Jenkins
PUD
7-10-57

(View of Priest Rapids se as of July 9, 1956)

This is how the site of the riest Rapids dam looked a year ago on July 9, 1956 when Merrit Chapman & Scott were officially awarded a $91,880,625 contract o construct a dam for the Public Utility District of Grant Count. The small building in right center is the old powerhouse across the river, which was abandoned on October 1, 1956. (PUD Photo)

---30----

Herb Jenkins
Grant County PUD
3-12-58

(Exclusive, your city)

(Photo No. 2752, powerhouse construction at Priest Rapids)

The massive powerhouse at Priest Rapids dam is taking shape. The completed structure will be 1,025-ft long and have a base width of 197 feet. It will contain 10 generating units, with an initial installed capacity of approximately 800,000 KW. The dam is being built for the Public Utility District of Grant County, and was 39 per cent complete on March 1, 1958.

(Grant County PUD Photo)

---30---

Herb Jenkins
Grant County PUD
4-10-58

Immediate Release
Exclusive, your city.

(Aerial Photo No. 2855, Priest Rapids dam)

Piers for the first 11 of 22 spillway bays at Priest Rapids dam edge out into the river at left. The low cofferdam around these piers is now being removed and the river will flow between the piers while another cofferdam is constructed on the other side of the river to enclose construction of the next 11 spillways. Behind the high cofferdam work is proceeding on the 1,025-ft-long powerhouse. The large structure at the right end is the left bank fish passage facilities. The dam is being built for the Public Utility District of Grant County, and work is ahead of schedule. (Grant County PUD Photo)

---30---

4 col Rep Tues

34

PUBLIC UTILITY DISTRICT
OF GRANT COUNTY
PRIEST RAPIDS DEVELOPMENT
DATE_____ PHOTO NO_____

Official U.S. Air Force
Photo

Jenkins
PUD
9-5-57

EPHRATA---Things are humming at Priest Rapids dam. More than 1500 men are on the job; the impervious and pervious fill material is being placed in the 4500-ft. trench for the east embankment; and inside a 35-acre area enclosed by a high cofferdam, work is under way on the left bank fish passage facilities. Also, the excavation is nearing completion and some concrete has been poured for the footings for the 1025-ft. powerhouse.

A lower cofferdam (Stage 1B) extends out into the river from the stream side of the high cofferdam. The Stage 1B area has been pumped out and construction has started on 11 bays of the spillway. Across the river, excavation is proceeding for the right embankment.

The entire job is approximately 18 per cent completed, and is said to be slightly ahead of schedule. The dam is being built for the Public Utility District of Grant County by Merritt-Chapman & Scott of New York under a $91,880,625 contract. The Harza Engineering Company of Chicago is the designer and consulting engineer for the Project.

A visitor looking over the vast construction activity at Priest Rapids would find it difficult to realize that actual construction work started on the Project just a year ago. True, the contract officially started on July 9, 1956 when Merritt-Chapman & Scott was given the "go ahead" signal by the Public Utility District of Grant County. However, most of the activity between the contract date and September was given over to the building of an access road

(more)

from Beverly to Priest Rapids, the moving in of equipment, and the setting up of the contractor's camp. The actual diversion of the river began on September 15, 1956.

The barren sage-covered site of just a year ago now contains an extensive contractor's camp with office buildings, machine shops, warehouses, steel storage yard, a soils and concrete testing laboratory and other buildings.

A concrete batch and mix plant containing four 4-cu.-yd. mixers and storage silos, a large screening plant, a 1750-ft. construction bridge, and three miles of railroad are some of the other facilities that have been erected for the job.

Above the construction area on the Grant County side of the river are 18 homes built by Merritt-Chapman & Scott for key personnel. Close by are a cafe, dormitory and small apartment house erected by a private concern. A trailer court and other facilities have been built recently on the east side, also by a private concern.

On the right (Yakima) bank of the river is a pozzolan plant capable of turning out 5 tons of pozzolan an hour. This natural fly ash of volcanic origin is used as about a 25 per cent replacement for cement, resulting in a denser concrete with better hydraulic qualities.

The statistics for the dam are rather staggering. The dam will be 8,412 feet long---enough length to provide moorage for eight Forrestal type airplane carriers, end to end. Its maximum height of 178 feet from deepest point of excavation is equal to the height of a 14-story building. It has approximately a 79-ft. head.

(more)

The powerhouse, 1,025 feet long with a base width of 197 feet, could enclose three football fields. The powerhouse will contain 8 generators, each with a nameplate rating of 78,850 KW for a total of 630,800 KW. Space will be provided for two additional generators to be added at a later date.

Just to haul the cement for the job would require 3,028 hopper cars, each carrying 250 barrels, making a train 24.7 miles long. The 910,000 cu. yds. of concrete would build a 4-ft. sidewalk, 4 inches thick, 3,488 miles long--or clear across the United States.

Want some more statistics? If all the 3, 239,000 cubic yards of excavation were loaded in 16-cubic-yard trucks it would require 202,438 trucks, bumper to bumper, in a line 1,150 miles long, and it would require almost as many trucks, 194,063, in a line 1,103 miles long to haul in the 3,105,000 cubic yards of fill material. What a traffic jam this would cause if all the truck drivers decided to stop at the same hamburger stand at the same time!

Still playing around with statistics---the 60,000,000 pounds of reinforcing steel, if the rods were placed end to end, would reach 4,236 miles, or enough to penetrate to the center of the earth.

Carpenters aren't forgotten either. Before they are through, the wood workers will have built 85-1/2 acres of straight forms, enough to build a fence 6 feet high on either side of the road from Ellensburg to Priest Rapids and still have some left over. More than 9-1/2 acres of curved forms will be used.

---30---

Jenkins
PUD
10-10-57

EPHRATA---Several "firsts" in the construction of Priest Rapids dam marked the early days of October. The first pour of concrete on the right (west) bank of the river occurred October 8. The first pour on 11 bays of the spillway section and the first placing of impervious core in the right enbankment occurred a few days later.

Engineers said work was still ahead of schedule on the dam, which is being built on the Columbia River, 24 miles below Vantage, for the Public Utility District of Grant County. The Harza Engineering Company of Chicago is the consulting engineer, and Merritt-Chapman & Scott of New York is the contractor on the $91,880,625 construction job.

A record pour of 2325 cubic yards of concrete was placed in the powerhouse section on October 8. More than 135,000 cubic yards of concrete had been placed to that date, of some 950,000 cubic yards which will be required for the entire job, engineers said.

September placing of concrete averaged 1500 cubic yards a day, but with preliminary work completed on other phases of the job, the October pouring of concrete has been averaging 1800 cubic yards a day and is expected to climb to approximately 2300 cubic yards a day as work progresses on the spillways.

Engineers said work was well along on the excavation phase, with approximately 90% of all types of excavation accomplished. More than 2,150,000 cubic yards of excavation have been removed.

(More)

The contractor has 1533 men on the job and the PUD about 100 engineers and inspectors. Concrete pouring, form work and all work on the powerhouse are being carried on with three shifts of workmen five days a week.

It was pointed out that the advent of winter weather would curtail the working force, with the number of employed starting to increase again in the spring.

The completed dam will contain 8 generators, each with a name-plate rating of 78,850 KW, for a total of 630,800 KW. Space will be provided for two additional generators to be added at a later date.

---30---

Jenkins
~~PUD~~
11-22-57

OLYMPIA----A record of 2,350,000 manhours of construction work without a fatality was recognized ~~today (Friday)~~ Nov. 22 by the granting of the annual Governor's Safety Award to Merritt-Chapman & Scott, contractors who are building the Priest Rapids dam for the Public Utility District of Grant County.

The award was presented at 2 o'clock in the House chambers by Governor Albert D. Rosellini to R. J. Jenks, Project Manager for Merritt-Chapman & Scott at Priest Rapids. D. J. Jeffers, M-C&S Safety Engineer, was among those present at the ceremony.

The award covered the year ending September 1, 1957, during which time the 2,350,000 manhours were worked without a fatality. The record is still clear of fatalities, as of today.

Although Merritt-Chapman & Scott were awarded the $91,880,625 contract on Priest Rapids dam on July 9, 1956, actual construction work did not start on the dam itself until in September of that year---the intervening time being given over to the building of an access road, setting up the construction camp, and moving in equipment.

According to engineers, work on the job is ahead of schedule, and the job is about 28 percent complete.

----30----

Jenkins
PUD
12-13-57

EPHRATA--Bids will be publicly opened at 2 PM, January 15 at the office of the Public Utility District of Grant County in Ephrata for construction of two 230 KVA steel tower transmission lines from Priest Rapids Dam to the BPA Midway substation located near Vernita, a distance of approximately seven miles.

The two parallel lines will be erected on the Grant County side of the river from Priest Rapids to the point where it crosses the Columbia River at Midway. The construction area is accessible from the recently completed Highway 11A from Priest Rapids to the Vernita Ferry.

The completion date for the job is March 1, 1959. Bid documents are available for examination at the PUD office in Ephrata; the Associated General Contractors offices in Seattle, Spokane and Portland; the Spokane Construction Council office and Wenatchee Construction Council office.

---30---

Jenkins
PUD
1-16-58

EPHRATA ---Key Construction Company, Tacoma, was the apparent low bidder Wednesday, January 15, at $934,680 for construction of two 230 KV steel tower transmission lines from Priest Rapids Dam to the Bonneville Power Administration Midway substation located near Vernita, a distance of approximately seven miles, it was announced today by the Public Utility District of Grant County.

Eleven bids were received. The bids are being evaluated, and an official announcement will be made later.

Other bids included Power City Electric Company, Inc., Spokane, $966,903; Midland Constructors, Inc., Chicago, $1,031,500; Tyee Construction Co. and Lee Hoffman, Seattle, $1,039,037; Pettijohn Engineering Co., Portland, $1,043,405; Parker Schram Company, Portland, $1,053,926; R. A. Montgomery, Portland, $1,054,490; W. L. Ridge Construction Co., Spokane, $1,078,648; G. M. Groves, Ephrata; $1,087,466; Commonwealth Electric Company, Lincoln, Nebraska, $1,149,600, and Merritt-Chapman & Scott Corporation $1,217,440.

---30---

May 10 – 50 % complete

Herb Jenkins
Grant County PUD
4-25-58

For Immediate Release

PRIEST RAPIDS, APRIL 25---Today, just one year from the day the first bucket of concrete was poured at Priest Rapids dam, finds construction proceeding ahead of schedule and the entire job about 43 per cent complete.

A year ago the job consisted largely of a high cofferdam enclosing a construction area about 37 acres in size; a second lower cofferdam to enclose future construction of 11 of the 22 spillway bays; a partial excavation behind the high cofferdam for the powerhouse; a construction bridge; a trench for the left earthen embankment, and the contractor's camp.

As of today, the left earthen embankment is 75 percent complete and the right earthen embankment is 85 percent complete. Work is under way on the left bank fish passage facilities, the powerhouse, removal of the 1B cofferdam and other features.

The dam is being built for the Public Utility District of Grant County. Merritt-Chapman & Scott, New York, the contractor, has approximately 1500 men on the job, and 100 are employed by the Grant County PUD. Those employed by the PUD represent inspectors, engineers, etc., who are under the direction of the Harza Engineering Company of Chicago, the designing and supervising engineering firm for the Project.

The Priest Rapids Project, which is licensed by the Federal Power Commission, consists of two dams -- Priest Rapids dam, located approximately 14 miles below Beverly, and the Wanapum dam which will be built at a site about 3 miles above the town of Beverly. These two dams will have an initial rated capacity of about 1,500,000 KW.

(more)

Priest Rapids dam will have a total overall length of 10,138 feet with a reinforced concrete section consisting of about 2,427 feet. This concrete section will contain a powerhouse 1,025 feet long, a spillway section of 22 bays with a total length of 1,142 feet, and a section of gravity dam. Earthen embankments with impervious cores will form the ends of the dam, with the two embankments totalling 7,711 feet in length. The dam will have a maximum height of 178 feet from deepest point of excavation, with a head of approximately 79 feet.

The rated capacity of the eight generators originally planned to be installed in the Priest Rapids dam is 630,800 KW. Plans are proceeding for the installation of two additional generators not contemplated originally, which will bring the combined rated capacity of the ten generators up to about 788,500 KW. The installation of these later generators is made possible by the savings that have been made in the construction of the dam and will not necessitate the floating of additional bonds.

On July 9, 1956 construction began under a contract to Merritt-Chapman & Scott for $91,880,625. The contract is for 1900 calendar days from July 9, 1956. This represents about 92 percent of the cost of the physical structure. The other 8 percent represents transmission facilities and other items which were not included in the general contract. In April of 1957 the first concrete was poured. As of April 22, 1958 the status of construction was as follows: concrete, 46-1/2 percent complete; excavation, 83 percent complete; fill, 69 percent complete; reinforcing steel, 45 percent complete; form work, 35 per cent complete.

(more)

In 1957, $38,615,000 was spent on the Project. In 1958 it is estimated that the expenditures will be in the neighborhood of $45,682,000.

The plans for 1958 include completion of the powerhouse section to a point where the contractor can begin to install turbines and generators. The earth fill embankments, both on the left and right sides of the river, will be substantially completed by the end of 1958. The east eleven bays of the spillway section will be completed. The cofferdams enclosing the west 11 bays will be built and work will be carried on in this area.

A contract has been awarded Key Construction Company of Tacoma for $934,680 for construction of two steel tower transmission lines of 230 KV capacity from Priest Rapids to the Bonneville Power Administration Midway substation located near Vernita. Work is well along on this project and the land portion of the transmission line is expected to be completed by the end of this year.

The present progress on the dam indicates that power will be available from partial head on a limited number of generators as early as October 1959, with all eight original units and the two additional units in full head operation in May of 1960.

Plans are going ahead for the early construction of the Wanapum Dam which was licensed by the Federal Power Commission and included in the original project license. Harza Engineering Company is now finishing the preliminary design and starting work on the necessary drawings for filing with the FPC. The site exploration work is about completed and the exact location of this dam has been chosen.

(more)

The preliminary time table on Wanapum dam includes the bid opening in February of 1959, with the bonds to be sold in March and actual construction beginning in May of 1959. The completion date for Wanapum is expected to be about May, 1964.

The 12 power purchasers buying power from the Priest Rapids dam have an option for the like amount, or 63-1/2 percent, of the Wanapum output. (The Public Utility District of Grant County retains 36-1/2 percent for its own use.) Indications are that these purchasers are interested in the early start of Wanapum dam and will assume the same obligation, percentage-wise, as they did on Priest Rapids dam.

----30----

Herb Jenkins
Grant County PUD
4-25-58

For Immediate Release

PRIEST RAPIDS, APRIL 25 ---Today, just one year from the day the first bucket of concrete was poured at Priest Rapids dam, finds construction proceeding ahead of schedule and the entire job about 43 per cent complete.

A year ago the job consisted largely of a high cofferdam enclosing a construction area about 37 acres in size; a second lower cofferdam to enclose future construction of 11 of the 22 spillway bays; a partial excavation behind the high cofferdam for the powerhouse; a construction bridge; a trench for the left earthen embankment, and the contractor's camp.

As of today, the left earthen embankment is 75 percent complete and the right earthen embankment is 85 percent complete. Work is under way on the left bank fish passage facilities, the powerhouse, removal of the 1B cofferdam and other features.

The dam is being built for the Public Utility District of Grant County. Merritt-Chapman & Scott, New York, the contractor, has approximately 1500 men on the job, and 100 are employed by the Grant County PUD. Those employed by the PUD represent inspectors, engineers, etc., who are under the direction of the Harza Engineering Company of Chicago, the designing and supervising engineering firm for the Project.

The Priest Rapids Project, which is licensed by the Federal Power Commission, consists of two dams -- Priest Rapids dam, located approximately 14 miles below Beverly, and the Wanapum dam which will be built at a site about 3 miles above the town of Beverly. These two dams will have an initial rated capacity of about 1,500,000 KW.

(more)

Priest Rapids dam will have a total overall length of 10,138 feet with a reinforced concrete section consisting of about 2,427 feet. This concrete section will contain a powerhouse 1,025 feet long, a spillway section of 22 bays with a total length of 1,142 feet, and a section of gravity dam. Earthen embankments with impervious cores will form the ends of the dam, with the two embankments totalling 7,711 feet in length. The dam will have a maximum height of 178 feet from deepest point of excavation, with a head of approximately 79 feet.

The rated capacity of the eight generators originally planned to be installed in the Priest Rapids dam is 630,800 KW. Plans are proceeding for the installation of two additional generators not contemplated originally, which will bring the combined rated capacity of the ten generators up to about 788,500 KW. The installation of these later generators is made possible by the savings that have been made in the construction of the dam and will not necessitate the floating of additional bonds.

On July 9, 1956 construction began under a contract to Merritt-Chapman & Scott for $91,880,625. The contract is for 1900 calendar days from July 9, 1956. This represents about 92 percent of the cost of the physical structure. The other 8 percent represents transmission facilities and other items which were not included in the general contract. In April of 1957 the first concrete was poured. As of April 22, 1958 the status of construction was as follows: concrete, 46-1/2 percent complete; excavation, 83 percent complete; fill, 69 percent complete; reinforcing steel, 45 percent complete; form work, 35 per cent complete.

(more)

In 1957, $38,615,000 was spent on the Project. In 1958 it is estimated that the expenditures will be in the neighborhood of $45,682,000.

The plans for 1958 include completion of the powerhouse section to a point where the contractor can begin to install turbines and generators. The earth fill embankments, both on the left and right sides of the river, will be substantially completed by the end of 1958. The east eleven bays of the spillway section will be completed. The cofferdams enclosing the west 11 bays will be built and work will be carried on in this area.

A contract has been awarded Key Construction Company of Tacoma for $934,680 for construction of two steel tower transmission lines of 230 KV capacity from Priest Rapids to the Bonneville Power Administration Midway substation located near Vernita. Work is well along on this project and the land portion of the transmission line is expected to be completed by the end of this year.

The present progress on the dam indicates that power will be available from partial head on a limited number of generators as early as October 1959, with all eight original units and the two additional units in full head operation in May of 1960.

Plans are going ahead for the early construction of the Wanapum Dam which was licensed by the Federal Power Commission and included in the original project license. Harza Engineering Company is now finishing the preliminary design and starting work on the necessary drawings for filing with the FPC. The site exploration work is about completed and the exact location of this dam has been chosen.

(more)

The preliminary time table on Wanapum dam includes the bid opening in February of 1959, with the bonds to be sold in March and actual construction beginning in May of 1959. The completion date for Wanapum is expected to be about May, 1964.

The 12 power purchasers buying power from the Priest Rapids dam have an option for the like amount, or 63-1/2 percent, of the Wanapum output. (The Public Utility District of Grant County retains 36-1/2 percent for its own use.) Indications are that these purchasers are interested in the early start of Wanapum dam and will assume the same obligation, percentage-wise, as they did on Priest Rapids dam.

----30----

Herb Jenkins
Grant County PUD
4-29-58

EPHRATA -- F. Wm. Arlt, president of the Commissioners of the Public Utility District of Grant County, poured the 401,661 cubic yard of concrete at Priest Rapids dam on April 25. This represents the completion of the pouring of 47-1/2 percent of the 844,000 cubic yards of concrete that will be required on the job.

The pouring came exactly one year from the day the first bucket of concrete was poured at Priest Rapids, and during the regular monthly inspection trip of PUD officials to the dam. Present were Arlt; William Schempp, secretary of the Commissioners; George Schuster, Commissioner; G. A. Smothers, manager of the Grant County PUD; Robert Jenks, project manager, and Russell Hoffman, project superintendent for Merritt-Chapman & Scott, contractors on the dam, and Bert Hall, assistant resident engineer for Harza Engineering Company of Chicago, the designing and consulting engineering firm on the job.

Construction of the Project began July 9, 1956 under a contract to Merritt-Chapman & Scott for $91,880,625. However, actual construction of the dam did not start until September 15, 1956, the previous time being used for building of access roads and setting up of the contractor's camp. The entire job is now 43 percent complete, and the work is reported ahead of schedule. The dam is being built for the Public Utility District of Grant County.

---30---

Herb Jenkins
Grant County PUD
5-1-58

IMMEDIATE RELEASE

EPHRATA---The Public Utility District of Grant County is submitting a proposal to federal and state fishery agencies to transport migratory fish over Wanapum dam in barges, it was announced today by G. A. Smothers, manager of the PUD. Smothers said the plan is based, in part, on experience gained by the fisheries agencies in other areas and on certain refinements recommended by their biologists.

"After giving the matter a great deal of consideration, we believe we have a plan that is beneficial to the fish," Smothers said. "It will save the fish three or four days in their upstream migration time, and reduce the injury and loss ratio. It also will give the fish a rest period that will allow them to arrive at their spawning grounds in better shape."

Smothers explained that under the plan now being studied by the PUD, the fish will be collected in barges anchored at the top of the Priest Rapids dam fish ladders. As soon as one barge is filled it will be taken 18 miles upstream to Wanapum. At Wanapum the filled barge will be lifted over the dam. The barge will then continue upstream to a point where there is enough current to enable the fish to be released and find their way on up the river without confusion.

The barge trip upstream is expected to require about eight hours, in comparison to an average of three or four days believed to be the normal time required for a fish to travel the same distance and climb a fish ladder.

(more)

Observers say fish often have some difficulty in locating the attraction water leading them to the ladders and at times lose hours or days while trying to find the stairway over a dam. Once over the dam, some of the fish lose their way and are apt to be swept back over the spillway and have to make the hard climb all over again.

Since migratory fish do not feed on their way upstream, any method that will save them energy in reaching their spawning grounds will tend to increase production.

During the entire barge trip the fish will never leave Columbia River water. Fresh river water will be constantly circulated through the barges, and there will be no problem of varying water temperatures as is sometimes encountered in tank truck transport. At the end of the trip the fish will not be dumped but will swim out the opened ends of the barge. This method of releasing fish will avoid the confusion ordinarily associated with dumping, and will not disturb the orientation of the fish and cause them to lost their sense of direction. In addition, the fish will reach their "port of debarkation" in a rested condition and not tired from battling up another series of ladders in the Columbia River.

Smothers said barge transportation of fish would not be suitable for all dams, but is adapted to the Wanapum dam because there are no tributaries between Priest Rapids and Wanapum, and it is only a short distance between the two structures. Barge transportation of fish is now being used at the lower Baker dam.

(more)

"We are interested in trying to preserve the migratory fish runs on the river," Smothers said. "We believe that barge transportation will not only help preserve the runs but will decrease the factors that hinder them at present. It will save the battering and bruising now incurred by some of the fish in making their way up a fish ladder, and it will save energy and migration time. It also might prove feasible to sort out the scrap fish from the collection barge and in this way assist in improving the habitat of the sports and commercial fish."

The PUD manager said, "We believe we have a good proposal, and we hope that the fishery agencies will give it their favorable consideration."

---30---