Decision No. 6396_



BEFORE THE RAILFOAD COMMISSION OF THE STATE OF CALIFORNIA.

In the Matter of the Application of the PALMDALE WATER COMPANY, a corporation, for an order approving the plans and specifications of a certain dam on Littlerock Creek, in Littlerock Canyon, Los Angeles County, California, and for permission to construct the same.

Application No. 4319

Donald Barker and James M. O'Brien for Applicant.
W. C. Petchner for Palmdale Irrigation District.
Jesse Waterman for Littlerock Creek Irrigation
District.

W. F. McClure for Department of Engineering, State of California.

BRUNDIGE, EDGERTON and MARTIN, Commissioners.

OBINION

This is an application of Palmdale Water Company, a public utility corporation, for authority to construct an impounding dam in Littlerock Creek Canyon near Palmdale, Los Angeles County.

The application alleges in effect that applicant ownes and operates an irrigation system and delivers water to lands in the vicinity of Palmdale; that applicant contemplates the construction of a storage reservoir to impound the waters of Littlerock Creek, and has had plans and specifications prepared for a multiple arch type of dam, and prays that this Commission approve the plans and specifications and authorize the construction of the proposed dam.

Public hearings were held in this proceeding in Los Angeles on March 3, and in San Francisco on May 29, 1919.

We have given very careful consideration to the principles and details of the design affecting the safety and economy of the construction of a dam at the proposed site. The comprehensive evidence before us enables us to analyze the design and fessibility of this type of dam. After carefully considering all of the evidence submitted, we are convinced that so far as the type of structure goes, applicant should be authorized to proceed with its construction.

The plans and specifications in evidence, which were submitted for the purpose of obtaining suthorization for the construction of this type of dam rather than as complete working drawings, do not show sufficient detail to determine whether or not all of the sumiliary features of the design are satisfactory. We shall therefore recommend that as soon as available further details of design be submitted for our approval. These features include detailed design of the siphon spillway, together with computations showing capacity; plans for outlet which shall be furnished as soon as location can be definitely determined, which shall include provision for balance action of the outlet valves; drawings showing dimensions and location of steel reinforcement; and detail of the design of struts.

The specifications for concrete should provide for a mixture only sufficiently wet to assure proper covering of the reinforcement and to permit efficient handling without a segregation of the materials. The quantity of water used should

be measured in order to produce a concrete of uniform consistency.

Although we recommend that applicant be authorized to construct this dam, we believe it advisable that inspection be made during the construction period of the methods used, and that no material be placed in the excavation for cutoff walls or other portions of the structure until inspection has been made and authorization granted.

In the matter of the approval of further details of designs discussed above, in the inspection of foundations and methods of construction, and in any modification of design which may be made necessary as the construction proceeds, we invite the cooperation and suggestions of the State Engineering Department. Applicant is ordered to file with the State Engineering Department duplicates of all data required by this Commission.

ORDER

The Palmdale Water Company, a public utility coporation, having made application for an order approving the plans and specifications of a dam to be constructed on Little-rock Creek in Los Angeles County, and public hearings having been held and the Commission being fully apprised in the premises,

IT IS HEREBY ORDERED that Palmdale Water Company
be and it is hereby authorized to proceed with the construction
of a dam on Littlerock Creek, according to the plans, specifications and maps on file with the Commission, making such
changes as are outlined in the opinion preceding this order and

as may be necessary from time to time in the future as approved and authorized by this Commission.

IT IS HEREBY FURTHER ORDERED that in the construction of the proposed dam, applicant shall proceed only so far as may be specifically authorized by this Commission in writing, and that there shall be no material placed upon the foundations or in the excavation to be occupied by cutoff walls of buttresses until they have been inspected by a duly authorized representative of the Commission.

IT IS HEREBY FURTHER ORDERED that the authority herein granted is conditional upon the commencement of construction within six (6) months from the date hereof and for the completion of the construction as indicated within eighteen (18) months from the date of commencement.

The foregoing opinion and order are hereby approved and ordered filed as the opinion and order of the Railroad Commission of the State of California.

Dated at San Francisco, California, this 10 day of June, 1919.

Commissioners.