

KASIDAYA CREEK HYDROELECTRIC PROJECT

PROJECT NO. 11588

MONTLY CONSTRUCTION REPORT

FOR

JANUARY 2007



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KASIDAYA CREEK¹ HYDROELECTRIC PROJECT FERC PROJECT NO. 11588-AK

MONTHLY CONSTRUCTION REPORT FOR THE MONTH OF JANUARY 2007

PREPARED FEBRUARY 14, 2007

The FERC authorized the start of construction for the Kasidaya Creek (formerly Otter Creek) Hydroelectric Project 3 miles south of Skagway, Alaska on April 5, 2006. Mobilization began April 11, 2006.

1. PROGRESS OF WORK

Snow fell almost every day in January and stormy winter weather hampered accessing the upper project and stopped further construction of the right-of-way until the weather warms up. Progress however was made on the powerhouse foundation and powerhouse frame as described below. A 20-foot shipping container was brought over from Skagway to store the building materials for the powerhouse structure to keep them out of the weather. Cradles were built in Skagway for transport pipe to the project site. Needed vehicle maintenance was completed on-site, including oil changes and tune-ups.

Jetty and Staging Area

The last of the brush was burned on the end of the jetty.

Powerhouse Site

The remaining east side foundation walls were poured and then stripped of their plywood forms. Other concrete work at the powerhouse for the foundation walls was completed early in the month. Backfill around the foundation walls continued as progress was made. Soils and plywood forms were being heated this time of year before and after pouring concrete. The 6-inch building drains were completed. Ground rods and the copper wire ground grid for the powerhouse were installed. The valve and turbine pits were covered to provide a safe work area. The sub-grade electrical was installed on the inside of the foundation. A crane was brought by landing craft to install the the powerhouse frame. The powerhouse frame was near completion by the end of the month, including all purlins and girts and was trued up and leveled.

Five of six tailrace weirs (energy dissipaters) were installed on the beach below the tailrace. The sixth weir was not installed at this time because it may interfere with beach landings by the personnel boat and landing craft.

¹ Name change from Otter Creek Hydro was approved by FERC on June 26, 2006.

Access Road

Construction of the access road has stopped until weather warms up to melt ice on the right-of-way.

2. STATUS OF CONSTRUCTION 52% Complete

A copy of the construction schedule is included in the Appendices. A detailed budget report is being developed. A summary budget report is also included in the Appendices.

3. CONSTRUCTION DIFFICULTIES

Normal equipment issues requiring repairs on site or in Skagway have occurred. Ice on the right-of-way has stopped construction of the road until weather conditions warm up. Some winter storms have also hampered access of the project during the month of January. The labor force in January varied from 4 to 8 people employed full time.

4. CONTRACT STATUS 35% Complete

Construction surveying is being provided by Pacific Contract Co. ECM is a joint effort shared by David Hunz of H&H who also contracted Molly Covenor to be part of the ECM team. Other contracts will be negotiated as the project progresses. At this time there is only the ECM contract.

5. CRITICAL EVENTS & DATES

Future critical events and dates are:

- February 16 design for the road extension and penstock to FERC Regional Office for review.
- February 16 an addendum of the recently filed (January 23, 2007) license amendment application will be submitted changing a proposed aluminum box culvert Kasidaya Creek crossing to a bridge crossing.

6. IMPOUNDMENT FILLING

Not applicable at this time (Phase III)

7. FOUNDATIONS

Tailrace and powerhouse foundations are complete.

8. SOURCES OF MAJOR CONSTRUCTION MATERIALS

Vendors are: Gilkes (Turbine/Generator/Lube Unit)
Chief Buildings (Powerhouse structure)
H&H Construction (Concrete)

9. MATERIALS TESTING AND RESULTS

Concrete samples from each batch are being tested by R&M engineering of Juneau, AK. Test results are on file at the Skagway AP&T office. Concrete air entrainment testing has also been performed periodically.

10. INSTRUMENTATION

The only gauging at this time is continuation of stage measurement at Kasidaya Creek mouth.

11. PHOTOGRAPHS

Photographs in the Appendices show work on the powerhouse foundation forms and tailrace weirs.

12. EROSION CONTROL / OTHER ENVIRO MEASURES

No erosion was noted at any of the project activities. Soils encountered have been very sandy, mixed with boulders, or bedrock. The road and traveled parts of the staging area have been surfaced with rock to minimize erosion. This time of year the ground is frozen and covered with snow and ice. Weather conditions were generally cold with 8 cloudy or mildly wet days, 21 days of snow, and 2 days of sunshine or partial sunshine according to the Weather Underground website. The total precipitation for January was 2.69 inches. Precipitation was most likely snow and onsite data indicates there was more snow than shown on the weather website. Average high temperature for the month was 33.9°F with a maximum of 44°F on January 31. The average low temperature for the month was 25.9°F with the lowest temperature of 5°F occurring on January 10 and 11. No turbidity measurements taken at this time because there is no activity near Kasidaya Creek. Soils dry out quickly due to good drainage from the sandy soils. A tiny stream north of the project is also being watched and has a hay bale placed in it just in case, but the water has remained clear and no sediment has been observed. Surface water has mostly been frozen and the ground covered with snow.

Summary of ECM Weekly Reports for January:

PROGRESS OF WORK

- The crew finished all of the sub-grade electrical work that is required for this phase of the project. About eighty percent is complete.
- Backfilling around the foundation of the powerhouse is finished until spring.
- Last week the crew completed all needed maintenance to the vehicles on site, including oil changes and tune-ups.
- The crane being used to install the I-beams was brought over by the Landing Craft.
- 21 of the 32 total sections of ductile iron pipe have been brought to the staging area from Skagway.
- The crew has started to work on clearing the right-of-way up to Station 9+00 so that the remainder of the pipe being brought over can be stored there. While working on the beginning of the road, they are placing more large rocks onto the wall on the east side of the right-of-way.
- The main frame of the powerhouse building is up. All purlins and girts are in place. The structure has been trued up and leveled.
- One quarter of the insulation for the building has been brought over and is on site. The crew is planning on bringing the building sheeting and the roll-up door over later in the week.

- Due to the ECM's being out of town and bad weather, this report is covering 3 weeks instead of the planned 2 weeks.
- The last of the brush was burned on the end of the pier.
- The crew poured the remaining east side foundation walls of the Powerhouse and then stripped the plywood forms.
- The 6-inch building drains were completed.
- The ground rods and the copper wire to ground the perimeter of the Powerhouse were installed.
- The Valve Pit and the Turbine Pit were covered.
- The sub-grade electrical was installed around the perimeter of the inside of the foundation.
- The Valve Pit area and the Tailrace were decked over.
- A small window of warmer weather allowed the crew to haul gravel and dirt from the Upper Spoils Area down the right-of-way to backfill the foundation of the Powerhouse. Then temps cooled and the right-of-way froze again. Since then they have been unable to make it back up the right-of-way.
- Five of the six Tailrace Weirs were installed. Roger Barger, project Superintendent, was worried that the sixth weir would block boat access to the beach so he said that he would install it later in the project.
- The crew built cradles to help transport pipe from Skagway to Kasadaya.
- A 20-foot shipping container brought over from Skagway is being used to hold the building materials for the Powerhouse out of the weather. The crane being used to move the building materials and shipping container was also brought over.

- The Crew was in the process of drying out the ground on the east side of the foundation so that conduit could be imbedded while I was on site.

EROSION CONTROL

- The majority of the site is still iced over.
- Due to freezing winter conditions, the threat of erosion on site is minimal.

- Since the first of the year, it has snowed almost every day which is keeping the temperatures around freezing. There has been a lot of thawing and freezing which has caused surface ice to form everywhere.
- The right-of-way up to the Upper Spoils Area has large frozen ruts throughout.
- The only flowing water that was seen was through the culvert at Sta. 7+31. The water is free of sediment and the culvert is working.

HAZARDOUS SUBSTANCES

- No fuel spills or sheens were observed at the property, including around the truck that slipped off the right of way by Station 9+00. I inspected the perimeter of the truck and saw no visible leakage.
- All hazardous substances are being held in appropriate containers.
- The petroleum shed continues to be used as intended.
- There are adequate numbers of hazardous substance cleanup supplies on site.
- Fire hazard remains low due to wet and freezing conditions.

WILDLIFE OBSERVATIONS

- Surf Scooters, Seagulls and Crows are the only wildlife observed on site.

RECOMMENDATIONS

- There were no recommendations during the month of January.

13. OTHER ITEMS OF INTEREST

There have been no reportable accidents or incidents during this reporting period.

APPENDICES

SCHEDULE FOR CONSTRUCTION

PHOTOGRAPHS

OTTER CREEK (KASIDAYA) HYDRO PROJECT
 FERC PROJECT NO. 11588
 PROJECT SCHEDULE

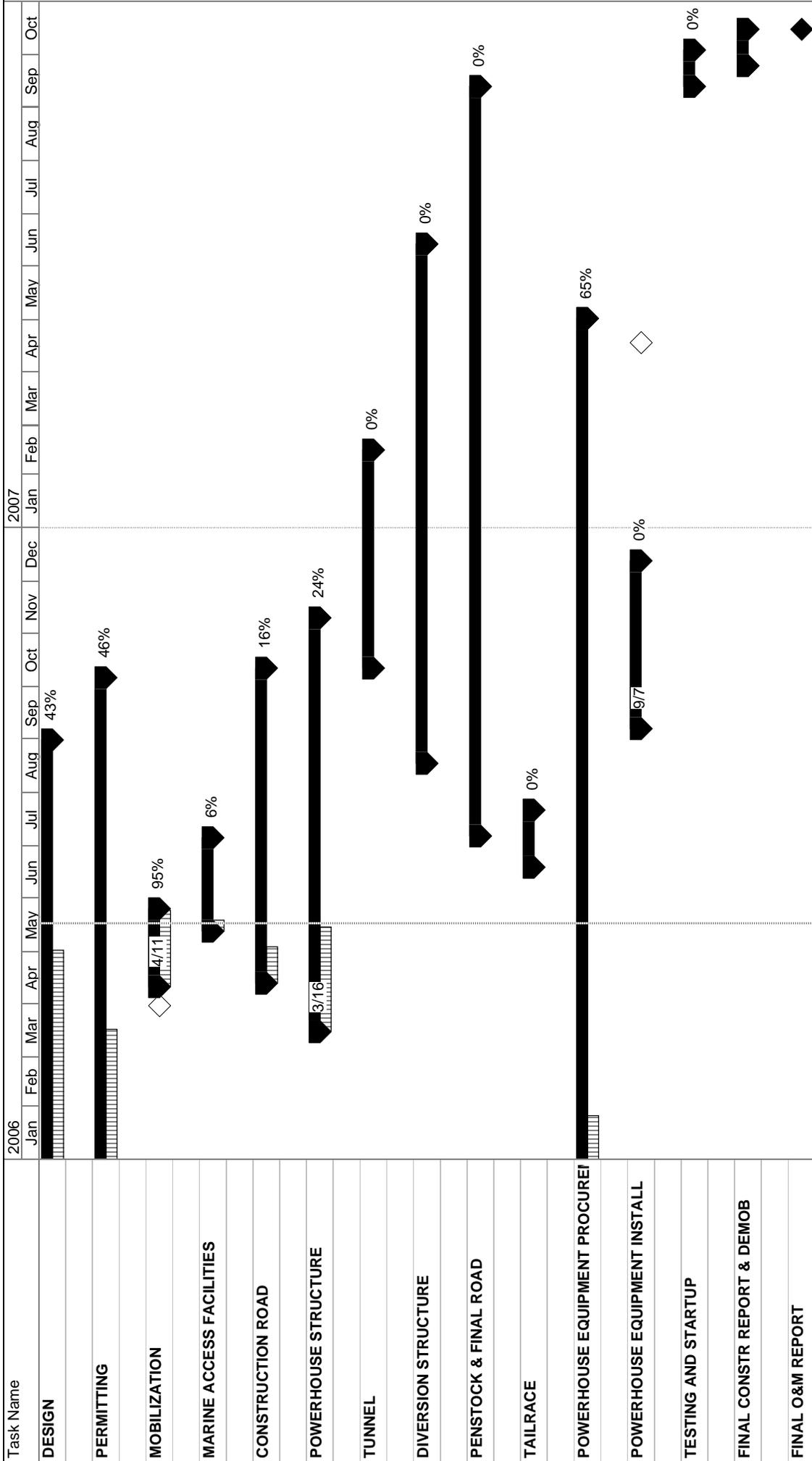




Photo 1

CONCRETE TRUCK ARRIVING VIA LANDING CRAFT JANUARY 5, 2007



Photo 2

POWERHOUSE FOUNDATION AS VIEWED FROM THE SOUTH END, JANUARY 5, 2007

Photo 3



January 13, 2007

POWERHOUSE FOUNDATION FROM THE SOUTHEAST CORNER

Photo 4



January 13, 2007

POWERHOUSE FOUNDATION FROM THE NORTH WITH TAILRACE PORTAL VISIBLE

Photo 5



Looking towards the Upper Spoils Area from Sta. 23+00

Photo 6



Truck slid off the side of the right of way near Sta. 9+00.

Photo 7



Water flowing through the culvert at Sta. 7+31.

Photo 8



The Powerhouse from the road above.

Photo 9



Looking down at the staging area from the road above.

Photo 10



Crew working in the staging area.

Photo 11



Looking at the south end of the Powerhouse foundation.

Photo 12



The southeast corner of the Powerhouse foundation.

Photo 13



The southwest corner of the Powerhouse foundation.

Photo 14



Looking towards the Tailrace on the north end of the Powerhouse.

Photo 15



Looking west down the tailrace towards the weirs.

Photo 16



Looking east towards the weirs from the water.

Photo 17



INSTALLATION OF POWERHOUSE FRAME

Photo 18



Photo 19



INSTALLATION OF POWERHOUSE FRAME VIEWED FROM THE SOUTH

Photo 20



INSTALLATION OF POWERHOUSE FRAME VIEWED FROM THE NORTHEAST CORNER



CONDUIT RUNS BEING INSTALLED ALONG POWERHOUSE FOUNDATION FOR VARIOUS PIECES OF EQUIPMENT



CONDUIT RUNS BEING INSTALLED ALONG POWERHOUSE FOUNDATION FOR VARIOUS PIECES OF EQUIPMENT



Photo 23

CONDUIT RUNS ALONG POWERHOUSE FOUNDATION FOR VARIOUS EQUIPMENT



Photo 24

LOOKING OUT THE TAILRACE WITH WEIRS INSTALLED ON BEACH

Photo 25



PENSTOCK BEING OFF LOADED ONTO STAGING AREA

Photo 26



Photo 27



**VIEW OF PROJECT FROM JUST NORTH OF LANDING;
JETTY NOW HAS ITS MARINE PETINA**



Photo 28

Crew working on the Right-of-way just east of the Staging Area.



Photo 29

The Crane that is being used on the South side of the Powerhouse.

Photo 30



Looking at the south side of the Powerhouse.

Photo 31



Looking at the north side of the Powerhouse.

Photo 32



The west side of the Powerhouse.