cougar, Washington

Project Manager - Development of conceptual design and associated fishery criteria, and the preparation of the 30% design of downstream fish passage facilities at Swift Dam in accordance with the requirements of the new FERC license and Settlement Agreement requirements for the Lewis River Hydroelectric Projects. These facilities consist of a floating surface collector (FSC) approximately 170 feet long and 70 feet wide with fish attraction flow capability from 300 cfs up to 900 cfs. The FSC includes fish guidance components, primary and secondary fish screens and pumps, and onboard fish sorting and holding facilities. Fish transfer and loading facilities are also provided for the transport and release of the downstream migrants below Swift Dam. The work included working with various resource agencies to define the biological criteria for the project, reservoir field measurements and CFD modeling, and naval architecture to determine FSC flotation and mooring requirements.

2006- Present

American Fork Hydroelectric Project

PacifiCorp

American Fork, Utah

Project Engineer - Detailed design of the decommissioning of the 1 MW American Fork Hydroelectric Project. The decommissioning design included dam removal, intake structure decommissioning, site grading and landscaping, riverbed grading and stabilization, penstock decommissioning, and powerhouse decommissioning. Specific tasks included the preparation of construction drawings, specifications, and cost estimate.



LAMONT A. NIGUS, P.E.

KANSAS CITY OFFICE

2005 - Present

Merwin Hydroelectric Project

PacifiCorp

Aerial, Washington

Project Engineer - Conceptual design of upstream fish passage facility improvements at the Merwin Hydroelectric Project in accordance with FERC relicensing and Settlement Agreement requirements. The improvements include modifications to the existing fish trap facility to improve the human working environment and fish trapping efficiency, and new fish handling facilities to collect, sort, and transport upstream migrant fish species to be encountered at the site.

1998 - 2000

Rio Taquesi Hydroelectric Project

Hidroelectrica Boliviana S.A.

Bolivia

Project Manager - Engineering, procurement, and construction (EPC) of two hydroelectric projects with total capacity of 83.5 MW. Each project consists of a diversion dam, intake structure, de-silting facilities, power tunnel with surge shaft, penstock, single unit powerhouse, and transmission line. The Chojlla Plant has a capacity of approximately 34 MW at a design flow of 7.0 m³/sec and a net head of 540.4 meters. The Yanacachi Plant has a capacity of approximately 49.5 MW at a design flow of 11.0 m³/sec and a net head of 498.6 meters.

1995

Domenigoni Valley Reservoir

Metropolitan Water District of Southern California

California

Project Engineer - Design of forebay spillway structures for a 800,000 acre-feet water storage reservoir. Specific tasks included structural design of spillway, structure walls, slabs, and foundations to meet normal, flood, and high seismic load conditions; development of structural construction drawings; and development of structural technical specifications.

1991 - 1993

Hazelton B and Wilson Lake Hydroelectric Projects

Ida-West Energy Company

Hazelton, Idaho

Engineering Manager - Design of 7 MW and 8 MW hydroelectric projects. Specific tasks included coordination of powerhouse, power canal, and tailrace design with client; coordination of design with construction activities; and field inspection of construction.

1989 - 1991

Ashton Hydroelectric Project

PacifiCorp

Ashton, Idaho

Engineering Manager - Design of powerhouse electrical rehabilitation, replacement of 1.8 MW turbine with 3.0 MW turbine, and roller compacted concrete (RCC) overflow spillway to pass the PMF. The project is located on Henry's Fork of the Snake River. Specific tasks included feasibility study for upgrading the existing powerhouse and respective electric systems; feasibility study for expansion of the project spillway capacity to pass the PMF; development of turbine, generator rewind, and electrical equipment technical specifications; development of roller compacted concrete overflow spillway



LAMONT A. NIGUS, P.E.

KANSAS CITY OFFICE

technical specifications; detailed design of overflow spillway, including energy dissipation; detailed design of turbine, bypass valve, and electrical equipment installations; development of construction drawings; coordination of design with client; coordination of design with construction activities; field inspections; and FERC interface.

1988 - 1990

Hazelton A Hydroelectric Project

Bypass Limited (Sihle Energies)

Hazelton, Idaho

Engineering Manager - Design of an 8 MW hydroelectric project. Specific tasks included coordination of design with client; preparation of technical specifications and procurement documents; supervising design of powerhouse, power canal, and tailrace including hydraulic analyses, concrete and earthwork design, and site and plant arrangements; development of construction drawings; development of project cost estimate; and coordination of design with construction activities.

1982 - 1985

Greater Cairo Wastewater Project

Cairo Wastewater Organization

Cairo, Arab Republic of Egypt

Design Engineer - Design of structures associated with the sewage conveyance systems and wastewater treatment facilities in the Greater Cairo area and effluent drain study for the wastewater treatment facilities on the West Bank of the Nile. Specific tasks included supervision of structural design team composed of Egyptian and British engineers for design of sewage conveyance systems and wastewater treatment facilities; coordination of design with the Ministries of the Government of Egypt; development of cost estimates; development of technical specifications; supervised civil design team composed of American and Egyptian engineers for effluent drain study; feasibility study of existing irrigation drain and canal system; preparation of wastewater treatment plant effluent drain study report; and field data collection.

1979 - 1980

Black Fox Nuclear Power Station

Public Service Company of Oklahoma

Inola, Oklahoma

Design Engineer - Design of 1,150 MW nuclear power plant. Specific tasks included design of roads, storm and sanitary drainage, site security system, construction facilities, site structures, and underground utilities; periodic visits to site during construction to coordinate design with construction activities; coordination of design with client; preparation of technical specifications and procurement documents; supervision of design engineering team; and coordination of civil, mechanical, and electrical underground utilities.

1973 - 1978

Semarang and Muara Karang

Steam Power Plants

Perusahaan Umum Listrik Negara

Indonesia

Design Engineer - Design of two 50 MW power plants in Semarang and three 100 MW and two 200 MW power plants in Jakarta. Specific tasks included development of technical specifications and procurement documents; evaluation of construction bids for recommendation of contractor to client; presentation of bid evaluation to client; contract negotiations with contractor; supervision of



LAMONT A. NIGUS, P.E.

KANSAS CITY OFFICE

plant facilities design including roads, plant buildings, utilities, drainage, pile-supported foundation, and dock and cargo unloading facilities; and preparation of power plant operating instruction manual.

PUBLICATIONS

Hydroelectric Power Development Using Irrigation Flows, Waterpower 1995, Waterpower '95 Proceedings of the International Conference on Hydropower July, 1995

Low-Head Hydro - A Look at a Cross Section of Projects (irrigation/hydroelectric project), Power Magazine, December, 1991, Coauthor B. A. Ainsworth and G. W. Gaydar

Rehabilitation of the Ashton Hydroelectric Project, International Joint Power Generation Conference and Exposition, October, 1991, Coauthor D. R. Froehlich

Ashton Hydroelectric Project Rehabilitation, Waterpower '91, Proceedings of the International Conference on Hydropower, July, 1991, Coauthor D. R. Froehlich

Appendix J.4
List of Contract Documents

Construction Contract Documents for the American Fork Decommissioning are as follows:

- The Construction Contract.
- General Construction Specification 130683.70.0176
- Contract Drawing sheets, all with Drawing No. 116032:

Sheet Number	Title
001	Cover Sheet and Drawing Index
002	General Project Plan
100	Dam Bypass & Demolition
101	Dam Intake Modifications
102	Dam Channel Restoration
110	Powerhouse Bypass & Demolition
111	Powerhouse Site Restoration
112	Powerhouse Modifications
120	Flowline Plan & Profile
140	Soil Erosion Plan

Appendix J.5

Materials Testing Schedule and Standards

<u>Material</u>	<u>Test</u>	<u>Test Method and/or Standard</u>
Concrete	Slump	ASTM C143
	Air Content.	ASTM C231
	Compression	ASTM C31, C39, C192

Bear River Hydroelectric Project Materials and Testing Standards

American Concrete Institute (ACI)	
212R	Chemical Admixtures for Concrete
301	Specifications for Structural Concrete for Buildings
308	Guide to Curing Concrete

American Society for Testing and Materials (ASTM)	
A121	Standard Specification for Metallic-Coated Carbon Steel Barbed Wire
A185	Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete
A392	Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric
A491	Standard Specification for Aluminum-Coated Steel Chain-Link Fence Fabric
A497	Standard Specification for Steel Welded Wire Reinforcement, Deformed, for Concrete
A615	Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
A824	Standard Specification for Metallic-Coated Steel Marcellled Tension Wire for Use With Chain Link Fence
C31	Standard Practice for Making and Curing Concrete Test Specimens in the Field
C33	Standard Specification for Concrete Aggregates
C39	Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
C94	Standard Specification for Ready-Mixed Concrete
C143	Standard Test Method for Slump of Hydraulic Cement Concrete
C150	Standard Specification for Portland Cement
C192	Standard Practice for Making and Curing Concrete Test Specimens in the Laboratory
C231	Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
C260	Standard Specification for Air-Entraining Admixtures for Concrete
C494	Standard Specification for Chemical Admixtures for Concrete
C618	Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete
D3776	Standard Test Methods for Mass Per Unit Area (Weight) of Fabric
D3787	Test Method for Bursting Strength of Textiles-Constant-Rate-of-Travel (CRT) Ball Burst Test
D4354	Standard Practice for Sampling of Geosynthetics for Testing

**Bear River Hydroelectric Project
Materials and Testing Standards**

American Society for Testing and Materials (ASTM)	
D4355	Standard Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture and Heat in a Xenon Arc Type Apparatus
D4533	Standard Test Method for Trapezoid Tearing Strength of Geotextiles
D4632	Standard Test Method for Grab Breaking Load and Elongation of Geotextiles
D4833	Standard Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products
F626	Standard Specification for Fence Fittings
F1043	Standard Specification for Strength and Protective Coatings on Metal Industrial Chain Link Fence Framework

Appendix J.6
Example of Reports to be Used

Appendix J.6.a
Daily Work Report



Daily Work Report

AMERICAN FORK DECOMMISSIONING PROJECT

Date: _____

Contractor: _____

Weather Conditions: _____

DESCRIPTION OF WORK PERFORMED:

(Work performed, general comments, instructions to contractor, etc)

DISCREPANCIES NOTED & CORRECTIVE ACTIONS:

(Discrepancies with specs, expected field conditions, etc)

DELAYS or LOST TIME ENCOUNTERED:

EQUIPMENT & LABOR FORCE:

(Working, delivered, idle.)

Submitted by: _____

Appendix J.6.b
Nonconformance Report Form

NON-CONFORMANCE REPORT

NCR NO. _____

DATE ISSUED: _____

PROJECT: Cove Decommissioning Project

OWNER: PacifiCorp

ENGINEER: Black & Veatch

TO: _____

FROM: _____

DRAWINGS/SPECIFICATIONS REFERENCED: _____

CORRECT NON-CONFORMING CONDITION BY: _____

NON-CONFORMING/DEFECTIVE CONDITION: _____

CORRECTIVE ACTION REQUIRED:

Engineer: _____

Date: _____

CERTIFICATION OF CORRECTION

Contractor: _____

Date: _____

Engineer: : _____

Date: _____

Appendix J.6.c
Construction Progress Report Outline

Outline for Monthly Construction Progress Report

1. **Progress of Work**
2. **Status of Construction**
3. **Construction Difficulties**
4. **Contract Status**
5. **Critical Events and Dates**
6. **Source of Major Construction Material**
7. **Material Testing and Results**
8. **Photographs**
9. **Erosion Control and Other Environmental Measures**
10. **Other Items of Interest**

Appendix J.6.d
Inspection Checklist Forms

PROCESS QUALITY CONTROL INSPECTION CHECKLIST CONCRETE PLACEMENT

1.0 INFORMATION ABOUT ITEM INSPECTED

- 1.1 CONSTRUCTION CATEGORY _____
- 1.2 PROCESS LOCATION/COMPONENT ID NUMBER _____
- 1.3 CONTRACTOR _____ CONTRACT NO. _____
- 1.4 DOCUMENTS DEFINING QUALITY REQUIREMENTS _____

2.0 INSPECTION CHECKLIST

2.1 STRUCTURAL CONCRETE REPLACEMENT

	<u>UNSAT</u>	<u>SAT</u>	<u>N/A</u>
(1) Lines and grades within construction tolerances.	_____	_____	_____
(2) Excavations for foundations properly located and dimensioned.	_____	_____	_____
(3) Drainage provided.	_____	_____	_____
(4) Inspection of soft spots and varying support materials.	_____	_____	_____
(5) Weather conditions-frozen ground.	_____	_____	_____
(6) Forms aligned within tolerances.	_____	_____	_____
(7) Stability of forms.	_____	_____	_____
(8) Inspection of openings.	_____	_____	_____
(9) Surface preparation.	_____	_____	_____
(10) Form camber.	_____	_____	_____
(11) Shoring condition.	_____	_____	_____
(12) Cleanup.	_____	_____	_____
(13) Embedded portions of piles or piers clear of dirt or mud.	_____	_____	_____
(14) Chamfer and drip strips in place.	_____	_____	_____
(15) Form oil applied such that dowels and reinforcing are not covered.	_____	_____	_____
(16) Keyways and expansion joint material properly located and secured.	_____	_____	_____
(17) Embedments in place.	_____	_____	_____

2.2 STRUCTURAL CONCRETE-REINFORCING BARS

(1) Size of bars and grade mark.	_____	_____	_____
(2) End anchorage.	_____	_____	_____
(3) Location-number of bars.	_____	_____	_____
(4) Minimum clear spacing.	_____	_____	_____
(5) Coverage.	_____	_____	_____
(6) Splice locations.	_____	_____	_____
(7) Splice lap lengths.	_____	_____	_____
(8) Dowel bars-condition and location.	_____	_____	_____
(9) Screenshot lines.	_____	_____	_____
(10) Bar supports.	_____	_____	_____

PROCESS QUALITY CONTROL INSPECTION CHECKLIST STRUCTURAL CONCRETE ERECTION (Continued)

	UNSAT	SAT	N/A
(11) Cadwelds-Splice Information.			
Splice No.			
Splicer No.			
Position (H, V, D).			
Splice type (T or B).			
Bar size.			
Splicer qualification current.			
Preparation of bars by wire brushing and drying.			
Longitudinal centering of the sleeve.			
Sufficient fill.			
No gas blowout.			
Packing removed.			
Slag in tap hole.			
Visual inspection of voids.			
(12) Note provision for curing.			
2.3 STRUCTURAL CONCRETE--PLACEMENT			
(1) Water hose.			
(2) Compressed air hose with oil trap.			
(3) Vibrators.			
(4) Hoes and shovels.			
(5) Buggies.			
(6) Surge hoppers and chutes.			
(7) Tremies.			
2.4 CONCRETE CONTROL			
2.5 TRUCK TO FORM CONVEYANCE			
2.6 CURING			
2.7 FREEZE PROTECTION			

3.0 DESCRIPTION OF DEFICIENCIES NOTED

4.0 ACTION TAKEN ON NOTED DEFICIENCIES

Nonconformance Report Issued

Date

NCR NO.

Inspector

Date Inspected

[illegible]

**PROCESS QUALITY CONTROL INSPECTION CHECKLIST
CONTRACTOR ENVIRONMENTAL PROTECTION PRACTICES (CONTINUED)**

3.0 DESCRIPTION OF DEFICIENCIES NOTED _____

4.0 ACTION TAKEN ON NOTED DEFICIENCIES _____

Nonconformance Report Issued

Date

NCR NO.

Inspector

Date Inspected

PROCESS QUALITY CONTROL INSPECTION CHECKLIST DAM REMOVAL and GENERAL DEMOLITION

1.0 INFORMATION ABOUT ITEM INSPECTED

1.1 CONSTRUCTION CATEGORY _____

1.2 PROCESS LOCATION/COMPONENT ID NUMBER _____

1.3 CONTRACTOR _____ CONTRACT NO. _____

1.4 DOCUMENTS DEFINING QUALITY REQUIREMENTS _____

2.0 INSPECTION CHECKLIST

UNSAT SAT N/A

2.1 Dam Removal and General Demolition

(1) Water diversion structures in place and functional	_____	_____	_____
(2) Dam removal being done in the dry to the extent possible	_____	_____	_____
(3) Concrete is broken into pieces no larger than 5 feet.	_____	_____	_____
(4) Concrete is removed from the river channel and either buried per plans or taken off site.	_____	_____	_____
(5) Any exposed metals have been cut flush with concrete.	_____	_____	_____
(6) Concrete left on site is covered with soil and rock per plan.	_____	_____	_____
(7) Public safety and Hwy 92 controls in place	_____	_____	_____
(8) Haz mats removed prior to house and garage demo	_____	_____	_____
(9) Removal of items to be salvaged before demo.	_____	_____	_____
(10) House septic tank drained before removal	_____	_____	_____
(11) Overhead and energized lines observed and avoided	_____	_____	_____

2.2 BLASTING PLAN (if used)

(1) Type of explosives is listed.	_____	_____	_____
(2) Procedures for inclement weather are outlined.	_____	_____	_____
(3) Ignition plans are included.	_____	_____	_____
(4) Ignition system and detonation devices are listed.	_____	_____	_____
(5) Sample blast pattern is included which indicates shot charges and total quantity of explosives.	_____	_____	_____
(6) Plan indicates location and method of onsite storage.	_____	_____	_____
(7) Copies of all required permits, certificates, and qualifications.	_____	_____	_____
(8) Duration and schedule of blasting.	_____	_____	_____
(9) Contingency plan for charges that fail to detonate.	_____	_____	_____
(10) Drilling methods and access.	_____	_____	_____
(11) Documentation indicating Contractor has complied with all permits and notification requirements.	_____	_____	_____

2.3 BLASTING

(1) All adjacent property owners are notified at least 24 hours in advance.	_____	_____	_____
(2) Contractor has given sufficient prior notice to the: county engineer, county sheriff, fire districts, police departments, and all other agencies and authorities where the blasting is to be performed.	_____	_____	_____
(3) Contractor has furnished a copy of all blasting permits to Company 7 days prior.	_____	_____	_____
(4) A copy of the blasting permit is displayed on the site.	_____	_____	_____
(5) Pre-blast survey has been completed for all utilities and structures that may be damaged by blasting.	_____	_____	_____

PROCESS QUALITY CONTROL INSPECTION CHECKLIST DAM REMOVAL and GENERAL DEMOLITION (Continued)

(6) All utilities and structures within 500 feet of blasting area are included in the pre-blast survey

(7) Contractor has submitted a copy of the pre-blast survey.

(8) Seismographs are used to measure peak particle velocity adjacent to buildings subject to ground shock.

(9) Air overpressure is measured at adjacent structures.

(10) Measurement records of the blast monitoring are submitted to Company within 24 hours.

(11) Post-blast survey is performed on all structures and utilities included in pre-blast survey.

(12) Post-blast survey has been submitted to Company.

2.4 PHASEOUT

Removal of temporary measures and structures from work site.

3.0 DESCRIPTION OF DEFICIENCIES NOTED

4.0 ACTION TAKEN ON NOTED DEFICIENCIES

Nonconformance Report issued

Date

NCR NO.

Inspector

Date Inspected

Data Inspected

**PROCESS QUALITY CONTROL INSPECTION CHECKLIST
EROSION CONTROL (Continued)**

3.0 DESCRIPTION OF DEFICIENCIES NOTED _____

4.0 ACTION TAKEN ON NOTED DEFICIENCIES _____

Nonconformance Report Issued

Date

NCR NO.

Inspector

Date Inspected

PROCESS QUALITY CONTROL INSPECTION CHECKLIST FLOWLINE DEMOLITION and REMOVAL

1.0 INFORMATION ABOUT ITEM INSPECTED

1.1 CONSTRUCTION CATEGORY _____

1.2 PROCESS LOCATION/COMPONENT ID NUMBER _____

1.3 CONTRACTOR _____ CONTRACT NO. _____

1.4 DOCUMENTS DEFINING QUALITY REQUIREMENTS _____

2.0 INSPECTION CHECKLIST

2.1 PIPE DEMOLITION

- (1) Visible pipe is cut and secured on hill side for subsequent removal
- (2) Pipe bulkheads installed.
- (3) Timber crib foundations dismantled and left on site.
- (4) Tunnel portals closed or left open per plans.
- (5) Safety measures taken per plan

2.2 PIPE REMOVAL via HELICOPTER

- (1) Flight plan and schedule in place all notifications made.
- (2) Daily safety briefings and coordination meetings with helicopter crew conducted
- (3) Traffic control measures taken at drop zone.
- (4) Refueling and spill prevention measures in place.
- (5)

2.3 PHASEOUT

Removal of temporary measures and structures from work site.

UNSAT	SAT	N/A
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

3.0 DESCRIPTION OF DEFICIENCIES NOTED

4.0 ACTION TAKEN ON NOTED DEFICIENCIES

_____ Nonconformance Report Issued Date _____

NCR NO. _____ Inspector _____

Date Inspected _____

PROCESS QUALITY CONTROL INSPECTION CHECKLIST
Re-Vegetation Work (Continued)

3.0 DESCRIPTION OF DEFICIENCIES NOTED

4.0 ACTION TAKEN ON NOTED DEFICIENCIES

Nonconformance Report Issued

Date

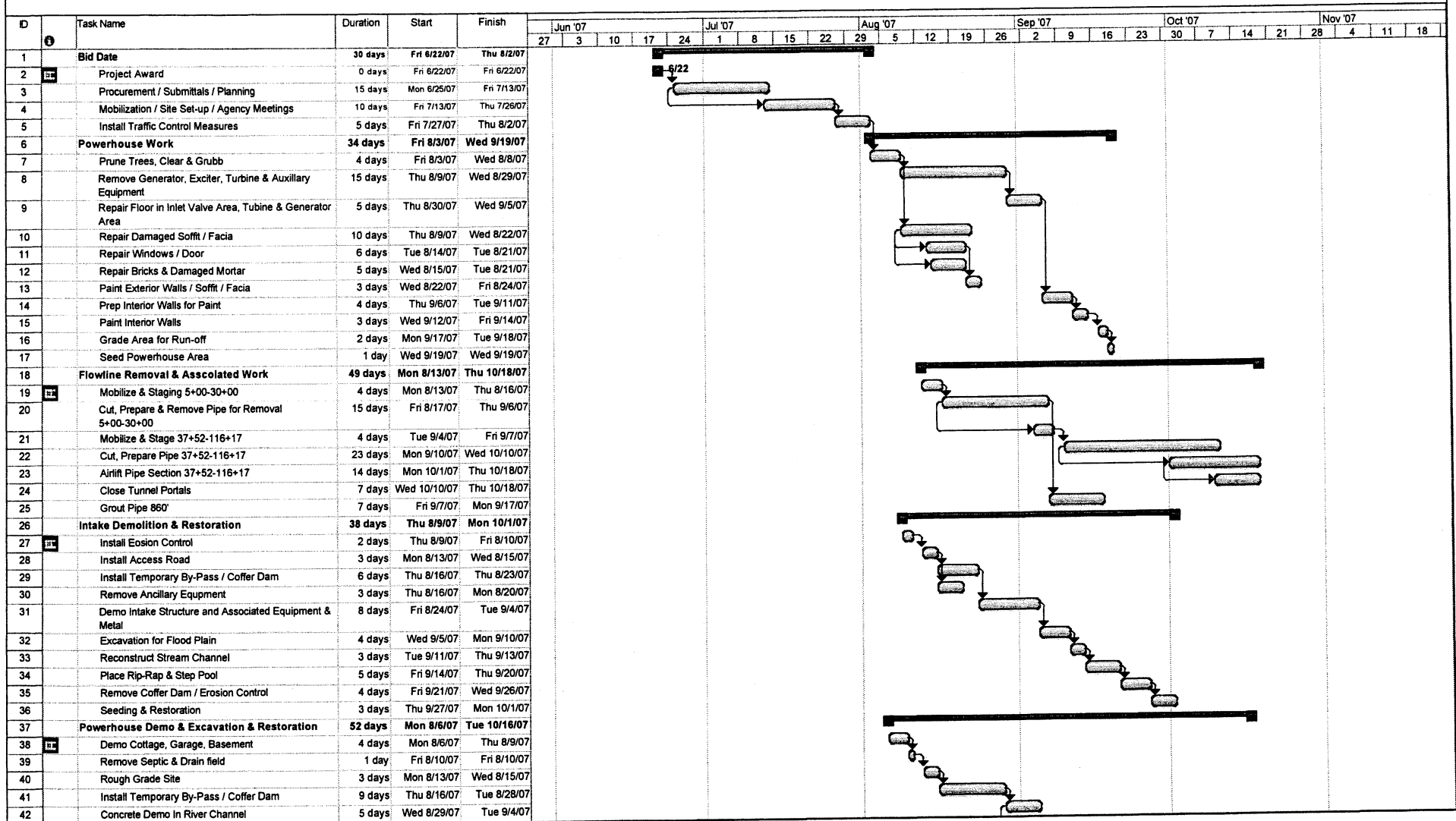
NCR NO.

Inspector

Date Inspected

Appendix J.8
Contractor's Schedule

Preliminary Schedule for American Fork Decommissioning



Project: American Fork Decommissioning
Date: May 31, 2007
Prepared By: Mark Radich Jr.

Task
Split

Progress
Milestone

Summary
Project Summary

External Tasks
External MileTask

Split

Preliminary Schedule for American Fork Decommissioning

ID	Task Name	Duration	Start	Finish	Jun '07							Jul '07				Aug '07				Sep '07				Oct '07				Nov '07			
					27	3	10	17	24	1	8	15	22	29	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	
43	Excavate & Regrade River Channel	3 days	Mon 9/3/07	Wed 9/5/07																											
44	Concrete Work	10 days	Thu 9/6/07	Wed 9/19/07																											
45	Excavate for Flood Plain	7 days	Thu 9/6/07	Fri 9/14/07																											
46	Place Rip-Rap & Step Pools	7 days	Mon 9/17/07	Tue 9/25/07																											
47	Remove Temp. By-Pass	4 days	Wed 9/26/07	Mon 10/1/07																											
48	Grade Site Backfill Existing Intake, reove underground Pipe	4 days	Tue 10/2/07	Fri 10/5/07																											
49	Install Foot Bridge / Handrail	3 days	Mon 10/8/07	Wed 10/10/07																											
50	Install Restroom	3 days	Thu 10/11/07	Mon 10/15/07																											
51	Install Gravel Path	3 days	Mon 10/8/07	Wed 10/10/07																											
52	Install Gravel Parking	4 days	Thu 10/11/07	Tue 10/16/07																											
53	General Site Clean-up	10 days	Wed 10/17/07	Tue 10/30/07																											
54	Demobilization	10 days	Wed 10/31/07	Tue 11/13/07																											

Project: American Fork Decommissioning
Date: May 31, 2007
Prepared By: Mark Radich Jr.

Task  Progress  Summary  External Tasks  Split 
Split  Milestone  Project Summary  External MileTask 



825 NE Multnomah, Suite 1500
Portland, Oregon 97232

AGENCY PLAN REVIEW COMMENTS

**American Fork Hydroelectric Project
FERC No. 696
American Fork Decommissioning**

**Addressing Ordering Paragraphs of the FERC Decommissioning Order 108 FERC
61,130**

In Consultation with:
See attached agency review matrix

June 2007

American Fork Hydro Decommissioning Project Agency Plan Review Matrix

The matrix below shows the agency review process for the project plans required by the Commission Order 108 FERC 61,130, issued August 4, 2004. The shaded "X's" indicate receipt of written agency comments. The other agencies indicated general concurrence with the plans by not providing written comments.

	Plan Description	Reviewing Agencies						
		USFS	USNPS	UDWR	USFWS	UDOT	USHPO	FERC
1.	Cofferdam Drawings & Specs FERC Order, Par.E	■	■					X
2.	Soil Erosion Plan FERC Order, Par.F	■	■	■				X
3.	Wetland Protection Plan FERC Order, Par.G	■	■	■	X			X
4.	Spill Containment & Prevention Plan FERC Order, Par.H	■	■	■				X
5.	Public Safety & Traffic Control Plan FERC Order, Par.I	■	■			■		X
6.	Implementation of MOA between SHPO and FERC FERC Order, Par.J	■	■				X	X
7.	Temporary Construction Emergency Action Plan (TCEAP) FERC Order, Par.D	■	■					X
8.	Quality Control Inspection Program (QCIP) FERC Order, Par.D	■	■	■				X
9.	Blasting Plan - No Blasting Planned FERC Order, Par.D	n/a	n/a	n/a	n/a	n/a	n/a	n/a

USFS – US Forest Service, Pleasant Grove District, Uinta National Forest
 USNPS – US National Park Service, Timpanogos Cave National Monument
 UDWR – Utah Division of Wildlife Resources
 USFWS – US Fish and Wildlife Service
 UDOT – Utah Department of Transportation
 USHPO – Utah State Historic Preservation Office
 FERC – Federal Energy Regulatory Commission

Request for Agency Comments



825 NE Multnomah, Suite 1500
Portland, Oregon 97232

May 1, 2007

Project Consultation List

**Subject: American Fork Hydroelectric Decommissioning Project
Project Plans for Review**

Dear Agency or Organization:

Attached for your review and comment over the next 30 days is a collection of plans required by the decommissioning order issued by the Federal Energy Regulatory Commission, (FERC) dated August 4, 2004. Also included is a current set of decommissioning drawings and specifications. Following your review, these plans will be finalized and provided to the FERC for approval. While we are providing you a complete set of the various plans for your information, you are requested to review only those plans shown on the attached matrix having an "X" corresponding to your agency.

Please send your written or emailed comments on or before June 1, 2007 to;

PacifiCorp Energy
825 NE. Multnomah Ave. 1500 LCT
Portland, OR. 97232
Attn: Bob Atwood
bob.atwood@pacificorp.com

After June 1, 2007, the project schedule requires that we interpret an absence of comments to indicate a general concurrence with the plan(s). In the meantime, if you have questions or need to discuss this further, please contact myself at 503-813-6696 or Eve Davies at 801-220-2245.

Thank you in advance for your time spent reviewing these plans and for your continued interest in this project.

Sincerely,

A handwritten signature in black ink that reads "Robert A. Atwood".

Robert A. Atwood
Sr. Project Manager

Enclosure

American Fork Hydro Decommissioning Project Plan Review Matrix

Your invited to review all the attached plans, however, as a minimum please review and comment on those plans corresponding to your agency by the "X". Please provide your written or emailed comments to Bob Atwood at PacificCorp Energy, 825 NE. Multnomah Ave. 1500 LCT, Portland, OR. 97232 or at bob.atwood@pacificcorp.com

	Plan Description	Reviewing Agencies						
		USFS	USNPS	UDWR	USFWS	UDOT	USHPO	FERC
1.	Cofferdam Drawings & Specs FERC Order, Par.E	X	X					X
2.	Soil Erosion Plan FERC Order, Par.F	X	X	X				X
3.	Wetland Protection Plan FERC Order, Par.G	X	X	X	X			X
4.	Spill Containment & Prevention Plan FERC Order, Par.H	X	X	X				X
5.	Public Safety & Traffic Control Plan FERC Order, Par.I	X	X			X		X
6.	Implementation of MOA between SHPO and FERC FERC Order, Par.J	X	X				X	X
7.	Temporary Construction Emergency Action Plan (TCEAP) FERC Order, Par.D	X	X					X
8.	Quality Control Inspection Program (QCIP) FERC Order, Par.D	X	X	X				X
9.	Blasting Plan - No Blasting Planned FERC Order, Par.D	n/a	n/a	n/a	n/a	n/a	n/a	n/a

USFS - US Forest Service, Pleasant Grove District, Uinta National Forest
 USNPS - US National Park Service, Timpanogos Cave National Monument
 UDWR - Utah Division of Wildlife Resources
 USFWS - US Fish and Wildlife Service
 UDOT - Utah Department of Transportation
 USHPO - Utah State Historic Preservation Office
 FERC - Federal Energy Regulatory Commission

**American Fork Decommissioning Project
Consultation List:
May 2007**

Pam Gardner (to 5/30/07) John Logan (acting) District Ranger United States Forest Service Uinta National Forest 390 North 100 East Pleasant Grove, UT. 84062 pgardner@fs.fed.us	Stuart Hoff Utah Department of Transportation 2760 N. Frontage Road Lehi, UT. 84043 shoff@utah.gov
Denis Davis Michael Gosse (acting) Superintendent National Park Service Timpanogos Cave National Monument Rural Route 3, Box 200 American Fork, UT. 81003 michael_gosse@nps.gov denis_davis@nps.gov	Chris Hansen Utah State Historical Preservation Office 300 S. Rio Grande Street Salt Lake City, UT. 84101 clhansen@utah.gov
Doug Sakaguchi Utah Division of Wildlife Resources 1115 N. Main Street Springville, UT. 84663 dougsakaguchi@utah.gov	James McMillan USACE Utah Regulatory Office 533 W. 2600 S. Suite 150 Bountiful, Utah 84010
Tim Hawkes Trout Unlimited 506 S. Main Street, Suite 101 Bountiful, UT. 84010 thawkes@tu.org	Charlie Vincent American Whitewater 1800 E. 3990 S. Salt Lake City, UT. 84124
Paul Abate United States Fish and Wildlife Service 2369 W. Orton Circle #50 West Valley City, UT. 84119 paul_abate@fws.gov	

U.S. Forest Service Comments and Response

From: John R Logan [jrlogan@fs.fed.us]
Sent: Friday, June 01, 2007 7:36 AM
To: Atwood, Robert
Cc: Denis_Davis@nps.gov; Reese Pope; Jeremy Jarnecke; Ron W Smith; Denise VanKeuren
Attachments: pic10288.gif



pic10288.gif (3 KB)

Bob - Here are the comments from the Uinta NF

We have concern about the proposed modification of the stream channel near the powerhouse.

The Forest Service surveyed a 700 foot longitudinal profile at the Powerhouse site during the original negotiation process. Thalweg slope above the spillway was 4.5%, below the spillway was 3.4%, with an overall slope of 5.1%. This survey showed a number of 2-3 foot drops with 25-60 foot spacing. The current proposal by PacifiCorp includes a series of rock step-pool structures to replace the concrete spillway. As drawn, the step-pool structure series will result in a 20% grade (10 foot drop over 50 horizontal feet) over the distance currently occupied by the spillway structure. This is a substantial departure from natural gradient or existing step-pool configuration of this stream type and will likely be a trigger point for channel incision, as discussed in the original negotiation process. Additionally, this steep gradient is likely to be a barrier to aquatic organism passage.

The step-pool proposal is a viable design, but needs to be modified to some proximity to existing stream morphology of American Fork River. The final length and dimensions of the step-pool sequence should be reflective of representative reference reaches above or below the Powerhouse site as recommended by Bio-West in their review of the plans on March 9, 2007. From the longitudinal profile discussed above, the step-pool series should be completed on a minimum of a 120-150 foot stream segment (8.3% - 6.6% slope) to achieve a stable, functional stream channel that allows aquatic organism passage.

In addition the seed mix that was provide was intended to be used in the bottoms. There will need to be a species substitute for those upland areas. I will have Denise VanKeuren send you a list of species for the upland seed mix.

Appreciate the opportunity to have a chance to review.

From: Denise VanKeuren [dvankeuren@fs.fed.us]
Sent: Friday, June 01, 2007 12:52 PM
To: John R Logan
Cc: Denis_Davis@nps.gov; Jeremy Jamecke; Reese Pope; Atwood, Robert; Ron W Smith
Subject: Re: dry site seed mix for american fork

Attachments: pic14834.gif



pic14834.gif (3 KB)

As I understand it, the first seed mix should work for the great majority of the ground disturbing work, which Jeremy confirms should mostly be in the bottom of the canyon. But for those areas where reseeding is wanted up on the dry south-facing steep slopes here is a different seed mix:

Yarrow (<i>Achillea millefolium</i>)	4 lbs PLS/ac
Blue wildrye (<i>Elymus glaucus</i>)	6 lbs PLS/ac
Lewis blue flax (<i>Linum lewisii</i>)	4 lbs PLS/ac
Sandberg bluegrass (<i>Poa sandbergii</i>)	6 lbs PLS/ac

PLS = Pure Live Seed

Denise Van Keuren
Uinta National Forest
(801) 342-5179

Internet mail: dvankeuren@fs.fed.us

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From: Atwood, Robert
Sent: Monday, June 04, 2007 9:19 AM
To: 'John R Logan'
Cc: Denis_Davis@nps.gov; Reese Pope; Jeremy Jarnecke; Ron W Smith; Denise VanKeuren; Davies, Eva; Edelmann, Frank
Subject: American Fork Hydro Decommissioning Project - Plan Review

John:

Thank you for providing the comments from the Uinta National Forest (Unita NF).
Regarding the points you raised we have the following responses:

1. **THALWAG GRADIENT AT POWERHOUSE:** The intent of the stream restoration is to mimic natural conditions to the extent possible. We will attempt to flatten the gradient in the area of the spillway and apron as you have discussed. This area is shown as Section A on drawing Sheet 112 and indicates an approximate vertical drop of 6 feet (91'-85') over a horizontal distance of 45 feet. This location of the step-pool features will be elongated to approximately 120 to 150 feet to achieve a flatter step-pool gradient in the range of 5%.

2. **SEED MIX FOR FOREST SERVICE UPLANDS:** Thank you and Denise Van Keuren for providing the seed mix to be used on the Forest Service uplands located on the north canyon wall. While we do not expect to create or aggravate naturally occurring erosion conditions in these upland areas, we will plan to have erosion control measures available as well as 1 acre of the seed mix you have specified, in the event actual field conditions warrant their use. At the end of the project we will leave any remaining seed mix for your use. We note that the Uinta NF and the National Park Service have provided similar, but different seed mix and application requirements for the uplands and we will endeavor to use each on your respective properties.

Thanks again for reviewing the eight plans we furnished you and for your comments, below.
We look forward to our continued work together on this decommissioning project.

Regards,
Bob Atwood

Robert A. Atwood
Sr. Project Manager
PacifiCorp Energy - Hydro Resources
825 NE Multnomah Ave. - Suite 1500
Portland, OR 97232
Phone: 503-813-6696
FAX: 503-813-6659
Cell: 503-703-7572
E-Mail bob.atwood@pacificorp.com

National Park Service Comments and Response

From: Denis_Davis@nps.gov
Sent: Thursday, May 31, 2007 2:39 PM
To: Atwood, Robert
Cc: Davies, Eve; Michael_Gosse@nps.gov; Camille_Pulham@nps.gov; Jennifer_Yates@nps.gov; jrlogan@fs.fed.us
Subject: Amer Fork Hydro Decommissioning Project - Plan Review

Bob,

We appreciate the opportunity to participate in this decommissioning project and review the plans that you gave us May 1, 2007.

We only have two comments and one of them is simply confirming an item in your specifications.

1. We want to confirm that Note # 12 on Drawing Sheet # 120 is correct. We would like flowline tunnel entrances to not be closed or blocked off on Timpanogos Cave National Monument lands. This will allow us to place bat grates over the entrances as needed to keep out potential human intruders for their safety and so they won't disturb Townsend Long Eared Bats that roost in the tunnels, and the bat grates will allow the bats to go to and from the tunnels as they have in the past.

2. I realize in talking to you that you don't plan much if any seeding of disturbed sites along the course of the flowline where you plan to remove it. It was unclear from our review of your plans and specifications what your erosion control and site rehab plans were along the flowline removal portion of the project. Those are actively eroding slopes naturally. However, if you do plan any seeding of disturbed sites there, we recommend the following seed mix that can be obtained from Granite Seed. It is far more appropriate for the dry, south facing slopes than the mix in the specifications, and it is all native species that occur on the American Fork Canyon south facing slope.

Slender Wheatgrass 15%
Sandburg bluegrass 3.75%
Thick Spike wheatgrass 20%
Indian Rice grass 20%
Idaho Fescue 10%
Bluebunch-wheatgrass 20%
Blueflax 5%
Yarrow 1.25 %
Palmer penstemon 5%
Suggested 25-30 lb/acre

Where you seed, we also suggest that you consider erosion control mat/blankets due to the degree of the slopes involved, or I suspect little of the seed will be around long enough to be of any value. Granite Seeds' specification/recommendations on what slopes to use them are excellent.

We appreciate the opportunity to review and comment on your plans and specifications, and look forward to continued communication and coordination with you in regards to this project.

Denis Davis
Superintendent of Timpanogos Cave National Monument
R.R. 3, Box 200
American Fork, UT 84003
801-756-5239

From: Atwood, Robert
Sent: Thursday, May 31, 2007 4:00 PM
To: 'Denis_Davis@nps.gov'
Cc: Davies, Eve; Michael_Gosse@nps.gov; Camille_Pulham@nps.gov; Jennifer_Yates@nps.gov; jrlogan@fs.fed.us; Edelmann, Frank
Subject: RE: Amer Fork Hydro Decommissioning Project - Plan Review

Denis:

Thank you for your comments.

The follow are our responses to them:

No. 1 - Yes. PacifiCorp re-confirms Note #12 on Drawing Sheet #120 that says tunnel portals on monument lands will be left open at the conclusion of the decommissioning project.

No. 2 - While we do not expect to create or aggravate naturally occurring erosion conditions, we will plan to have erosion control measures available as well as 1 acre of the seed mix you have specified, in the event actual field conditons warrant their use. At the end of the project we will leave any remaining seed mix for your use.

Thanks again for reviewing the eight plans we furnished you and for your comments, below.
We look forward to our continued work together on this decommissioning project.

Best regards,
Bob Atwood

Robert A. Atwood
Sr. Project Manager
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FAX: 503-813-6659
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E-Mail bob.atwood@pacificorp.com

Utah Department of Transportation Comments and Response

From: Stuart Hoff [shoff@utah.gov]
Sent: Monday, May 07, 2007 1:28 PM
To: Atwood, Robert
Subject: AF Canyon

The traffic plan will be fine. It has to be used at each location that work is going on. Truck crossing signs with flaggers should be used were trucks are entering the highway.

Stuart Hoff
801-768-9851 Station
801-830-9523 Cell
801-768-1889 Fax

6/8/2007

From: Atwood, Robert
Sent: Monday, May 14, 2007 7:34 AM
To: 'Stuart Hoff'
Cc: Davies, Eve; Barnes, Wayne; 'Denis_Davis@nps.gov'; John Logan (jrlogan@fs.fed.us)
Subject: RE: AF Canyon

Stuart:

Thanks for reviewing the Public Safety and Traffic Control Plan for the American Fork Decommissioning Project and for providing your comments below. Your comments will be implemented as the project proceeds.

Regards,
Bob Atwood

Robert A. Atwood
Sr. Project Manager
PacifiCorp Energy - Hydro Resources
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Utah Division of Water Rights Comments



State of Utah

**Department of
Natural Resources**

MICHAEL R. STYLER
Executive Director

**Division of
Water Rights**

JERRY D. OLDS
*State Engineer/
Division Director*

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

May 8, 2007

PacificCorp Energy
Attn: Bob Atwood
825 NE Multnomah Ave. 1500 LCT
Portland OR, 97232

**Re: American Fork Hydroelectric Decommissioning Project
Project Plans for Review.**

Dear Mr. Atwood:

Thank you for the opportunity to review the above referenced document. We have concentrated our review on the Wetland Protection Plan section of the document and concur that the berm originally called for in the surrender order is unnecessary. We believe that it is likely that the upstream wetland will be sustained by spring flow and groundwater and construction of the berm may actually result in impairment, both temporarily and permanently, to the American Fork River and surrounding riparian areas.

We also note that a portion of the project will involve alteration to the American Fork River and as such, a State Stream Alteration Permit will need to be obtained prior to initiating work. This office will be available to assist you in the application process and will expedite processing to the maximum extent possible. Provided the application is submitted in the near future, we anticipate that permit issuance should occur well in advance of the proposed work period (August through November, 2007).

If you have any questions or require further information, please contact me at (801) 538-7404.

Sincerely,

A handwritten signature in black ink, appearing to read "Chuck Williamson".

Chuck Williamson, P.G.
Stream Alteration Specialist

Utah Division of Wildlife Resources Comments and Response

From: Doug Sakaguchi [dougsakaguchi@utah.gov]
Sent: Friday, May 25, 2007 12:54 PM
To: Atwood, Robert
Subject: UDWR comments on review of Decommissioning Project Plans

Bob,

I think most of my concerns have been addressed or questions answered in the Soil Erosion Plan, Spill Containment & Prevention Plan, and the Wetland Protection Plan.

In the Quality Control Inspection Program (QCIP), I noticed that you had indicated that Specialty Inspectors were not applicable for this project. This raises a question for me: For the stream restoration work, our agency has found that regular equipment operators and foremen generally do not have the experience in building in-stream structures, so the structures do not last nor maintain themselves.

I am concerned, that even though the stream restoration work has been redesigned to be step-pools, that the diagrams on sheets 100, 102 and 111 are not detailed enough for a regular contractor or equipment operator to be able to anchor and install the step-pools correctly. Maybe this kind of experienced person is not a "specialty inspector", but I did not recall reading that someone familiar with installing in-stream structures (building the step-pools) would be part of your decommissioning team. Also, in section J.6.d--Inspection Checklist Forms, I did not notice any parts of any of the checklists referring to the stream restoration work (installation of step-pool structures).

I realize that the stream restoration work is a relatively minor part of the decommissioning project; however, the proper functioning of the stream will be the long-lasting observable part of the barrier removal. If the step pools are installed incorrectly and wash out and the locations where the barriers had been located then become headcuts and barriers again to upstream fish migration, then the intended benefits for fish migration become nonfunctional again.

Thanks for the opportunity to review the plans.

Douglas K. Sakaguchi
Habitat Biologist
Central Region
Utah Division of Wildlife Resources
1115 North Main St.
Springville, UT 84663
Phone: 801-491-5653
Fax: 801-491-5646
Email: dougsakaguchi@utah.gov

From: Atwood, Robert
Sent: Friday, May 25, 2007 1:22 PM
To: 'Doug Sakaguchi'
Cc: Davies, Eve
Subject: RE: UDWR comments on review of Decommissioning Project Plans

Thanks for your comments Doug.

In the QCIP, "inspectors" are a different animal than a "consultant". I plan to have BioWest (our consultant) periodically visit the site to observe the stream work. Relative to inspectors, I'll have a full time representative to overview all aspects of the project.

Regarding your comment about, section J.6.d--Inspection Checklist Forms, I'll add an item for stream restoration. Good comment, thanks.

Bob Atwood

Robert A. Atwood
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