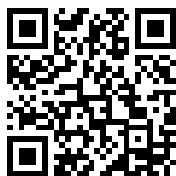

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BOULDER DAM

HEARING

BEFORE THE

U. S. Congress, House.

COMMITTEE ON RULES

HOUSE OF REPRESENTATIVES

SEVENTIETH CONGRESS

FIRST SESSION



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON
1928

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COMMITTEE ON RULES

HOUSE OF REPRESENTATIVES

SEVENTIETH CONGRESS, FIRST SESSION

BERTRAND H. SNELL, New York, *Chairman*

THEODORE E. BURTON, Ohio.

EDWARD W. POU, North Carolina.

THOMAS S. WILLIAMS, Illinois.

FINIS J. GARRETT, Tennessee.

FRED S. PURNELL, Indiana.

WILLIAM B. BANKHEAD, Alabama.

EARL C. MICHENER, Michigan.

JOHN J. O'CONNOR, New York.

HARRY C. RANSLEY, Pennsylvania.

C. WILLIAM RAMSEYER, Iowa.

LOUIS A. FROTHINGHAM, Massachusetts.

MAUD A. REED, *Clerk*

BOULDER DAM

HOUSE OF REPRESENTATIVES,
COMMITTEE ON RULES,
Tuesday, April 24, 1928.

The committee met at 10 o'clock a. m., Hon. Bertrand H. Snell (chairman) presiding.

The CHAIRMAN. I called this meeting this morning to hear the various people who are interested in the Boulder Dam legislation. However, to my regret, late yesterday afternoon, I understood that Mr. Douglas, who is opposed to the proposition, met with an accident on Sunday afternoon and would be unable to be here to-day. He thinks he will be able to be here in two or three days. I thought this morning we would hear whoever was here and then complete the hearings at a later date. Mr. Smith is here, who is the chairman of the committee in charge of the legislation, and we will be glad to hear from him.

STATEMENT OF HON. ADDISON T. SMITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF IDAHO

Mr. SMITH. Mr. Chairman and members of the committee, on the 23d of last month I introduced the pending resolution (H. Res. 146), with the hope this committee would report it favorably and give a preferential status on the legislative program to H. R. 57773, introduced by Mr. Swing on the opening day of Congress, to provide for the construction of works for the protection and development of the lower Colorado River Basin, for the approval of the Colorado River compact, and for other purposes.

This is a matter, as the chairman has said, which has been before this committee before. During the last session of the last Congress, the committee very kindly set aside three days for the consideration of this measure; so that we feel that you are all probably very, very well informed regarding the proposed legislation and the urgency of giving it immediate consideration. I shall confine my remarks more particularly to the urgency of the legislation rather than to the details, because of the fact that you are all well informed as to the provisions of the pending bill. Many of the objections which were urged at the last Congress to this legislation have been met, either by elimination of some provisions of the bill or by certain amendments. Since the bill was authorized to be favorably reported on the 3d of February from the Committee on Irrigation, we have considered other amendments which will be offered on the floor. These amendments have been tendered with the hope of reconciling the differences between the proponents and opponents. We now wish to convince the committee that this is a subject of such great im-

portance that it ought to be brought out on the floor of the House of Representatives for consideration.

For the last six years this legislation has been considered in the committees of Congress and in both branches of Congress, and the newspapers and magazines of the country have been filled with arguments pro and con during that period. So it would seem that, if Congress is ever going to act in the matter, the time is certainly ripe to bring the bill out on the floor of the House and let the House of Representatives determine what it wishes to do about it.

This legislation has been urged upon Congress by two Presidents. President Harding brought it to the attention of Congress and the present Executive, Mr. Coolidge, in his annual messages in December, 1926, and in December, 1927, brought the attention of Congress to the importance of this legislation.

Mr. BANKHEAD. Right there, Mr. Smith: Are you in a position to state or do you care to state whether or not this bill, in substance, would meet with the approval of President Coolidge?

Mr. SMITH. I think I may state definitely and absolutely that it does meet with the approval of the President. We have had several interviews with President Coolidge and we feel convinced he will favor and sign a bill of this character. It has also been submitted to the Director of the Budget and it has met with his approval, and the present Secretary of the Interior, Mr. Work, has repeatedly, during the past four years, in letters addressed to the chairman of the committee which are embodied in these reports, urged the enactment of this legislation.

The CHAIRMAN. Do you mean to say the President is entirely in accord with the provision for putting the Government into the business of manufacturing and distributing hydroelectric energy at Boulder Dam?

Mr. SMITH. The President, in our interview with him, stated that on general principles he is not favorable to the Government going into a power development, but, on account of the peculiar conditions surrounding this project, the fact that the land is owned by the Government, and the fact that it is in a great canyon where not more than one agency could be occupied at the same time in constructing the works, he has expressed himself as being in favor of the legislation that is pending. And I do not think there is any doubt but what, if the matter were again brought to his attention, he would express himself as being favorable to the legislation.

Mr. RAMSEYER. Mr. Chairman, I doubt the advisability or propriety of trying to draw out from witnesses just what the attitude of the President is on certain legislation.

Mr. BANKHEAD. We have had that up the last two or three days on the floor very sharply and I think it is entirely pertinent.

Mr. SMITH. As far as I am concerned, I do not think there is any objection at all to getting the opinion from any officer of the Government regarding a matter of public policy, whether he be the President of the United States, member of the Cabinet or other officer.

Mr. RAMSEYER. But the President has not put it in writing like the Secretary of the Interior has done, time and again, and as a witness. That is an entirely different proposition.

Mr. SMITH. We can refer the gentleman to a letter which the President has written expressing his opinion on the matter.

Mr. RAMSEYER. Certainly; I know the attitude of the Secretary of the Interior.

Mr. SMITH. The great need of this legislation is to prevent the devastation by floods in the lower Colorado Basin. The watershed in that section occupies a large portion of seven States, and a large proportion of the precipitation is by snow in the mountains and, in the springtime, when the snow melts and the torrential rains occur, which, combined with the melting snow, brings these great floods. Because of the high altitude where the rains and the snow fall and the rapid descent of the water, it carries with it a great deal of silt, the settling of which in the bottom of the stream forces the river in the lower basin frequently to change its course. In other words, the silt builds up the bottom of the river and on that account it frequently changes its course.

Mr. MICHENER. How long do the engineers tell us it will take the silting process to make the dam of little value?

Mr. SMITH. In the particular location where it is proposed to build the dam, it is estimated the silt that comes in the waters down to that point would be held in the reservoir for at least 300 years.

Mr. MICHENER. At the end of the 300 years we would have the water going over the top of the dam, then?

Mr. SMITH. It is possible by that time some other plan would be evolved to get rid of the silt. In 1905, the bottom of the river had been built up to such an extent that its direction was turned to the northward instead of the southward, and it was deflected into the Great Salton Sea Basin, which centuries ago doubtless was part of the Gulf of Mexico; and the Colorado River ran into that basin for two years. Congress was appealed to to turn the river to the southward, without success, and Congress adjourned without affording relief. President Roosevelt called in the president of the Southern Pacific Railroad, Mr. Harriman, and urged him to put his engineers and his construction forces at work to change the stream back to its natural channel. Mr. Harriman accomplished that feat after many months and after the expenditure of more than \$2,000,000, and to the discredit, in my opinion, of the Federal Government the Southern Pacific Railroad has never been reimbursed for the money expended. Since then the control of these floods has been entirely in the hands of the people in the Imperial Valley. They have been compelled to expend their own money to protect their property, and they have constructed 78 miles of levees in Mexico. I was down there a few years ago and saw them at work constructing these great levees. It is necessary for them to keep building them higher and higher, which is accomplished by having a railroad on top of the levee and drawing in the material to build the levees higher. Practically the only material they have for building the levees is this silt or soft mud, and they bring in rocks to place in front of the levee so as to keep it from washing out. The Federal Government has built about 30 miles of levees in Arizona and in Colorado, and is maintaining these levees in order to protect the property which has been developed from the desert and arid lands.

Mr. PURNELL. Mr. Smith, approximately how many acres of land will this project bring under cultivation that are not now under cultivation?

Mr. SMITH. It is estimated about 200,000 additional acres of land can eventually be brought under cultivation—new lands.

Mr. PURNELL. When that land is brought under cultivation what can be raised on it?

Mr. SMITH. Mostly citrous fruits. Because of the fact the lands are much lower than the surrounding country and it is very hot there, citrous fruits and alfalfa, lettuce, canteloupes are the principal crops.

Mr. PURNELL. Can crops be grown to any great extent that might come in competition with crops now grown, of which we have a so-called exportable surplus?

Mr. SMITH. No; excepting possibly dairy products and corn.

Mr. PURNELL. That question is frequently raised, if we are dealing with a surplus agricultural problem here.

Mr. SMITH. That is true.

Mr. POE. There will be a large additional acreage for the production of cotton.

Mr. SMITH. There is a certain variety of cotton raised there, long-staple cotton, but not the kind of cotton you raise in the South. It is a different kind of cotton. In any event, it is up to Congress to determine when this additional land shall be brought under cultivation; it may be 10 years or may be 20 years. We are eager to save property that is already there and the people who are not in danger because of the floods as well as on account of the danger of drought, due to the fact if this river should break out again there would be no way to get the water in there to irrigate these lands and for domestic purposes and there would be great suffering and possibly death, because of the fact their water supply would be destroyed.

The CHAIRMAN. Have the levees themselves ever had any breaks in them?

Mr. SMITH. Oh, yes. In 1909, 1914, and 1918 the levees have broken through and only by the expenditure of a great deal of money have they been able to close these gaps.

Mr. GARRETT. Mr. Smith, is not this primarily a power proposition?

Mr. SMITH. No; it is not, Mr. Garrett, primarily a power proposition. If it were a power proposition, we would not feel we had any right to bring it to the attention of Congress. It is a flood-control and irrigation proposition and the development of the power is merely incidental to the building of the reservoir, and it is a question whether or not the building of the power plants and the selling of power should be given consideration in order to reimburse the Government, or whether the Government should expend twenty-five or forty million dollars to build a dam for flood control only. Under this plan it is proposed that the Government will be reimbursed, with interest at 4 per cent, for all the money that is advanced. And if it were for the development of the power alone, then this bill would come from another committee and the Congress would have to determine whether it would take \$40,000,000 out of the Treasury to build a dam and lose it all, or whether they want to adopt a plan

like this which will accomplish, among other things, the reimbursement of the Government for all moneys expended.

Mr. GARRETT. You say \$40,000,000. My recollection is, from the hearings we had here the last time, it would be \$125,000,000, which was the lowest estimate made, for the dam.

Mr. SMITH. Oh, no. That includes, of course—

Mr. GARRETT. For the dam and for the canal.

Mr. SMITH. No; the \$125,000,000, Mr. Garrett, includes everything; it includes \$20,000,000 interest on the money advanced by the Federal Treasury. That is all figured in, and the \$125,000,000 is the maximum.

Mr. MICHENER. That is for power development, too; but the \$40,000,000 is only for flood control.

Mr. SMITH. Yes.

Mr. MICHENER. In other words, if we want to handle this just as a question of flood control, the estimate is it will cost \$40,000,000.

Mr. SMITH. Yes.

Mr. MICHENER. But if you want to go into the power business in addition, it will cost \$120,000,000; is that it

Mr. SMITH. Yes; except this; in addition to power we must have this all-American canal, because the water is supplied now to the Imperial Valley through Mexico.

Mr. MICHENER. I know, but if I get it right—and if I am not right, please correct me—\$40,000,000 would simply take care of the flood-control proposition; but if we want to go to the extent of power and irrigation, it will then cost us \$120,000,000?

Mr. SMITH. \$125,000,000, including the interest.

Mr. POU. In the former hearings as I recollect, because I specifically made inquiry, the amount of money necessary to protect the Imperial Valley against the overflow of the Colorado River was put at a maximum of \$25,000,000.

Mr. SMITH. That is in the event the dam is built elsewhere than at Boulder Dam. Now we contend—

Mr. POU. I think some of the engineers were examined here; I think they came before the committee, if I remember correctly.

Mr. SMITH. The temporary control of the floods might be effected by building a dam elsewhere on the river; but, in order to take care of the silt, it is necessary to build a dam where the canyon is very deep, so that the silt may settle there and not be carried down and build up the bed of the river in the years to come. This is a permanent improvement.

Mr. RAMSEYER. Mr. Smith, the situations relative to the dam and power, the all-American canal and irrigation are the same in this bill as they were in the other bill?

Mr. SMITH. Yes; and they are the same as far as that feature is concerned.

Mr. RAMSEYER. I do not want to detract you from your plan of presentation, but I should like to know, before you get through, how this bill differs from the one a year ago. I think we got that quite clearly in our minds then, and I would like to know how the situation is otherwise now than it was a year ago, that is, with regard to the agreements among the States and what the States are demanding?

Mr. SMITH. The bill is practically the same. We eliminated from the bill the provision which authorized the Secretary of the Treasury to issue bonds, because we thought, if the occasion ever arose when he needed to do that, he could get supplemental authority for it. In other respects, the bill is practically the same as it was when we had it up before you at the last session. Now, as far as the differences among the States is concerned, we feel they are nearer an agreement than they were a year ago, because the representatives of these States have been holding frequent meetings, and we think they are more likely to come to an agreement than they were before, with the exception of one State—Arizona—which is as determined as ever not to join the compact.

Mr. RAMSEYER. Right there, what is your notion now or idea as to enacting this legislation and then having the States come to an agreement before you do the work, or to enact the legislation and proceed to do the work without the unanimous agreement of the States?

Mr. SMITH. We, of course, expect at least six of the States will ratify the compact before they proceed with the work.

Mr. RAMSEYER. Does your bill so provide?

Mr. SMITH. Yes; the bill so provides that at least six of the States will ratify the compact.

Mr. RAMSEYER. That is, before the act, supposing Congress passes it, becomes operative, why six States must have ratified the compact?

Mr. SMITH. Yes; and we have thrown other safeguards around the bill. We provide that no part of this money shall be expended until that and other things shall be accomplished. This bill affords an opportunity for making progress; whereas, in the present situation, we can not turn a wheel without the legislative authority authorizing the Secretary to proceed with the negotiations which he must take care of. Our contention is, after considering this matter for six years and after waiting five years for these States to agree among themselves as to a division of the water, we should enact this legislation and then await developments. We feel we would be making progress in that way.

The CHAIRMAN. While you are on that proposition, Mr. Smith, I would like to call attention to a resolution, a copy of which has been filed with me, that was passed by the four upper-basin States of the Colorado River Basin, at Denver, Colo., on the 19th day of December, 1927. This resolution reads:

Whereas it is the conviction of the governors and interstate water commissioners and other representatives of the States of Colorado, New Mexico, Utah, and Wyoming, the four States of the upper basin of the Colorado River, that the interstate agreement embodied in form by the Colorado River compact as negotiated at Santa Fe, N. Mex., in November, 1922, should be completed and placed in full force and effect through approval and acceptance by the seven Colorado River States, in order that the way may be properly cleared for the orderly development of the Colorado River; and

Whereas substantial progress has been made during the past few months toward the completion of the said compact and negotiations are now being carried on in a competent manner looking to such completion: Therefore be it

Resolved, That it is the firm belief of the representatives of the four said upper-basin States as assembled at Denver, Colo., this 19th day of December, 1927, that no legislation proposing the construction of any project upon the Colorado River should be enacted by Congress, or otherwise authorized by any

Federal agency, before the negotiations now in progress have been completed and every reasonable effort exhausted to reach such agreement between the seven States.

W. H. Adams, Governor of Colorado; Geo. H. Dern, Governor of Utah; Frank C. Emerson, Governor of Wyoming; Edward Sargent, Lieutenant Governor of New Mexico; Delph E. Carpenter, interstate river commissioner for Colorado; Francis C. Wilson, interstate river commissioner for New Mexico; L. Ward Bannister, counsel for the city of Denver; M. C. Mechem, representing New Mexico; Wm. L. Boatright, attorney general of Colorado.

Mr. SMITH. I will say, Mr. Chairman, we had those resolutions presented to the committee and we invited the governors of those States and the other gentlemen mentioned to come before the committee and discuss their objections, which they did. Then, after deliberation, we, on the 3d day of February, as I recall, agreed to report the bill favorably but to withhold the report six weeks in order to give these gentlemen further opportunity to deliberate. And I have been in correspondence with Governor Dern since he returned (Governor Dern being chairman of the commission) and he told me they had had several meetings and they finally had reached the conclusion it was impossible to get Arizona to come into the compact. That is the situation at the present time: Arizona has refused to come into the compact because of certain demands which she makes and which they think are impossible to grant.

The CHAIRMAN. Here is a resolution signed by four governors and with Arizona would make the fifth out of your seven States opposed to considering this legislation at this time.

Mr. SMITH. They were opposed at that time; they were opposed on December 19, when the resolution was passed; but they have not, since endeavoring to get together, reiterated the proposition, and, as far as I am now informed, they are not antagonistic to the bill at this time.

The CHAIRMAN. They have never said anything else to date?

Mr. SMITH. No; they have not said anything else except a letter that I received from Governor Dern, within the last three or four weeks, expressing his very great regret they had been unable to meet the conditions and requirements which would result in an agreement.

The CHAIRMAN. Do you not think it is a rather serious proposition, when we are considering legislation that is founded on a compact between seven States, that the governors of five States ask you not to consider it at this time and to await further developments?

Mr. SMITH. If the lives of the people and property were not at stake, there probably would be some reason for delaying the matter; but they have been afforded, as I have said, five years to get together and we delayed action in our committee in previous Congresses for weeks and months and adjourned over a whole recess on the promise they would get together. They have not gotten together; they have not made any progress, and it is just a question whether Congress wishes to defer to the opinion of one or two of the chief executives of the States and permit the property of nearly 60,000 people, amounting to nearly \$60,000,000, to be jeopardized on account of the situation to which you refer.

The CHAIRMAN. Let me ask you one more question: Considering there is this discussion and disagreement between these States, why would it not be a better proposition just to take up a purely flood-control measure to protect those people, which could be done with a very small expenditure on the part of the Federal Government, and let these other matters wait until they could reach some agreement?

Mr. SMITH. I would not think it would be a very small expenditure to start in on a development that would cost thirty or forty million dollars, and that would not relieve from jeopardy the Imperial Valley because of the water going down through another country that is not particularly friendly to us, and which, in case of war, in one night, could blow up the levees with dynamite and cut off the only water supply Imperial Valley has.

Mr. O'CONNOR. What is the canal project itself going to cost?

Mr. SMITH. The canal project itself will cost \$30,000,000.

Mr. GARRETT. Is there any protest in any way on the part of the Mexican Government?

Mr. SMITH. No.

Mr. GARRETT. That it will divert water now going into Mexico and be used for irrigation purposes?

Mr. SMITH. The Mexican Government is unfriendly to our people only to the extent of imposing a tax on nearly everything they take in there in the way of material, but, otherwise, they are not objecting; because, under the present arrangement, they are able to bring their own lands under irrigation, which they are doing rapidly; that is, land in Mexico that belongs, in large part, to American citizens and who are eager to get as much land as they can under cultivation before the matter is determined, on the theory that this water will never be taken away from them after they get their lands under cultivation.

Mr. GARRETT. The water law of that section, as I understand it, is derived from the Spanish law, and it differs from the water law of the Eastern States—the law of appropriation?

Mr. SMITH. I do not think the law of Mexico could be applied against water coming from our country; it would simply be a question of comity between the two nations.

Mr. GARRETT. It is an international stream?

Mr. SMITH. It is an international stream; but, before it leaves this country, another country can not lay particular legal claim to it. It is a matter of friendliness to another government if we permit them to use the water.

Mr. GARRETT. It has always seemed to me there was probably involved in it a question of international ethics.

Mr. SMITH. Yes; and we are now attempting to adjust that situation through a commission which has been appointed, authorized by the last Congress, so as to avoid any conflict that might otherwise arise.

Mr. BURTON. What share of the flow of the river would be withheld from passing into Mexico by this plan?

Mr. SMITH. I do not know that any would be withheld from passing into Mexico by this plan. A certain amount would be allowed to pass over the dam, to generate the power; but, as far as Mexico is concerned, there is no reservation being made especially for Mex-

ico. We are simply proceeding on the assumption that our Government would not want to take away any water which Mexico is now using.

Mr. GARRETT. The all-American canal would do that, though?

Mr. SMITH. No, not entirely; because if this water which Mexico is now using was continued to be supplied there, it would not interfere with the land they already have under cultivation.

Mr. MICHENER. The theory is you would regulate the water and give them the share of water they are now receiving, under the new plan?

Mr. SMITH. Yes.

Mr. MICHENER. And it would be given to them in such quantity and at such times as they wanted it?

Mr. SMITH. Yes; but as a matter of comity rather than a legal right.

Mr. MICHENER. But as a matter of fact they would be better off if the improvement were made than they are now, unless they wanted more water.

Mr. SMITH. Probably.

Mr. MICHENER. Because it would regulate it in a manner they wanted and when they wanted it.

Mr. SMITH. Probably it would be better.

Mr. MICHENER. Now the basis of this whole thing is the silt, is it not?

Mr. SMITH. That is one of the great problems.

Mr. MICHENER. Is not that the problem; that is, the question of flood control is the silt and without the silt there would be no danger there?

Mr. SMITH. I am not so sure about that; it would take an engineer to answer a question of that kind.

Mr. MICHENER. I thought that was the basis of your system, the fact that this river keeps silting up and the bottom keeps getting higher and eventually the water goes over the banks.

Mr. SMITH. Yes; I used that as an argument why we should build the all-American canal into the Imperial Valley and protect the people against the water running into the Salton Sea.

Mr. MICHENER. Now, you say if they erect this dam, the engineers suggest that possibly it will fill up at the end of 300 years?

Mr. SMITH. Yes.

Mr. MICHENER. What is going to happen at the end of 300 years to all of this territory if we now start on this proposed policy of permanent improvement?

Mr. SMITH. You could answer that question as well as I. It is a matter of conjecture.

Mr. MICHENER. Do you not think we should answer that question for posterity? Do you think we have any right here to do a thing which is going to ruin the whole Imperial Valley at the end of 300 years?

Mr. SMITH. It is hoped by that time some way will be devised of getting that silt out.

Mr. MICHENER. You think we ought to build the dam, let it fill up, and trust to God?

Mr. SMITH. I certainly do.

The CHAIRMAN. You said the land in Mexico that would receive a benefit from this was largely owned by Americans?

Mr. SMITH. Yes.

The CHAIRMAN. Do you know who those Americans are?

Mr. SMITH. I am told Mr. Chandler, the owner of the Los Angeles Times, is one of the large owners there. He testified before our committee his company owned about 830,000 acres.

The CHAIRMAN. Is that the reason he is so actively interested in this question, because it would improve his own land?

Mr. SMITH. That is probably a question you could answer, Mr. Chairman, as well as I could.

The CHAIRMAN. I would like to have your views.

Mr. SMITH. Knowing human nature as I do, I assume that is true.

The CHAIRMAN. He is very anxious for it, and, of course, other people have a personal interest in it, and I was wondering if he had a personal interest in it?

Mr. SMITH. Now, some question has been raised about the engineering features of this great enterprise and some criticism has been advanced by some of those opposing it that the engineers of the Government are not capable. But I wish to say that out of the 26 dams that have been built by the Government engineers under the reclamation policy of the Government, all of them have proved to be 100 per cent safe and we feel that we have in the Government just as competent engineers as they have outside.

The CHAIRMAN. Will you tell the committee, then, how large a proportion of the dams they have built have been built within their estimate?

Mr. SMITH. The dams which were built prior to the war and commenced prior to the war cost more than the estimates, because of the fact that wages of labor doubled and materials doubled in value as a result of the war. The estimates were all made from 1905 to 1915. Those dams built since the war, on the present price of labor and material, have cost less than the estimate.

The CHAIRMAN. How many of them have been built for less than the estimate?

Mr. SMITH. I think three of them. We have one in my district, American Falls Dam, which cost \$4,000,000, and they saved over \$800,000 on the estimate.

The CHAIRMAN. Was the estimate made before the project was adopted or after the project was adopted?

Mr. SWING. We will put in the record some seven or eight, all built within the last six or seven years, that were finished either at the estimate or under the estimate.

Mr. SMITH. The American Falls Reservoir project is a portion of the Minidoka project and the estimate was made in advance of construction.

Mr. POE. Mr. Smith, before you get too far away in your discussion, I would like to develop this point: How much is the estimated cost of a dam necessary to protect the people of the Imperial Valley and to build a canal which would make America independent of Mexico?

Mr. SMITH. Well, we have those figures in detail. The dam would cost \$41,500,000; the horsepower development would cost \$31,500,000.

Mr. POE. I am speaking about the canal.

Mr. SMITH. The All-American canal would cost \$31,000,000, and the interest during the construction period of five years, before there would begin to be any return, would amount to \$20,000,000.

Mr. POW. You mean they would need a dam to cost \$41,000,000 just for the purpose of flood control?

Mr. SMITH. For mere flood control, you could probably find another site; but it would not last very long because the silt would fill it up much sooner. At Boulder Dam the canyon is very deep and it is though that is the place to solve the silt question.

Mr. FROTHINGHAM. What do you mean by "it would not last very long"? Three hundred years?

Mr. SMITH. I should say, 25, 30, or 40 years, probably, at the other place, because they have not the depth.

Mr. MICHENER. In the Boulder Dam, as this silt fills in, as I get it, at the end of a period of 300 years, it will be entirely filled in then; but each year it will be filling up some and in the last 150 years, let us say, there would be a lot of water going over the dam in flood time?

Mr. SMITH. Not necessarily, because it would take a year and a half for this reservoir to fill, and the assumption is they would anticipate floods and let some of the water out during the time when the floods were anticipated.

Mr. MICHENER. That is just the point. When it gets full of silt, then it is not a reservoir any more; and every year it becomes less valuable as a reservoir, because the silt is filling up the bottom. And, eventually, you are not going to store much water there because of the silt.

Mr. SMITH. If you can suggest any other plan, we would be glad to consider it.

Mr. MICHENER. I can not.

Mr. TAYLOR. I can suggest another plan, if you will permit a suggestion on this dam proposition. There are 30 applications now for dams on that river, and every dam that is built upstream will catch some of that silt. As a matter of fact, there will be 100 dams on that river within the next 25, 30, or 50 years, and they will catch that silt. It is not only this one dam; this is not the only dam that is going to be built on that river in the next 300 years, but other dams will be built on that river up above, so that there won't be any silt coming down to the dam when the other dams are built up the river. So the silt cuts no figure.

The CHAIRMAN. On that basis, if you built a dam further down, then it would be all right for flood control?

Mr. TAYLOR. No, sir, it won't do; you would have a thousand or fifteen hundred miles—

The CHAIRMAN. If they are going to catch all the silt, if we build a dam 150 feet high, would not that answer for the purpose of flood control?

Mr. TAYLOR. No; it would not answer for the purpose of flood control, because it would catch the silt.

The CHAIRMAN. I thought it was not going to catch any silt; I thought these other dams up above were going to catch the silt.

Mr. TAYLOR. I will address the committee later on that.

Mr. MICHENER. Of course, you would not want to create a condition here for the future where Congress would be confronted with a situation like the Mississippi flood control?

Mr. SMITH. No; we hope this is a permanent improvement.

Mr. MICHENER. And do you not think, as it is a permanent improvement, that you should look to the future and not construct a dam somewhere that in future years is going to create a menace; and then Congress will be met with this proposition, "You did it; now we are entitled to protection"?

Mr. SMITH. I feel the construction of a dam at this place will defer the question you refer to longer than the construction of a dam anywhere else.

Mr. PURNELL. I do not think I caught your answer to Mr. Pou's question. I was wondering what sort of an estimate you were going to place on those two projects. The dam and the all-American canal, according to the report here, shows an aggregate of about \$72,000,000, exclusive of the interest.

Mr. SMITH. His question was with reference to the dam and all-American canal without the power plant.

Mr. Pou. Not taking into consideration the development of power, but contemplating flood control and the protection of the people of the Imperial Valley.

Mr. SMITH. Of course, we have been working on this bill with the hope of bringing Congress something where the Federal Treasury would not be burdened with any expenditure, and, if we take it up from the other viewpoint, then there will come out of the Federal Treasury millions of dollars which will never be returned.

Mr. PURNELL. But if that policy were followed, then it would not cost so much for the dam.

Mr. SMITH. It would not cost so much for the dam, but you would not have so large a reservoir. And one of the things we have taken into consideration, in addition to the all-American canal, is the importance of making available to the southern California cities a supplemental water supply, which they can get if this dam is built at Boulder Canyon. But the Secretary can not proceed with the construction of this work until he has contracts with various municipalities to purchase the water at a price which will reimburse the Government over a period of years. I would like to read a letter from Secretary Work addressed to me on the 21st instant, as follows:

I see that in discussion of the so-called Boulder Dam bill in the Senate, fear has been expressed that a safe foundation may not be found for such a structure.

In a previous report some years ago on this project I stated that "it would be an engineering experiment." It has, however, since had the approval of some of the ablest engineers and geologists. Borings have been made by the engineers of this department to the depth of 250 feet, cores have been analyzed by the geologists of the department, and their reports agree that a safe foundation can be laid in both the Black and Boulder Canyons.

I have previously stated, in event the project is authorized by Congress, that I would ask five of the ablest engineers in the country to determine faults, if any, in the geology of the area and confirm or disapprove our findings.

I wish, however, that there might be included in the bill pending a mandate to the Secretary of the Interior that a board of five engineers and geologists should examine and approve the adopted site before construction should begin.

And the amendment suggested is:

Provided further, That before beginning construction of said dam and incidental works, the Secretary of the Interior shall cause the proposed site of the dam to be examined and approved by a board of five eminent engineers and geologists, which he is hereby authorized to appoint, and whose compensation and expenses are authorized to be paid out of any moneys appropriated under the authority of this act.

Now we feel, gentlemen, that we have eliminated practically every objection to this legislation; we feel that we have presented to you here a measure which it is the duty of Congress to consider, in order to solve this great problem confronting the people in the southwestern part of the country, we feel, under the plan proposed in this bill, that the Government itself will be reimbursed the entire amount expended at 4 per cent interest, so that not a cent of the money will ever be levied upon the people of the country. We hope you will bring out a rule and let the matter be discussed on the floor of the House and let the House determine what shall be done before this session closes.

The CHAIRMAN. Do you maintain that it is the province or duty of the Federal Government to furnish a water supply for various communities?

Mr. SMITH. No; I am not contending that, Mr. Chairman. I am contending it is the duty of the Federal Government to control the floods which are a menace to the lives and property of its citizens and, incidental to that construction, if it is possible to furnish water for a price to the people who are badly in need of it, as they are in the southern California cities, that it certainly is no reason why Congress should not authorize such a procedure.

The CHAIRMAN. I understood you to say one of the reasons why it was necessary to do this was in order to get this water.

Mr. SMITH. No; one of the reasons we are anxious to have this passed is because of the fact eventually those people down in southern California will be short of water and we will find a market there for this excess water, which will help to pay the Government back the money which it advances.

Mr. BURTON. It is with the idea of reimbursing the Government?

Mr. SMITH. Yes, absolutely. We are not asking, as the other flood control propositions are asking, that the Federal Government bear all of the expense, but we are asking that the people in that vicinity have the opportunity to have this great work carried on with the hope, expectation, and belief that the Government will be reimbursed for every dollar of the cost.

Mr. PURNELL. How many acres of Mexican land will be affected?

Mr. SMITH. Only the 200,000 acres under irrigation, probably, at this time; but ultimately three hundred and twenty-five to three hundred and thirty thousand, because private interests there, as rapidly as they can, are adding other land and asking the people to come in and cultivate the land.

Mr. TAYLOR. They are adding at the rate of about 30,000 acres a year.

Mr. O'CONNOR. If that reimbursement feature is so important, they could grow oranges, too, down there and reimburse the Government?

Mr. SMITH. Yes; they could grow oranges, lettuce, citrus fruit, figs, and cherries.

Mr. O'CONNOR. Has it ever been suggested putting that in the bill?

Mr. SMITH. What is that?

Mr. O'CONNOR. The Government going in and developing this new land and raising citrous fruits?

Mr. SMITH. Oh, no.

Mr. MICHENER. And the alfalfa.

Mr. SMITH. No; we are not entering upon anything of that kind. The only way we are bringing the Government into business—and I imagine that is what your question is based on—is in the matter of reimbursing the Government.

Mr. GARRETT. Where would be the market for this power?

Mr. SMITH. In the southern California cities and in the mines in that section of the country. But bear in mind the bill provides that no money can be expended in this great undertaking unless the Secretary of the Interior has already entered into contracts of a continuing character which will make the Government safe in the expenditure.

The CHAIRMAN. Thank you, Mr. Smith.

STATEMENT OF HON. EDWARD T. TAYLOR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

Mr. TAYLOR. Mr. Chairman and gentlemen of the committee, I am not going into detail at all on this matter, but just try to touch upon a few of the main points. The conditions are no different from what they were when we appeared before you a year ago.

Here are seven States out there interested in this Colorado River. It is one of the greatest rivers in the world. Under the law of appropriation of water and under the acts of Congress admitting these States into the Union the waters of this Colorado River were given to the people of these seven States, for their sole use and benefit, and, up to this good minute, those people own that river. The whole question before Congress, Mr. Chairman, is whether or not the people are going to continue to own that river, or is it going to be turned over to the power companies. That is all there is to it. There are something like 30 power companies that are applicants for appropriations of water from that stream now. The Secretary of the Interior says he is not in favor of playing favorites; if any rights are to be granted, he is not in favor of playing favorites but of granting permits to all of them. The Secretary of War, the Secretary of the Interior, and the Secretary of Agriculture are the Federal Power Commission. They have authority to grant permits on that stream to develop power. Whenever they grant those permits on that stream to develop power, it will be done in the lower part for the present time, because that is the only place where there is a market now for power. Whenever they are granted they will acquire a right by priority of appropriation to the quantity of water that they appropriate under the United States Supreme Court decisions. Judge Van Devanter, in the decision of *Wyoming v. Colorado*, decided that any appropriation on an interstate stream appropriated the waters of the entire stream; that the stream is one entity,

regardless of State boundaries, and when an appropriation is made at any point on a stream it takes that quantity of water out. Now if the water is appropriated, if it is granted to these power people down the river for development—and that will be a legitimate enterprise—that prevents the four upper States from ever, in the future, appropriating any more water than they have now.

MR. O'CONNOR. Can that grant be made without the consent of the State and the people?

MR. TAYLOR. Yes. The Federal Power Commission has authority to grant permits on that stream or any other navigable stream in the United States for dams and power purposes. That stream is made navigable by the treaty of Guadalupe Hidalgo between Mexico and the United States. It is a navigable stream, it is an international stream, it is an interstate stream. That commission has the authority and jurisdiction to grant those permits.

Now, what the four upper States are afraid of is this: There are only three ways of protecting our rights. One is by an interstate agreement, authorized by Congress and consummated by the States and approved by Congress. There is no earthly possibility of a seven-State interstate agreement; absolutely none. That is a will-o'-the-wisp. I was present a large part of last summer before that seven-State conference in Denver. I told them before they convened and several times afterwards that they would never effect an interstate agreement; they never would and never will come together. They are no nearer together now than they have been at any time in the last six years. There is not any such thing as an amicable seven-State agreement.

MR. MICHENER. Why do those four States of which you are speaking ask Congress to defer action?

MR. TAYLOR. We do not. Last December they asked the Irrigation Committee to give the States further reasonable time to get together. We have given them that further time and now we say that time is up. I represent the people of the State of Colorado, where this water comes from and who are most vitally affected by this bill. I speak for them officially here and now. I have been continuously elected by those people for the past 32 years to represent them and practically two-thirds of all of this water comes from 20 of the 24 counties in my congressional district.

THE CHAIRMAN. You do not want to give any weight, then, to the statement of your governor, or the members of the Interstate River Commission?

MR. TAYLOR. That resolution you refer to simply asks Congress to take no action until they have had a reasonable opportunity to come to an agreement. They had that "reasonable opportunity" for six years before, and they have had that "reasonable opportunity" long enough since, and they are no nearer to it now than they were when they signed that resolution. And anybody who knows anything about this matter knows there is not now, and never has been, any likelihood of an agreement between those seven States at any time during the past five or six years. There are interests at work that have and will prevent any seven-States agreement. I think any one who asserts the contrary is lacking in either knowledge or judgment or honesty. If it were possible to enter into an honest interstate

agreement in the interest of the people of these seven States, that would be the ideal way of determining and protecting all our rights. But we have no way of coercing Arizona or Utah. They, or either of them, can prevent that agreement as long as they want to. The next way to ascertain or protect our rights would be by bringing a suit in the United States Supreme Court, which I have always favored, to have the Supreme Court adjudicate the respective water rights between these seven States. That is the orderly, honest, fair, decent, practical, just, and proper way of settling this matter.

In both the Wyoming and Kansas litigations against Colorado the Supreme Court held explicitly that the court not only had jurisdiction and did determine the respective rights between Colorado and Kansas in the Arkansas River, and determined the respective rights of Wyoming and Colorado on the Platte River. There is no question about that court's jurisdiction. It has jurisdiction, and each of those decisions is a precedent. That suit ought to be brought; the States ought to take this matter into the United States Supreme Court and have that court determine, adjudge, apportion, and allocate the division of those waters and their use by each of those seven States. But they have not agreed to that, and they will not agree to that.

So those two best ways of determining our respective rights and settling this controversy are lost and gone.

Mr. RAMSEYER. You say, "they have not agreed to that and won't agree to that." Who do you mean?

Mr. TAYLOR. I mean the seven States and their governors and legislatures; none of them has ever tried to do that. Their United States Senators and Representatives in Congress have no authority to do so.

Mr. RAMSEYER. Do you think it would require an agreement among all the seven States?

Mr. TAYLOR. No; I do not think it would. Any one or more of the seven States could bring that suit against all the rest of them, but it would be an expensive case and might take several years. Colorado and Kansas litigated for some 10 years. It is usually a slow process to litigate in the United States Supreme Court unless all the States would join in expediting the trial and determination of the controversy. Even so, I think that is—all things considered—the systematic and orderly and best way to do it. I think the four upper States ought to start that suit against the three lower States. If they did, the States of California and Nevada would ask to be joined as plaintiffs, I believe. Now, there is only one other way of protecting the upper States, and the rights of the lower States, too, for the future development of the waters of that stream. We of the upper States are not yet ready to put in dams and reservoirs. We have no markets for power now. We are not yet ready to undertake more irrigation. There is more irrigated land now in the country than there is good markets for our farm product. It would not be profitable to put in large and expensive dams and reservoirs and irrigation enterprises at this time or power plants either. We hope to have need for more irrigation and use of water 25 years from now; and much more 50, 75, or 100 years from now; and those four upper States should have their inherent rights to water for future development protected. But if the water is all appropriated before that

time and is all required for the appropriations below, then by the decision of the Supreme Court the water will have to run down to supply the appropriations in Arizona and California. We up the stream will never on earth be able to put in a reservoir or take out another ditch in the upper States or put in another power plant.

The CHAIRMAN. It would not interfere with power.

Mr. TAYLOR. Oh, yes; it would interfere with power for this reason—I can quickly answer all these questions if you give me time: Supposing we put in a dam up in my State, and make a reservoir and back up the water for 10 or 15 miles, and make a lake of a thousand or ten thousand acres, there would be a large quantity of that water lost by evaporation. That would detract that much from the water that might otherwise flow down below. The lower appropriators would promptly go into the Federal court in California and get a blanket injunction against all the upper States—which they can do—prohibiting our making any new use of the water over our present vested appropriations, unless and until we go down below and see those people and get their permission to do so, and they will not grant us that permission except we pay them a royalty on the use of all the water we have taken out upstream. When those seven States are unable or unwilling to come to an interstate agreement, and are unwilling to take the matter into the United States Supreme Court to settle it, then by this bill is the only other way those upper States can protect their rights; by having Congress enact a law making those lower appropriations subject to and subordinate to the conditions and provisions of an agreement that all of those States have acknowledged was a fair apportionment between the upper basin of four States and the lower basin of three States. None of these gentlemen dispute the fact that the seven-States agreement entered into six years ago is absolutely fair. This bill will let the upper States have 7,500,000 acre-feet of water, and have it allotted to them and not subjected to any priority appropriations down below. That is what they are entitled to. Then, as they need it they can use it. We can not drink it up. It will always run down to the three lower States. That is the law and the doctrine of appropriation in all our arid-land States, and we want that right held in abeyance for our future use.

They have all agreed that that is fair, and that the three lower States shall have 8,500,000 acre-feet set apart to them. That takes 16,000,000 acre-feet. That is somewhat less than the normal annual flow of the stream throughout a series of years. Now, what we have been trying for many years to do, and which is the orderly thing to do, is to build this Boulder Canyon Dam down at the place where there is the only good site for a safe and high dam, and to build it 600 feet high, so that it will hold the entire flow of that stream for one solid year, if there was not a drop to go over the dam. That is the way to regulate the flow of that stream. In other words, to back up the water some 75 miles up the Colorado River and back it up the Virgin River for 50 miles and make a reservoir big enough to control the stream, and regulate the flow over the dam in an orderly manner and as the people want to use it. The people of California and Arizona could then get the water as and when they need it, and get away from furnishing free water to Mexico. The

present canal that irrigates the Imperial Valley is taken out of the Colorado River in the United States, and to avoid cutting through a high sand mountain in the southeast corner of California they built the canal down south and around into old Mexico for 60 miles and then took it up into the Imperial Valley, forming a great big letter S. Mexico has no right to any of that water.

Judson Harmon, Attorney General of the United States, held that they have no appropriation or vested right to any of it. They have an agreement that for the permission of running that canal through the Republic of Mexico, they make us give them 50 per cent of all the water we run through that canal. That is a rental for a right of way. Then some far-seeing wise Americans go down there and buy up a large part of that very rich land, and with that 50 per cent of the water given to them on a silver platter, for nothing, they are adding about 30,000 acres of irrigated land every year. They have now several hundred thousand acres of land under irrigation and cultivation and they have something like a million acres they expect to irrigate and cultivate with our water and appropriate from that river and it all comes right out of our rights.

Now, all the water of the normal, natural, annual flow of that river is appropriated to-day. There is no more natural run-off through the season that is not appropriated. The only water we can further develop, for those seven States, is to build large dams—and they will in years to come build many of them—to build large dams and to catch and impound and hold the flood waters. Why there is enough flood water that goes to waste down to the Gulf of California every spring and summer to irrigate millions of acres. Now, what the people want is to hold back that enormous valuable waste and beneficially use it. The thing that prevents it, in my judgment, is the power interests who do not want the Government to go into the power business.

So far as this bill is concerned, this is the situation: There are three main objects: First, they want to build a high dam. A low dam would be only temporary. The power people are not opposing a low dam to protect the Imperial Valley if there is no power generated. But the people of California want a dam big enough not only to protect that valley but to make a reservoir to collect that water and hold it, both for irrigation and power, and last for all time and amount to something. The Secretary of the Interior wants also to build a power plant—not for the Government to go into the business—but to say to the city of Los Angeles or the power people, "If you want to come here to this dam and take the water here at the switch board and build your own transmission lines and pay the Government such a rate that will reimburse the Federal Treasury for this construction, all well and good." And it is provided in this bill the dam shall not be built until the Secretary has those contracts. As I say, this project involves three things: (1) Protection of the Imperial Valley. (2) Build a power plant in connection with the high dam to reimburse the Government for the cost of it; and (3) build an all-American canal to cut through those sand hills and all in the United States and keep all the water for use in the United States. They expect to pay for all the cost of that canal themselves the same as in any other Government irrigation reclamation projects. They

can easily pay it all back in that rich semitropical country down there. And let me say the produce they raise in the Imperial Valley does not come in competition practically at all with anything anywhere else in the United States. Their crops are ripe right now; their crops largely mature in the winter. They sell head lettuce and cantaloupes as well as citrus fruits. This does not come into competition with anything else.

Mr. PURNELL. Is that all they can raise?

Mr. TAYLOR. They can raise alfalfa and almost anything, but the principal crops that they get their money out of mature at times that do not compete with the rest of the country of goods they would raise.

Mr. PURNELL. And dairy products?

Mr. TAYLOR. Yes. And dairy products, but I think most of that is consumed on the west coast, so that it does not come in competition to any appreciable extent with the rest of the United States. The claim of competition is not founded on facts.

Mr. PURNELL. How many additional acres will be brought into cultivation?

Mr. TAYLOR. Down in that country?

Mr. PURNELL. Yes.

Mr. TAYLOR. If the Imperial Valley people build the All-American canal, as they hope to, it would, when completed, some time in the future bring in something like 200,000 acres more.

Mr. PURNELL. And how many acres in Mexico?

Mr. TAYLOR. Well, Mexico is another proposition entirely. If we ever make a treaty with Mexico—

Mr. PURNELL. I understand, but it is all involved in the question of our attitude, you see.

Mr. TAYLOR. People in Mexico (most of them Americans) are adding about 30,000 acres a year of newly cleared and irrigated land, while we have been delaying the passage of this bill in Congress during the past six years. They have already put in about 200,000 acres, and they will have a million acres in if we do not pass this bill before long and protect our American rights. It is a great godsend to Mexico and the wise Americans who have put their money in land down there to hold Congress in a stalemate for years and years and to go ahead and continue to appropriate the waters of that river. I think those Americans in Mexico have been appropriating more water for land in Mexico than we have in the whole seven American States during the years this bill has been held up in Congress. Mexico is every year acquiring much larger rights to water from that river, and the longer we put off this bill the greater her rights and claims will be. We may have to confirm those rights to some extent by treaty, notwithstanding the Attorney General says that they are not acquiring any vested rights as against our use in this country by reason of our giving them water out of our canal in consideration of our running that canal through their country. When we cease to run that canal through their country we ought to cease giving them any water for that right of way. That is all the right they have at this time. But they are very

rapidly using it, and they are acquiring what they will claim is a vested right to the use of that water, if we let it continue.

The CHAIRMAN. If that is so favorable to those people down there, why are they so anxious to have this measure passed?

Mr. TAYLOR. Nobody down in that country is anxious to have this measure passed; nobody down there has been asking before your committee to have this bill passed. They are not so foolish; it is a godsend to them not to have this bill passed.

The CHAIRMAN. The gentlemen who own the land down there, according to the statement of Mr. Smith, are anxious to have this bill passed.

Mr. TAYLOR. You misunderstood him entirely. Those people are praying this committee will sit here and do nothing for 10 years more. Then they will have at least a million acres under cultivation if you do that. It will be a great godsend to Mexico by letting them appropriate that water of ours, worth a thousand dollars an acre, down in that country, and every day we put off they are adding that much more land. Our delay in the passage of this bill is worth millions of dollars a year to Mexico.

Mr. FROTHINGHAM. Is that being done by Americans?

Mr. TAYLOR. Yes; the most of that rich land that is being cleared and brought under irrigation and cultivation in Old Mexico is owned by Americans. But they will use the Republic of Mexico to assert their rights to this water that they have obtained practically for nothing.

Mr. FROTHINGHAM. But Americans own the land?

Mr. TAYLOR. Americans, principally, own the land; yes, sir. Harry Chandler and some others in Los Angeles own a great deal of it, and a few other distinguished gentlemen are in on the enterprise, and it is to their very great interest for us to do nothing as long as possible.

The CHAIRMAN. Are not they earnestly advocating the passage of this bill?

Mr. TAYLOR. No, sir; and they do not come here urging it.

Mr. PURNELL. None of them appeared before the Irrigation Committee urging it?

Mr. TAYLOR. No, sir; I do not know of anybody who appeared before our committee that I ever heard of, asking that this bill be passed. If there is any claim of that kind, it is an absolute deception. Do you suppose they want to have that all-American canal started and have their water supply cut off?

Mr. SMITH. I want to answer the question of the gentleman from Indiana. I wish to say that Harry Chandler came before the committee by request and testified he did not see any special reason why we should proceed with the passage of this bill and offered reasons why it should not be passed.

The CHAIRMAN. Is that the Chandler who owns the Los Angeles Times?

Mr. SMITH. Yes.

The CHAIRMAN. Is not that paper a most ardent supporter of this?

Mr. TAYLOR. No; that paper is now and always has been fighting this bill.

The CHAIRMAN. What is the other paper?

Mr. TAYLOR. The principal other paper is the Examiner, a Hearst paper. Now let me go on. There are three things you have to consider. The first is whether you are going to build any dam at all; the second is whether you are going to build it only high enough to protect the Imperial Valley, or high enough to generate sufficient power to repay the Government for the cost of construction. The question before you is whether or not you are going to let the Government of the United States recoup itself for the cost of the dam and the power plant. The power people have no objection to Uncle Sam spending as much money as he pleases, so long as he don't put in a power plant and go to selling power to get back the cost of the construction.

Another thing, the all-American canal as a separate irrigation reclamation project is a perfectly proper and practical enterprise and very necessary. That really has nothing to do with this. The Boulder Dam and power plant should not be held up on account of that canal proposition; and on the other hand, the canal should not be, on account of the power plant. The Imperial Valley people should be allowed to go ahead and build the canal and pay for it; just the same as we do on the Grand Valley project or the Uncompahgre project in Colorado and all the other reclamation projects, the Government letting them have 40 years to pay for them, without interest. That ought to be a separate proposition. There is no reason or sense in anyone holding up the all-American canal as a bug-a-boo. I am on the Interior Department appropriation committee, and we appropriate something like \$300,000,000 a year, and that money is coming back and most of it will come back. There is no reason why anybody should have any apprehension about that. It is much better and safer than nine out of ten of the present Government irrigation projects, and if those people are willing to pay for it that is nobody else's business. They are perfectly willing to pay for that canal to get more water and more land, and get out of Mexico. But there is a much greater right than all that; and that is the inherent rights and welfare of all those seven States. That is what I am here for.

Personally I am not concerned as to how these gentlemen of the lower three States divide the water between themselves, or what they do with it down in that lower country, or whether Uncle Sam builds the dam or whether private people build the dam. But I am immensely interested in the future development of these four upper States and in preserving their water rights for all time for this and succeeding generations when those States are developed. I do not want their development to stop. I do not want to have to pay a royalty and tribute to the power companies or people of the lower States for all future development in the use of the waters of that river. If the river is turned over to the power companies and they go ahead and put in several hundred million dollars in developing power plants, when they have done that, then they have a right to compel us to let the water come down the river to supply those

plants. They will, under the right of prior appropriation, compel us to let the water flow down to them without any diminution or even evaporation or use of any kind up the river. I am appealing to you on behalf of our people up the stream, the present and future generations of four States, to protect our rights so that we may have the use of that river hereafter from the tributaries of this stream, to build up those States, and not allow these appropriations down below to prevent and forever forestall us from ever developing up stream. That is what I am primarily concerned about. That is why I want this bill to pass at this session of Congress. Governor Dern, of Utah, apparently went to Denver last December and substantially said to those other three governors, "Here, we are holding meetings all the time and are just about to come to a seven-State agreement, so let's not allow the Swing-Johnson bill to pass until we come to an agreement, and let's ask Congress to just give us a little more time to come to an agreement on a compact." So the Irrigation Committee put it off for six weeks on account of that four-governors resolution. Because that is what the governors practically said in that resolution, that they were almost ready to sign on the dotted line. All they asked was for a reasonable time to agree. They have already had that reasonable time.

Mr. PURNELL. They did meet, according to that statement in this resolution, last December.

Mr. TAYLOR. Yes; the representatives of all those seven States have been meeting off and on all of the time for 8 or 10 years. Those upper four State Governors have been meeting much of the time for six or eight months. I think they have quit now. The Irrigation Committee decided they ought not to let this session of Congress adjourn without pressing this bill for consideration and passage, whether there was any agreement or not. If there was any prospect whatever of any agreement, why, I would feel indifferent. But I think I know there is not. This controversy has been going on for 10 years and is not as near a settlement now as it was 6 years ago.

Mr. BANKHEAD. I would like to ask you a question and understand I am very favorably inclined to your proposition, and I am not asking this in any antagonistic spirit, but I want to get some information.

Mr. TAYLOR. I will give it to you if I can.

Mr. BANKHEAD. I understood you to say there was not any prospect of these States getting together on an agreement in reference to a compact.

Mr. TAYLOR. No, sir; there is no possibility whatever of a seven-States compact. Arizona has defiantly said that time and again. And actions speak even louder than words.

Mr. BANKHEAD. Eliminate Arizona, do you think the other six States could reach an agreement?

Mr. TAYLOR. Yes; I do. I think if you pass this bill the other six States will come together. Of course, I can not speak for Utah. At present Utah is off of the reservation and I do not know when or whether she will come back on or not. I think Congress should pass

this bill and we will let Arizona and Utah take such course as they desire. I want to have these States upstream protected as against these developments down below. As you all know, I passed a bill just before Congress adjourned a year ago, prohibiting the Federal Power Commission from granting any power permits on that river until the 5th day of next March, 1929, and that is a law to-day. If that is not repealed or amended before then, that commission can not grant any permits before that date. I am confident if I had not passed that bill that river would have been grabbed up before now. I think that commission would have granted enough permits to take up all the flow of the stream, including the flood waters, and that our future development upstream would have been forever stopped. But that bill prevents those permits until the 5th day of next March, which is the next day after the present administration goes out of office.

Mr. BANKHEAD. How do you interpret section 4 of this bill in the light of the statement just made?

Mr. TAYLOR. What does it say?

Mr. BANKHEAD (reading):

No work shall be begun and no moneys expended on or in connection with the works or structures provided for in this act, and no water rights shall be claimed or initiated hereunder, and no steps shall be taken by the United States or by others to initiate or protect any claims to the use of water pertinent to such works or structures until the States of California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have approved the Colorado River compact mentioned in section 12 hereof.

Mr. TAYLOR. California expressly promises and agrees to come in immediately upon the passage of this bill, and if Utah will come in, the law becomes effective. If Utah does not come in, it does not become effective. Under that provision, six States have to agree. Utah is not compelled to come in. She can prevent the bill becoming operative if she wants to.

Mr. BANKHEAD. Is it your idea, if this legislation is passed it will be an additional inducement for those States to come in?

Mr. TAYLOR. I feel confident Utah will come in. I think the very inherent rights of that State will force her to come in. I do not see how she can afford to stay out and keep up this fight. If we do, we will soon have no water rights up the river to fight over.

Mr. MICHENER. In 1922, when the matter was up, California only ratified conditionally; that is, upon the conditions embodied in this bill?

Mr. TAYLOR. Yes.

Mr. MICHENER. California never ratified this thing excepting this bill were passed?

Mr. TAYLOR. Yes; California says there is no use of ratifying unless this bill passes, and if it passes, that State will immediately ratify the compact. I hold in my hand a statement from some Utah engineers and lawyers of the State, in which they seem to be in favor of that State coming in. Anyway, we are willing to take our chances on it. If this bill passes, I believe we are going to have six States in that agreement; and if the bill passes and they do not, then neither Utah nor Arizona are harmed any by it.

Mr. O'CONNOR. What is the matter with this great Democratic State of Arizona?

Mr. TAYLOR. I will not presume to answer for Arizona. You have some very alert experts from Arizona right here in this room. They have been watching this matter every day for 10 years. They are very shrewd gentlemen.

Now, let me answer some questions that were asked by members of the committee. You asked about crops, I have answered that; you asked about the four governors, I think I have answered that; you asked about Mexico objecting to this, and I think I have answered that. You asked about the silting. The silting is an enormous

proposition, that is true; but when you have a dam 650 feet high and it will take 100 years, practically, or, as some say, 300 years to fill up, we need not be much bothered, because we are going to build many other dams upstream in the years to come that will catch and intercept that silt, and it will not be silting up so much when it gets down below.

Now, this talk about a low flood control dam, that is the power companies' proposition. The power companies of this country want us to build a dam that will be some 50 or 100 feet high that will just intercept enough water to protect the Imperial Valley from destruction but will create no power and will have nothing to do with giving the Imperial Valley further water rights for irrigation or permit the development under the all-American canal. You understand, if the all-American canal is built, they will start up at the Laguna Dam and build the canal higher than the present canal and cover several thousand acres more land than the present Imperial Valley and that canal covers, and that additional land is a big incentive, and the further fact that they will not have to give half of that water to Mexico is another big incentive. They are looking to the future when, if Mexico keeps on with her diversion of the water, we are not going to have much left to divide among ourselves. But if we will keep it on our American land it will be of enormous value. Those seven States are all vitally interested in this bill. They want their future rights protected in some way, and this bill appears to them as the only way we can protect our future development, and we are all anxious, as I think Arizona ought to be, to prevent more water from being appropriated by the Republic of Mexico. Because while we fight among ourselves Mexico is enormously profiting.

Mr. TAYLOR. I am glad the Federal Trade Commission and the Washington Herald are letting the country know at least a little about some of the activities of the power interests in their opposition to this bill, and I hope they will smoke out a lot more of the people who are on the pay roll.

I thank this committee for this opportunity to impart and very hastily present what I think is the wishes of nearly all of the people of the upper four States.

Mr. SMITH. With reference to this compact, bear in mind that in 1922 it was signed by all the Representatives of these seven States,

and was ratified by the legislatures of six States, and only failed by one vote in the legislature of Arizona.

Mr. MICHENER. The California ratification was conditional.

Mr. SMITH. At first.

Mr. MICHENER. Has that condition ever been completely removed?

Mr. SMITH. It can not be.

Mr. MICHENER. Until this bill is passed.

Mr. SMITH. Until this bill is passed making sufficient storage to meet the requirements.

Mr. MICHENER. Now, if every State to the compact had made their ratification conditional the same as California did—"if and when you give us what we want, then we will ratify"—would you call that ratification?

Mr. SMITH. If Arizona would come in and make the same proposition, then we could consider it, but as it stands to-day she absolutely refuses to come into the compact and we can not make any progress.

Mr. SWING. California was unconditional, assuming the seven States were going to ratify, but when Arizona announced her intention to stay out and thereby laid a greater obligation upon California under a six-States compact, then California put on a condition because there was an added legal and economic obligation.

Mr. MICHENER. As I remember it, there was something before the committee at the last session indicating that California's ratification took place the last of the States and after the legislatures in the other States ratifying it had adjourned, and then you put a condition on it: "If, and when, you do what we want, then we will ratify."

Mr. SWING. But that was not by design or intent. We had a controversy among ourselves regarding the adoption of it, and it was seriously discussed as to what the legal obligation of the six-States compact was. It is now conceded by the upper-basin States lawyers, as well as our lawyers, that the six-States compact just throws upon California the obligation to guarantee the upper-basin States; and we could not, without giving our life's blood, ratify unconditionally and give away, as the compact would require, our vested water rights.

Mr. MICHENER. Is not that the contention of Arizona, that they can not ratify without giving away their life blood?

Mr. SWING. Oh, no. There is a difference between keeping alive existing communities with fifty or seventy-five thousand people in them, and the question of prospective profits to come out of a Government project.

The CHAIRMAN. We will now hear from the gentleman from Nevada, Mr. Arentz.

STATEMENT OF HON. SAMUEL S. ARENTZ, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEVADA

Mr. ARENTZ. I think it is well in any discussion on a rule for the Swing bill to refer to January, 1927, at which time this committee held a hearing on this bill. At that time it went over all of the

phases of the bill we have covered this morning, and all the phases of the bill that will be covered if we sit here for a week, the idea being this, that when the hearings were completed it was the sense of this committee that a little more time should be given for negotiations between the States of California, Arizona, and Nevada, and that is the only position this committee took, and it appeared to be the only reason why a rule was not given at that time. It heard everything there was pertaining to this proposed legislation; everything about the dam and construction, about the water rights, about the rights of Mexico, about the land it is contemplated would be put under cultivation, about the reasons for California saying she would ratify when this bill passed, and all that. Now the three lower-basin States have held these negotiations, and that should be the thing this committee directs its attention to to-day—whether or not, in good faith, the governors of the upper-basin States and the Colorado River commissioners, of Arizona, Nevada, and California tried to bring about a settlement of their differences by negotiation.

Now, since the adjournment of the Sixty-ninth Congress, since you held the hearings in January, 1927, these parties have been together; they have been together conscientiously day after day. The obstacles as they arose have been surmounted one after another until every day almost during the past six months—in fact, during the past eight months—an agreement has been expected and every difference that I know anything about ironed out except what? The matter of about 600,000 acre-feet of water. That is the only difference; and I defy anybody here from Arizona or any place else to state to this committee that there is any other difference mentioned in these negotiations except the matter of 600,000 acre-feet of water. An agreement had been reached tentatively between the representatives in Congress, representing the several States, as to how this matter of 600,000 acre-feet could be removed and I thought that was settled. But just as soon as they—the States of Arizona, California, and Nevada—apparently had reached the end of their differences, the way made clear for the consummation of a seven-State compact, some other difference appeared on the horizon and under no circumstances would the State of Arizona sign this compact. Why? I have not heard any other reason except that she wants something else. What is that something else? I do not know; and neither do you and neither do they; except that they want no dam constructed except where, when, and how Arizona dictates. Under such an arrangement the people of Arizona can make all the applications to the Federal Power Commission that they desire, from the upper State line of Arizona down to the lower border of the State of Arizona. So that what? So that when those filings are made they can put them to beneficial use by the utilization of Colorado River water either in power plants or reclamation projects throughout the years to come.

If that should be done, what would be the result? The result would be that the water of the Colorado River would all be appropriated in the lower basin and when the States in the upper basin, that have a sufficient amount of land to take care of their future

needs for 50, 75, or 100 years—when they applied for water, they would have to let that stream of water go by their door because Arizona or another lower basin State had applied for it and the Federal Power Commission had given a permit to them to use the water for power and for reclamation, regardless of the fact that a host of engineers of the highest standing report that the dam at Boulder Canyon is feasible from every point of view and a logical way to begin the development of the Colorado River.

Now, gentlemen, I think that the only consideration this committee should give this question is whether or not the negotiations carried on throughout the year have been carried on conscientiously and sincerely—the only difference now between Arizona and California being a matter of a few hundred thousand acre-feet of water—and if the results obtained by these negotiations justify this committee in the belief that even though a six-State compact is entered into rather than a seven-State compact that this bill should be given a rule and the merits of same determined upon the floor of the House.

I do not call 600,000 acre-feet of water intangible, something not worth fighting over, but I say it is a difficulty that can be settled between the States of California and Arizona, and the fact that it has not been settled is no indication that it will not be. And by the passage of this bill, I say that Utah, the only other State necessary to come into the compact, will come in, in our best judgment, and in justice to her own citizens she must come into this compact, regardless of what anybody says about that. I speak with no authority for Utah except to say that in justice to her citizens, to safeguard their water rights, Utah must come in—and Utah will come in. And no construction will commence on this project, according to the wording of this bill, not a spade of dirt will be turned at the site of this dam until six States sign the compact. If that is not a fair proposition I do not know what is.

Mr. O'CONNOR. If the six States do not sign, will you be back with a bill that work shall go ahead when five sign?

Mr. ARENTZ. Personally, I hope so.

Mr. TAYLOR. I will say I hope so, and I will do my best to bring in a five-States agreement. I am willing to go ahead with a five-States agreement. I feel they will have to come in.

Mr. ARENTZ. If the thing the seven States of the Colorado River Basin are primarily interested in is water, this bill or compact will give that right to those States; not for a few years but in perpetuity, for the desert lands awaiting the hand of man.

I look upon this stream as on a wonderful vein of gold or silver, and, in the same way, it is attended with an unlimited value for these States. It is one asset that will be left after their mines are all gone and their desert lands are ready for water—the greatest asset of all. Because in time our Nation's growth will necessitate the peopling of these desert wastes—when that time comes these lands will have awaiting them the water set aside as their right by this compact. At the present time, my State only has 80,000 people, although we have a territory of 110,000 square miles—two and a third times as big as the State of New York. We know what this

river means to us. The State of Nevada has had two amendments accepted by the Irrigation and Reclamation Committee for insertion in this bill. One was to the effect that the surplus created over and above the payments necessary to amortize the cost of this work to the Government, whatever the amount of the surplus may be, will be divided between the States of Arizona and Nevada; but not until those amortization amounts are paid will a dollar come to these States. I do not say there will ever be a surplus created, but if there should be a surplus created, then these States will get it. Furthermore, I put in an amendment to the effect that the States of Arizona, Nevada, and California will have the first right, the same right that a municipality would have, to make application for power, and why should not the States have that right to make applications for power. The State of Nevada may want 100,000 horsepower, she may want 150,000 horsepower, or she may want 200,000 horsepower, and if Arizona comes into the compact she is entitled to the same privileges and revenue when, and if, there is any. Arizona and Nevada are entitled to these things, and I say this bill containing these provisions is satisfactory to Nevada and it should be satisfactory to every basin State.

I thank you.

The CHAIRMAN. Now we will hear from you, Mr. Leatherwood.

**STATEMENT OF HON. E. O. LEATHERWOOD, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF UTAH**

Mr. LEATHERWOOD. Mr. Chairman and members of the committee, you have been so gracious in the past in listening to a discussion of this matter by me something over a year ago, that I will assure you at the very outset that I am not going to take 15 minutes of your time. I am going to ask that the balance of the hour which I do not intend to use shall be given to Mr. Douglas, for the reason that Mr. Douglas is peculiarly fitted, from business training and association, to answer some of the most pertinent questions that have been put here this morning. I say I am not going to take the time to discuss the controverted questions. I have done so in a minority report. I have discussed, I think, every question which has been adverted to by you gentlemen here this morning. I have not given you my opinion or my guess upon the main features of the bill, involving the economics and the engineering features of the bill and the question of the compact; I have given you the facts and not my opinion.

You have asked here this morning, gentlemen, some very pertinent questions; questions that ought to be answered fairly and dispassionately and without any subterfuge. By way of illustration, one or two gentlemen here have very properly asked what kind of products would be raised in Imperial Valley. We have given you that in our minority report, not from hearsay but from the official records of the State of California and, if you will turn to pages 24 and 25 of my minority report, you will there get the exact acreage devoted to the various products as taken from the official records of the State of California.

Gentlemen, if I were trying this matter before a legal tribunal, where we took advantage of the facts and admissions of the proponents of a measure, I would move for a nonsuit at this time and ask that the only relief to be granted be flood protection, which we have always asked for and say that California and the Imperial Valley is entitled to. And I say that for this reason: If the gentlemen who have made the admissions are clothed with any authority to speak for their respective States, they have admitted themselves out of this controversy. The esteemed chairman of my committee, for whom I have the highest respect, has admitted he would not be here if the major feature of this bill was the development of power. We challenge that in our minority views, both Mr. Douglas and myself, and we claim that any fair-minded jury, if they will but pay attention to the facts now before the committee, would say to Mr. Smith he would have to get out of court after making such an admission. My good friend, Mr. Taylor, of Colorado, has made a most excellent argument for the upper-basin States, and I wish to go with him on some of his conclusions; but he has admitted there are only two ways by which the water of this great river can be allocated, one by compact or treaty made and signed between the States, and the other by the judicial arm of the Government having jurisdiction. He admits there is no hope of an equitable distribution of the waters of this great river so far as the States are concerned, by compact, he admits that the only other way by which the equitable distribution of the water could be made is by a Federal court of competent jurisdiction. I fully agree with the gentleman from Colorado. Yet I am appalled to find that he stands here now and advocates that which violates the very spirit of his contention, and I hope and trust his people out in Colorado, who are most vitally affected by this bill, will never interpret his speech as he made it here this morning, for I fear there might be trouble on one branch of the Colorado River that runs through the gentleman's district.

I have called the attention of you gentlemen to the law of prior appropriation and I am not going to discuss that with you this morning. I must keep my promise to you to be brief and the injunction which was placed on me before I came here.

Mr. RAMSEYER. As to your view on the law of prior appropriation, does that conform to what has been stated this morning?

Mr. LEATHERWOOD. The general theory, yes; but the application of the principle was, of course, far-fetched and not based upon any facts. Let me say again that every question you gentlemen have asked here, if you will turn to the index in the back of my minority report, which I have here, answers, better than I could if I presumed to take your time, the very questions which are running through your minds about the engineering features, economics, and other questions involved. I am chiefly concerned, gentlemen, that this Congress does not do a foolish thing. I have no fear since I have heard my distinguished friend from Colorado but what the court will ultimately protect us if we have to go to court.

I regret that reference here this morning has been made to a matter which I can not discuss and which it would be improper for me to discuss; that is, the attitude of the President of the United States. I emphatically deny that any gentleman who has ever appeared before this committee or will appear before this committee has any authority to say that the President of the United States has indorsed the economics and engineering features of this bill. The President of the United States has stated (and I only can go this far) in his message exactly where he stands—and that is the position of all of us—that these people are entitled to flood relief and flood control. And I deny the statement made here of what it will cost to give that relief and we have given you not our judgment, but the views of the best engineers of the United States as to that item of cost.

Now, I must advert to one matter which is exceedingly humorous. It has been placed before you here by one much more worthy and capable of doing it than myself. That is that Mexico will be damaged by this bill. Here, gentlemen, are the facts; not the statements of those fired with enthusiasm for the passage of this bill or those who are opposing it. The facts, are gentlemen that to run this super-power plant you must release enough water from the reservoir so that after taking the maximum amount for all other purposes dreamed of below the dam you will still have 5,000,000 acre-feet of regulated flow going into Mexico which will treble her cultivated acres. I challenge any gentleman who will adhere to the facts to dispute that there will be 5,000,000 acre-feet of regulated water going down. I would like for some of the gentlemen who are proposing this legislation, before they get through, to tell you why it is they have made the intake to the all-American canal 30 feet higher than much of this land down in Mexico. I am going to let my colleague, Mr. Douglas, explain this; he can do it so much better than I can. Mr. Douglas will tell you I think, if you will ask him the question, very clearly how much new land will be brought in under this scheme; he will tell you how many more millions of dollars will have to be spent before you can bring in any new land.

My friend, Mr. Taylor—and I do not hold him wholly responsible for this, because we are so prone, when we get into the thick of a fight, to grab at some piece of propaganda and wave it in the air and say “This is a sacred document”—adverted to the report of some committee out in my State. Propaganda pure and simple! A photographic copy of a little newspaper item and the facts and details therein stated never happened.

I have been criticized by some gentlemen here in the room as being a minion of the so-called Power Trust. I shall take no time to answer that charge. A certain editor in my State, I am informed, has been induced to write an article, a very scathing article, denouncing me for the baleful influence I have exercised upon the legislature of my State. Another person wrote me a letter very severely criticizing me and charging me with having even misled the press of my State on behalf of this great cyclops of a power trust that has been stalking through the land. I have told you what I think of that

in my report, if you will read the chapter on lobbying. The interesting thing, gentlemen, is that last week I got a letter from this self-same person in which he very abjectly apologized for everything he had said.

Mr. FROTHINGHAM. There are no power companies in competition for this proposition, are there?

Mr. LEATHERWOOD. No. There is a little poem, I think, entitled "Seeing things at night." There have been a good many people seeing things. Something has been said here with reference to my governor. He is of a different political complexion than what I am, but a mighty fine fellow and a very good friend, and I am glad to know that in this controversy out in my country we have not known very much politics. We have all been interested in the welfare of our State. As a matter of fact, a meeting was practically arranged for last week between the governors of the upper basin States and was continued because of the necessity, as I understand, of Governor Emerson, of Wyoming, coming to Washington to attend to some official business. I would be very much delighted to have the chairman of my committee place before this committee the communication which he has from Governor Dern, bearing out the statements which he has made. Governor Dern has stated very succinctly and positively, I think, the attitude of the State from which I come, and you will find that statement in the hearings. I will not make further reference to it.

Mr. RAMSEYER. Would you mind answering a question right there?

Mr. LEATHERWOOD. I am always glad to, if I can.

Mr. RAMSEYER. Take that law of appropriation: Supposing this Taylor Act ceases to operate and then the commission down here proceeds to grant permits for dam sites to develop water power and for other purposes, how is Utah going to protect her interests in that event?

Mr. LEATHERWOOD. So far as the power is concerned?

Mr. RAMSEYER. No; so far as having saved her citizens for the future the water that she would have under the seven-States compact?

Mr. LEATHERWOOD. I am very glad, Mr. Ramseyer, you asked that question. Of course, that involves going back to the Federal water power act and use of water under the law of priority. I have always contended and I still contend that the only safe thing for all these States is a compact, or ultimately we must have a decree of the Supreme Court of the United States, just as Mr. Taylor has said. This question will never be settled otherwise.

Mr. RAMSEYER. Do you agree that a compact is impossible, as Mr. Taylor says, that the route to the Supreme Court would take 10 or 20 years to determine?

Mr. LEATHERWOOD. I would have to violate my promise to the committee, Mr. Ramseyer, to answer that. I would be very glad to do so, but I think Mr. Douglas will, and my physical conditions warns me not to make the attempt at this time.

Mr. RAMSEYER. I am not pressing the question.

Mr. LEATHERWOOD. I want to say this to you, that upon grounds that I have not discussed, I believe that this legislation is unconstitutional and no court will ever uphold it.

Mr. RAMSEYER. Do you discuss that in your report?

Mr. LEATHERWOOD. Yes.

The CHAIRMAN. We will have to adjourn now and will take the matter up further in a few days, as soon as Mr. Douglas is able to appear.

Mr. LEATHERWOOD. There are one or two observations I desire to make in conclusion.

The CHAIRMAN. There is no desire to cut you off, and you can make them at that time.

(The committee thereupon adjourned subject to the call of the chairman.)

BOULDER DAM

HEARING
BEFORE THE
COMMITTEE ON RULES
HOUSE OF REPRESENTATIVES
SEVENTIETH CONGRESS
FIRST SESSION

PART 2



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON
1928

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COMMITTEE ON RULES

HOUSE OF REPRESENTATIVES

SEVENTIETH CONGRESS, FIRST SESSION

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JOHN J. O'CONNOR, New York.

MAUD A. REED, *Clerk*

BOULDER DAM

HOUSE OF REPRESENTATIVES, COMMITTEE ON RULES, *Tuesday, May 2, 1928.*

The committee met at 10 o'clock a. m., Hon. Bertrand H. Snell (chairman) presiding.

The committee had under consideration H. Res. 146 and H. R. 5773, reading as follows:

[H. Res. 146, Seventieth Congress, first session]

RESOLUTION

Resolved, That upon the adoption of this resolution it shall be in order to move that the House resolve itself into the Committee of the Whole House on the state of the Union for the consideration of H. R. 5773, a bill to provide for the construction of works for the protection and development of the lower Colorado River Basin, for the approval of the Colorado River compact and for other purposes. That after general debate, which shall be confined to the bill and shall continue not to exceed six hours, to be equally divided and controlled by those favoring and opposing the bill, the bill shall be read for amendment under the five-minute rule. At the conclusion of the reading of the bill for amendment the committee shall rise and report the bill to the House with such amendments as may have been adopted, and the previous question shall be considered as ordered on the bill and the amendments thereto to final passage without intervening motion except one motion to recommit.

[H. R. 5773, Seventieth Congress, first session]

A BILL To provide for the construction of works for the protection and development of the lower Colorado River Basin, for the approval of the Colorado River compact, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the purpose of controlling the floods, improving navigation, and regulating the flow of the lower Colorado River, providing for storage and delivery of the waters thereof for reclamation of public lands and other beneficial uses within the United States, and for the generation of electrical energy as a means of making the project herein authorized a self-supporting and financially solvent undertaking, the Secretary of the Interior, subject to the terms of the Colorado River compact hereinafter mentioned, is hereby authorized to construct, operate, and maintain a dam and incidental works in the main stream of the Colorado River at Black Canyon or Boulder Canyon adequate to create a storage reservoir of a capacity of not less than twenty million acre-feet of water and a main canal and appurtenant structures located entirely within the United States connecting the Laguna Dam with the Imperial and Coachella Valleys in California: *Provided*, That all contracts for the delivery of water for irrigation purposes provided for in section 5 shall provide that all irrigable land held in private ownership by any one owner in excess of one hundred and sixty acres shall be appraised in a manner to be prescribed by the Secretary of the Interior and the sale prices thereof fixed by the said Secretary on the basis of its actual bona fide value at the date of appraisal without reference to the proposed construction of the irrigation works provided for by this act; and that no such excess lands so held shall receive water from said canal if the

owners thereof shall refuse to execute valid recordable contracts for the sale of such lands under terms and conditions satisfactory to the Secretary of the Interior and at prices not to exceed those fixed by the Secretary of the Interior; also to construct and equip, operate, and maintain at or near said dam, and within a State which has approved the Colorado River compact hereinafter mentioned, a complete plant and incidental structures suitable for the fullest economic development of electrical energy from the water discharged from said reservoir; and to acquire by proceedings in eminent domain, or otherwise, all lands, rights of way, and other property necessary for said purposes.

SEC. 2. (a) There is hereby established a special fund, to be known as the "Colorado River Dam fund" (hereinafter referred to as the "fund"), and to be available, as hereafter provided, only for carrying out the provisions of this act. All revenues received in carrying out the provisions of this act shall be paid into and expenditures shall be made out of the fund, under the direction of the Secretary of the Interior.

(b) The Secretary of the Treasury is authorized to advance to the fund, from time to time and within the appropriations therefor, such amounts as the Secretary of the Interior deems necessary for carrying out the provisions of this act, except that the aggregate amount of such advances shall not exceed the sum of \$125,000,000. Interest at the rate of 4 per centum per annum accruing during the year upon the amounts so advanced and remaining unpaid shall be paid annually out of the fund.

(c) Moneys in the fund advanced under subdivision (b) shall be available only for expenditures for construction and the payment of interest, during construction, upon the amounts so advanced. No expenditures out of the fund shall be made for operation and maintenance except from appropriations therefor.

(d) The Secretary of the Treasury shall charge the fund as of June 30 in each year with such amount as may be necessary for the payment of interest on advances made under subdivision (b) at the rate of 4 per centum per annum accrued during the year upon the amounts so advanced and remaining unpaid, except that if the fund is insufficient to meet the payment of interest the Secretary of the Treasury may, in his discretion, defer any part of such payment, and the amount so deferred shall bear interest at the rate of 4 per centum per annum until paid.

(e) The Secretary of the Interior shall certify to the Secretary of the Treasury, at the close of each fiscal year, the amount of money in the fund in excess of the amount necessary for construction, operation, and maintenance, and payment of interest. Upon receipt of each such certificate, the Secretary of the Treasury is authorized and directed to charge the fund with the amount so certified as repayment of the advances made under subdivision (b), which amount shall be covered into the Treasury to the credit of miscellaneous receipts.

SEC. 3. There is hereby authorized to be appropriated from time to time, out of any money in the Treasury not otherwise appropriated, such sums of money as may be necessary to carry out the purposes of this act, not exceeding in the aggregate \$125,000,000.

SEC. 4. (a) No work shall be begun and no moneys expended on or in connection with the works or structures provided for in this act, and no water rights shall be claimed or initiated hereunder, and no steps shall be taken by the United States or by others to initiate or perfect any claims to the use of water pertinent to such works or structures until the States of California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have approved the Colorado River compact mentioned in section 12 hereof and shall have consented to a waiver of the provisions of the first paragraph of Article XI of said compact, which makes the same binding and obligatory only when approved by each of the seven States mentioned in said section 12, and shall have approved said compact without condition save that of such six-State approval, and until the President by public proclamation shall have so declared.

(b) Before any money is appropriated or any construction work done or contracted for, the Secretary of the Interior shall make provision for revenues, by contract or otherwise, in accordance with the provisions of this act, adequate, in his judgment, to insure payment of all expenses of operation and maintenance of said works incurred by the United States and the repayment, within fifty years from the date of the completion of the project, of all amounts advanced to the fund under subdivision (b) of section 2, together with interest thereon.

SEC. 5. That the Secretary of the Interior is hereby authorized, under such general regulations as he may prescribe, to contract for the storage of water in said reservoir and for the delivery thereof at such points on the river and on

said canal as may be agreed upon, for irrigation and domestic uses, and delivery at the switchboard to municipal corporations, political subdivisions, private corporations, and persons of electrical energy generated at said dam, upon charges that will provide revenue which, in addition to other revenue accruing under the reclamation law and under this act, will in his judgment cover all expenses of operation and maintenance incurred by the United States on account of works constructed under this act and the payments to the United States under subdivision (b) of section 4. Contracts respecting water for irrigation and domestic uses shall be for permanent service. No person shall have or be entitled to have the use for any purpose of the water stored as aforesaid except by contract made as herein stated:

After the repayments to the United States of all money advanced with interest, charges shall be on such basis and the revenues derived therefrom shall be disposed of as may hereafter be prescribed by the Congress.

General and uniform regulations shall be prescribed by the said Secretary for the awarding of contracts for the sale and delivery of electrical energy, and for renewals under subdivision (b) of this section, and in making such contracts the following shall govern:

(a) No contract for electrical energy shall be of longer duration than fifty years from the date at which such energy is ready for delivery.

(b) The holder of any contract for electrical energy, not in default thereunder, shall be entitled to a renewal thereof upon such terms and conditions as may be authorized or required under the then existing laws and regulations, unless the property of such holder dependent for its usefulness on a continuation of the contract be purchased or acquired and such holder be compensated for damages to its property, used and useful in the transmission and distribution of such electrical energy, and not taken resulting from the termination of the supply.

(c) Contracts for the sale and delivery of electrical energy shall be made with responsible applicants therefor who will pay the price fixed by the said Secretary with a view to meeting the revenue requirements of the project as herein provided for. In case of conflicting applications, if any, such conflicts shall be resolved by the said Secretary, after hearing, with due regard to the public interest, and in conformity with the policy expressed in the Federal Water Power Act as to conflicting applications for permits and license: *Provided, however,* That no application of a political subdivision for an allocation of electrical energy shall be denied or another application in conflict therewith be granted on the ground that the bond issue of such political subdivision, necessary to enable the applicant to utilize the electrical energy applied for, has not been authorized or marketed, until after a reasonable time, to be determined by the said Secretary, has been given to such applicant to have such bond issue authorized and marketed.

(d) Any agency receiving a contract for electrical energy equivalent to one hundred thousand firm horsepower, or more, may, when deemed feasible by the said Secretary, from engineering and economic considerations and under general regulations prescribed by him, be required to permit other similar agency having contracts hereunder for less than the equivalent of twenty-five thousand firm horsepower to participate in the benefits and use of any main transmission line constructed by the former for carrying such energy (not exceeding, however, one-fourth the capacity of such line), upon payment by such other agencies of a reasonable share of the cost of construction, operation, and maintenance thereof.

The use is hereby authorized of such public and reserved lands of the United States as the said Secretary shall determine to be necessary or convenient for the construction, operation, and maintenance of main transmission lines to transmit said electrical energy.

SEC. 6. That the dam and reservoir provided for by section 1 hereof shall be used: First, for river regulation, improvement of navigation, and flood control; second, for irrigation and domestic uses and satisfaction of present perfected rights in pursuance of Article VIII of said Colorado River compact; and third, for power. The title to said dam, reservoir, plant, and incidental works shall forever remain in the United States, and the United States shall until otherwise provided by Congress control, manage, and operate the same: *Provided, however,* That the Secretary of the Interior may, in his discretion, enter into contracts of lease of a unit or units of said plant, with right to generate electrical energy, or, alternatively, to enter into contracts of lease for the use of water for the generation of electrical energy, within a State which has approved said Colorado River Compact, in either of which events the provisions of section 5 of this act relating to revenue, term, renewals, determination of conflicting applications, and joint

use of transmission lines under contracts for the sale of electrical energy, shall apply.

The Secretary of the Interior shall prescribe and enforce rules and regulations conforming with the requirements of the Federal water power act, together with the rules and regulations of the Federal Power Commission thereunder, respecting maintenance of works in condition of repair adequate for their efficient operation; maintenance of a system of accounting, control of rates and service in the absence of State regulation or interstate agreement, valuation for rate-making purposes, transfers of contracts, contracts extending beyond the lease period, expropriation of excessive profits, emergency use by the United States of property of lessees, and penalties for enforcing regulations made under this act or penalizing failure to comply with such regulations or with the provisions of this act. He shall also conform with other provisions of the Federal water power act and of the rules and regulations of the Federal Power Commission which have been devised or which may be hereafter devised for the protection of the investor and consumer.

SEC. 7. That the Secretary of the Interior may, in his discretion, when repayments to the United States of all money advanced, with interest, shall have been made, transfer the title to said canal and appurtenant structures to the districts or other agencies in the United States having a beneficial interest therein in proportion to their respective capital investments under such form of organization as may be acceptable to him. The said districts or other agencies shall have the privilege at any time of utilizing by contract or otherwise such power possibilities as may exist upon said canal, in proportion to their respective contributions or obligations toward the capital cost of said canal and appurtenant structures from and including the diversion works to the point where each respective power plant may be located. The net proceeds from any power development on said canal shall be paid into the fund and credited to said districts or other agencies on their said contracts, in proportion to their rights to develop power, until the districts or other agencies using said canal shall have paid thereby and under any contract or otherwise an amount of money equivalent to the operation and maintenance expense and cost of construction thereof.

SEC. 8. (a) All appropriations of water from the Colorado River, incident to or resulting from the construction, use, and operation of the works herein authorized, shall be made and perfected in and in conformity with the laws of those States which may or shall have approved the Colorado River compact ratified in section 12 of this act.

(b) The United States, its permittees, licensees, and contractees, and all users and appropriators of water stored, diverted, carried, and/or distributed by the reservoir, canals, and other works herein authorized, shall observe and be subject to and controlled by said Colorado River compact in the construction, management, and operation of said reservoir, canals, and other works and the storage, diversion, delivery, and use of water for the generation of power, irrigation, and other purposes, anything in this act to the contrary notwithstanding, and all permits, licenses, and contracts shall so provide.

(c) Also the United States, in constructing, managing, and operating the dam, reservoir, canals, and other works herein authorized, including the appropriation, delivery, and use of water for the generation of power, irrigation, or other uses, and all users of water thus delivered and all users and appropriators of waters stored by said reservoir and/or carried by said canal, including all permittees and licensees of the United States or any of its agencies, shall observe and be subject to and controlled, anything to the contrary herein notwithstanding, by the terms of such compact, if any, between the States of Arizona, California, and Nevada, or any two thereof, for the equitable division of the benefits, including power, arising from the use of water accruing to said States, subsidiary to and consistent with said Colorado River compact, which may be negotiated and approved by said States and to which Congress shall give its consent and approval on or before June 1, 1928; and the terms of any such compact concluded between said States and approved and consented to by Congress after said date: *Provided*, That in the latter case such compact shall be subject to all contracts, if any, made by the Secretary of the Interior under section 5 hereof prior to the date of such approval and consent by Congress: *Provided further*, That in the event no such compact is entered into prior to June 1, 1928, then there shall be reserved for acquisition by the States of Arizona and Nevada, their respective agents, licensees, or assignees, at the switchboard, at the plant or plants operated through the use of water impounded by said dam for each, electrical energy equivalent to 15 per centum of the total electrical energy made available by the use of such impounded water, to be contracted for by said respective States, or their agents,

licensees, or assignees, within six months after notice by the Secretary of the Interior, and to be paid for as and when said electrical energy is ready for delivery. If said plant or plants are operated by the Government, then said electrical energy shall be delivered on the terms and charges provided in the general regulations for delivery of electrical energy at the switchboard to municipal corporations and political subdivisions.

(d) Nothing in this Act shall be deemed to waive any of the rights or powers reserved or granted to the United States by paragraph 7 of section 20 of the act providing for the admission of Arizona, approved June 20, 1910, and by the tenth paragraph of Article XX of the constitution of Arizona, but the Secretary of the Interior is authorized on behalf of the United States to exercise such of said rights and powers as may be necessary or convenient for the construction and use of the works herein authorized and for carrying out the purposes of this act.

Sec. 9. That all lands of the United States found by the Secretary of the Interior to be practicable of irrigation and reclamation by the irrigation works authorized herein shall be withdrawn from public entry. Thereafter, at the direction of the Secretary of the Interior, such lands shall be opened to entry, in tracts varying in size but not exceeding one hundred and sixty acres, as may be determined by the Secretary of the Interior, in accordance with the provisions of the reclamation law, and any such entryman shall pay an equitable share in accordance with the benefits received, as determined by the said Secretary, of the construction cost of said canal and appurtenant structures; said payments to be made in such installments and at such times as may be specified by the Secretary of the Interior, in accordance with the provisions of the said reclamation law, and shall constitute revenue from said project and be covered into the fund herein provided for: *Provided*, That all persons who have served in the United States Army, Navy, or Marine Corps during the war with Germany, the war with Spain, or in the suppression of the insurrection in the Philippines, and who have been honorably separated or discharged therefrom or placed in the Regular Army or Navy Reserve, shall have the exclusive preference right for a period of three months to enter said lands, subject, however, to the provisions of subsection c of section 4, Act of December 5, 1924 (Forty-third Statutes at Large, page 702); and also, so far as practicable, preference shall be given to said persons in all construction work authorized by this Act: *Provided further*, That in the event such an entry shall be relinquished at any time prior to actual residence upon the land by the entryman for not less than one year, lands so relinquished shall not be subject to entry for a period of sixty days after the filing and notation of the relinquishment in the local land office, and after the expiration of said sixty-day period such lands shall be open to entry, subject to the preference in this section provided.

Sec. 10. That nothing in this act shall be construed as modifying in any manner the existing contract, dated October 23, 1918, between the United States and the Imperial Irrigation District, providing for a connection with Laguna Dam; but the Secretary of the Interior is authorized to modify the said contract, with the consent of the said district, and also to enter into contract or contracts with the said district or other districts, persons, or agencies for the construction, in accordance with this act, of said canal and appurtenant structures, and also for the operation and maintenance thereof, with the consent of the other users.

Sec. 11. "Political subdivision" or "political subdivisions" as used in this act shall be understood to include any State, irrigation, or other district, municipality, or other governmental organization.

"Reclamation law" as used in this act shall be understood to mean that certain act of the Congress of the United States approved June 17, 1902, entitled "An act appropriating the receipts from the sale and disposal of public land in certain States and Territories to the construction of irrigation works for the reclamation of arid lands," and the acts amendatory thereof and supplemental thereto.

"Maintenance" as used herein shall be deemed to include in each instance provision for keeping the works in good operating condition.

Sec. 12. (a) The Colorado River compact signed at Santa Fe, New Mexico, November 24, 1922, pursuant to act of Congress approved August 19, 1921, entitled "An act to permit a compact or agreement between the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming respecting the disposition and apportionment of the waters of the Colorado River, and for other purposes," is hereby approved by the Congress of the United States, and the provisions of the first paragraph of article 11 of the said Colorado River compact, making said compact binding and obligatory when it shall have been approved by the legislature of each of the signatory States, are hereby waived, and this

approval shall become effective when at least six of the signatory States, including the State of California, shall have approved or may hereafter approve said compact as aforesaid and shall consent to such waiver.

(b) The rights of the United States in or to waters of the Colorado River and its tributaries howsoever claimed or acquired, as well as the rights of those claiming under the United States, shall be subject to and controlled by said Colorado River compact.

(c) Also all patents, grants, contracts, concessions, leases, permits, licenses, rights of way or other privileges from the United States or under its authority, necessary or convenient for the use of waters of the Colorado River or its tributaries, or for the generation or transmission of electrical energy generated by means of the waters of said river or its tributaries, "including all permits, licenses, leases, or other privileges approved or issued under the provisions of the Federal Water Power Act, approved June 10, 1920," shall be upon the express condition and with the express covenant that the rights of the recipients or holders thereof to waters of the river or its tributaries, for the use of which the same are necessary, convenient, or incidental, and the use of the same shall likewise be subject to and controlled by said Colorado River compact.

(d) The conditions and covenants referred to herein shall be deemed to run with the land and the right, interest, or privilege therein and water right, and shall attach as a matter of law, whether set out or referred to in the instrument evidencing any such patent, grant, contract, concession, lease, permit, license, right of way or other privilege from the United States or under its authority, or not, and shall be deemed to be for the benefit of and be available to the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming, and the uses of water therein or thereunder by way of suit, defense, or otherwise, in any litigation respecting the waters of the Colorado River or its tributaries.

SEC. 13. This act shall be deemed a supplement to the reclamation law, which said reclamation law shall govern the construction, operation, and management of the works herein authorized, except as otherwise herein provided.

SEC. 14. The Secretary of the Interior is authorized and directed to make investigation and public reports of the feasibility of projects for irrigation, generation of electric power, and other purposes in the States of Arizona, Colorado, New Mexico, Utah, and Wyoming for the purpose of making such information available to said States and to the Congress, and of formulating a comprehensive scheme of headwater control and the improvement and utilization of the water of the Colorado River and its tributaries. The sum of \$250,000 is hereby authorized to be appropriated from said Colorado River Dam fund, created by section 2 of this act, for such purposes.

SEC. 15. That the short title of this act shall be "Boulder Canyon project act."

The CHAIRMAN. The committee will come to order. At the last hearing the proponents of this bill had 1 hour and 25 minutes and the opponents 15 minutes. If it is agreeable, I thought we would give the opponents to-day 1 hour and 25 minutes and the proponents 15 minutes. That will make an even division of time. Will that be satisfactory, Mr. Swing?

Mr. SWING. Whatever the committee decides.

The CHAIRMAN. Mr. Douglas, we will be pleased to hear you.

Mr. LEATHERWOOD. Mr. Chairman, if it is agreeable to the committee, I want to add one or two remarks to those I have already made, and then I want to surrender the rest of my time to Mr. Douglas. If Mr. Douglas would yield, I prefer to finish what I was saying.

The CHAIRMAN. Very well.

STATEMENT OF HON. ELMER O. LEATHERWOOD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF UTAH

Mr. LEATHERWOOD. Mr. Chairman and gentlemen of the committee. The chairman of the Committee on Irrigation and Reclamation at the hearing the other day before this committee, pursued much the same line of argument that he pursued something over a year ago,

and that was that the urgent necessity for flood control demanded that Congress should act, and act quickly, in this matter.

I have never heard my distinguished chairman, however, explain why, if the menace is so great to the people in the Imperial Valley, he is so insistent upon a program that means the deferring of flood-control for at least seven or eight years.

They told us last year there was an impending flood. It did not materialize. Mr. Smith told us the other day that there is another impending flood, and while I am not a prophet, I will say to you gentlemen that it will not materialize, knowing what I do of conditions in the Colorado River Basin.

I could not help but wonder whether or not, when the chairman urged so strenuously that this program be followed out, he had in mind that the only engineer of any considerable reputation outside of the engineers attached to the Reclamation Department, that has appeared before our committee and indorsed the Boulder Dam, was Mr. Mulholland, who had charge of the construction of the St. Francis Dam, that recently went out, as we are led to believe by the reports, from faulty construction, and carried with it death and destruction to something like 400 human beings and a property loss of something like thirty millions of dollars.

I wonder if it has occurred to any of the proponents of this bill, in urging the great necessity of flood control, that there might be some faulty construction of this dam which is to be twice as high as any known dam in the world, and is to be located in the very heart of an earthquake zone.

I think in the January or February issue of the Literary Digest there appeared a map showing the regions of seismic disturbances in that country, and two of the central areas located are in the immediate vicinity of this dam.

I just want, in passing, gentlemen, to call to your attention the danger to Imperial Valley that would result from building a high dam in a region subject to seismic disturbances. This dam would hold back 26,000,000 acre-feet of water, that might by faulty construction or earthquake shock be released at any time only to destroy all life and property in the valley from Boulder Canyon to the Gulf of California.

I simply suggest this for my distinguished chairman's consideration when he urges the placing of this great dam at Boulder Canyon. My recollection is that the record shows now that one witness before our committee testified what he had actually observed in this particular locality during an earthquake shock and at another time soon after a shock, and what the effects had been upon the walls of the canyon. It is for the Congress of the United States to determine whether or not flood protection is being provided or whether if we pass this legislation and place this gigantic engineering enterprise where it is proposed to be located, and of the height it is proposed to make it, we are not simply placing there that which might not only injure property, but obliterate life and property in the entire valley below the dam.

I can not refrain, gentlemen, at this time from adverting to another thing which has attracted the attention of the people of the upper basin States, and that is that not only the chairman of the Irrigation Committee, but other gentlemen have told us that the urgent

necessity of this legislation was such that our asking to be protected as to our equitable rights in the river must take a secondary place.

We have been told that the courts were open to us if we did not like this legislation. We have been told that the necessities of Southern California were so great that this enterprise ought not to be held in abeyance, according to the request of the governors of the upper basin States, and that it should go forward, because the people of California want it.

Mr. MICHENER (interposing). Right at that point, are the governors of the upper States requesting that we hold it in abeyance further?

Mr. LEATHERWOOD. The governors of the upper States, according to the resolution, as I understand the situation, Mr. Michener, believe that it is wise to not have any legislation at this particular time.

Mr. MICHENER. That was in the resolution passed when—in January?

Mr. LEATHERWOOD. The resolution was passed in December.

The CHAIRMAN. December 19.

Mr. MICHENER. Is that their attitude to-day?

Mr. LEATHERWOOD. That is their attitude to-day.

Mr. RAMSEYER. The resolution does not refer to this session of Congress at all.

Mr. LEATHERWOOD. No; but having attended the convention and having talked with most of them, I think I know what their attitude is, Mr. Ramseyer.

Mr. BURTON. Are you quite sure that that is their present attitude?

Mr. LEATHERWOOD. I am, so far as my own State is concerned. I am not at liberty to speak for any other State than my own. I have not been advised of any change in their attitude, and I know what the attitude of my own State is, and I speak of my own knowledge as to that.

I said that we had been told that this legislation is so urgent that it must go forward irrespective of our equitable rights.

I could not help but draw a parallel, gentlemen, when recently the same committee that is urging the passage of this legislation had under consideration the Columbia Basin project. The States of two members of the Irrigation Committee that have been urging the passage of this legislation, the gentleman from Montana, Mr. Leavitt, and the gentleman from Idaho, Mr. Smith, would both be affected by that project.

The beautiful lakes of northern Idaho would perhaps be changed in their level. They would probably not be scenically so beautiful if this project should be initiated and carried out as it is proposed, and at the very threshold, the gentleman from Idaho, Mr. Smith, and the gentleman from Montana, Mr. Leavitt, said the legislation could not go forward until there was an amendment put into the bill providing that all of the States in the basin to be affected by the proposed project in the Columbia River Basin should enter into, and execute a compact between themselves, which must be ratified by the Government. That is what the Upper Basin States of the Colorado River Basin have claimed they were entitled to; that they were entitled to the protection of a compact.

And I want to say to the credit of the gentlemen upon the committee that they all extended that relief which the gentleman from Montana and the gentleman from Idaho so much wanted, and put into that bill the desired amendment, holding the legislation in abeyance until the States have agreed as between themselves and executed a binding compact with reference to the waters of this river.

We did not tell them—well, I did suggest to the gentleman from Idaho that the courts were open to his people—but the committee did not tell these gentlemen to go into the courts. The committee did not tell them that because the State of Washington wanted this, the other States should lose their rights.

The committee did not tell them that the Government owned and controlled the unappropriated waters of their streams, as this bill is saying to the Upper Basin States.

The committee gave to these gentlemen what it ought to give them in equity and good conscience. We put into the bill an amendment which protects Idaho, protects Montana, protects Washington, and holds the legislation in abeyance until these States shall have settled and fully settled the question of the allocation of the waters of the river.

I trust, Mr. Chairman, and gentlemen of the committee, that no Member of Congress, and that the distinguished chairman of my committee will never again find himself in a position where he is unwilling to extend to the citizens of a sister State the same rights and the same protection which he claims for the citizens of his own State.

The CHAIRMAN. Mr. Leatherwood, will you yield there for a question?

Mr. LEATHERWOOD. I will.

The CHAIRMAN. According to the contention of the gentleman from Colorado, Mr. Taylor, as I recall it, this is the only way that those Upper Basin States can be protected, that is, by the construction of this dam by the Federal Government. I took that from his argument the other day.

Mr. LEATHERWOOD. In substance, I understood the gentleman from Colorado to say that there were but two ways by which this question of the allocation of the waters of the Colorado River could be settled, under the theory of the doctrine of prior appropriation, which we all hold the Supreme Court of the United States has never rejected; first by a compact or a contract between the States ratified by the Congress of the United States; and secondly by a decree of a court of competent jurisdiction.

That, Mr. Chairman, raises the question that has been raised before, that Congress does not have power to allocate the waters, the unappropriated waters of a stream, where the law of prior appropriation governs.

And I still maintain that the Congress of the United States has no power to allocate these waters, and what I understood the gentleman from Colorado to say was that there were the two ways which I have referred to.

Mr. POUL. The power of the United States Government is predicated upon the navigability of the stream, is it not?

Mr. LEATHERWOOD. It never has been until this last bill was framed. I refer you to the navigation chapter in my minority report.

Mr. BURTON. In what?

Mr. LEATHERWOOD. The navigation chapter of my minority report. I think that that covers it.

Mr. RAMSEYER. The navigability of the stream depends upon an act of Congress, not whether steamboats go up or down it.

Mr. POE. I know, but the act of Congress is predicated upon the idea that the stream may be navigable.

Mr. FROTHINGHAM (interposing). It can be made so by Congress.

Mr. LEATHERWOOD. I trust, gentlemen, you will not expect me to take the time of Mr. Douglas to argue that.

Mr. RAMSEYER. Will you yield for a question there?

Mr. LEATHERWOOD. I would like to finish this first, and then I shall be glad to yield.

I do not dispute the constitutional provisions of the power of Congress so far as navigation is concerned, but the mere declaration that a stream is navigable does not make it so, even though Congress should, under the theory of navigation, proceed.

Going back, the first decision on this question, I think, was by Chief Justice Marshall.

Congress, in exercising its constitutional right and power given to it, must exercise it upon the theory that it is actually for the benefit of navigation, and not under a mere pretext—Justice Marshall says you never can under the pretext of aiding navigation, go in and do something that is not for the primary development of navigation.

If you will keep in mind what they propose to put into this river, I think you have answered the navigation question.

Now I will yield to Mr. Ramseyer.

Mr. BURTON. At the same time, may I say, Mr. Leatherwood, the courts have been exceedingly liberal in declaring a stream to be navigable; even a very trivial form of navigation impresses upon a channel the qualities of a navigable stream, and the fact that a part of it is navigable impresses upon the whole stream that quality.

Mr. LEATHERWOOD. I realize that tendency, Senator, and I will call your attention to another question; that even if you concede that this stream is navigable, as a matter of fact and law, there is no authority for the Government to go ahead and do some of the other things that are proposed.

In other words, in the exercise of the power given to the Government under the navigation clause—it does not give the Government the power to trifle with our water rights other than simply to regulate for navigation, or to go into a business not contemplated; that is, exercise a power not conveyed to Congress by the Constitution.

Now, a very interesting question, Senator, and one which I hope irrespective of this legislation you will direct your attention to, is a question which is involved in this bill.

Arizona is claiming she must have some revenue. * Can the United States Government be exempt from taxation on property that is used by the Government for a function not contemplated within the Constitution?

And that question is coming to the United States Supreme Court at this time, arising out of a controversy with reference to a wharf up in the vicinity of New York.

It will be the first time that the Federal court will have passed upon that question as to whether the mere fact that the Government is using property for some purpose exempts it from taxation, unless

the purpose to which the Government is putting the property and using the property comes within a constitutional power conferred upon the general Government.

Mr. RAMSEYER. In view of the interstate and the international character of this stream, do you think that any one State by itself can protect itself in what it is equitably entitled to in the way of the use of water, either for power or irrigation? I just want to get your viewpoint, yes or no, if you care to answer it that way. I do not care to go into an extended discussion of it.

Mr. LEATHERWOOD. I never have evaded answering any question I could answer. Now, if you will state it again, please.

Mr. RAMSEYER. I said, in view of the interstate and international character of this stream, can any one of those States acting by itself protect itself in the use of the water to which it is equitably entitled?

Mr. LEATHERWOOD. That presupposes first that it can protect itself, if you take the bare law of prior appropriation, by making a beneficial use of it prior to the sister States.

Mr. RAMSEYER. That is, to get in ahead of the others?

Mr. LEATHERWOOD. Yes; ahead of the others.

Mr. RAMSEYER. But is there any way now——

Mr. LEATHERWOOD (interposing). Let me finish the answer. I do not want to leave you confused.

Mr. RAMSEYER. Well, I may be confused; go on.

Mr. LEATHERWOOD. I do not want to leave this answer so that it appears that I am confused. You may not be confused.

Without the application of that law, of course, there must be arrangements by which the States by agreement suspend, so to speak, the law of prior appropriation, or a court of competent jurisdiction must act.

Mr. RAMSEYER. That takes me to the second question.

Mr. LEATHERWOOD. Have I answered your first question? Let us see if we agree on that.

Mr. RAMSEYER. I understand it. I think we are correct there. I understand your viewpoint and I think it is logical. Now, we come to the second question. Of course, if the seven States agree and Congress ratifies, each State will be protected as to a certain quantity of water for a time. No water power commission can come in, or anything else, and appropriate water down the stream or up the stream so as to deprive that State of the use of the water which it may not require yet for 50 or 100 years. The query is this: Is it your viewpoint that any one State there can, for a good reason, or no reason, block an agreement on the part of the States with the consent of Congress, to protect those States, including the objecting State, in the beneficial use of water which it may not require for 50 years?

Mr. LEATHERWOOD. I am very glad that you asked that question, and I shall only give a very superficial answer, because my colleague, Mr. Douglas, is going to discuss that question.

Mr. RAMSEYER. I shall be glad to hear him.

Mr. LEATHERWOOD. Now, if a sister State—that is, if one of the States in the basin—first fails to go into the compact, of course, it is not bound by any compact that might be entered into by the other six, there being seven in this basin.

Mr. RAMSEYER. Yes.

Mr. LEATHERWOOD. Just the same as if seven of we gentlemen should contemplate the negotiation of a contract, and you should determine ultimately to stay out, you would not be bound by the terms of the contract. Upon the other six, if they executed the contract, as far as they are concerned, I take it that it would be binding.

Mr. RAMSEYER. On the States that enter into the compact?

Mr. LEATHERWOOD. On the six that enter into it; yes. The question, and the serious question which arises in this case, is whether a less number than all of the States in the basin can by contract settle any of the rights of the nonratifying State, assuming that the doctrine that the States own and control the unappropriated waters of the river, is the law of the land out there. We content that it is, and it never has been set aside by the courts. In other words, I contend that this bill could not traffick or barter away or in any way bind a nonratifying State as to its rights in the river, and that a lesser number as between themselves might bind themselves but could not traffick in the property in which the nonratifying State has a common interest.

Mr. RAMSEYER. One more question and I am going to stop. That is this: Suppose that there is no compact and suppose this Taylor Act which expires the 5th of March, 1929, comes to an end, and suppose that the Water Power Commission, in pursuance of its rights, grants licenses for the use of water, etc. Have the states any way to protect themselves against this appropriation of water?

Mr. LEATHERWOOD. Again I might use the language of the distinguished chairman of my committee and say that I think the courts would be open for the settlement of the controversy then.

Mr. RAMSEYER. I do not know. Suppose these water-power companies go in and they appropriate so much water before the courts get hold of it. Then where are you?

Mr. LEATHERWOOD. Of course, that raises a question that would take considerable time to answer, but you can always raise a hypothesis, gentlemen, under which you might lose your rights.

Mr. BANKHEAD. Instead of that being a hypothesis, is it not a practical probability—that is, that those things that Mr. Ramseyer has suggested will take place?

Mr. LEATHERWOOD. I am going to ask that you permit Mr. Douglas to answer that question. I indorse anything he says upon this and his views are the same as my own. I would be glad to discuss it only I would be trespassing on his time which he needs to present the case of his State.

I have but one other thought, and that is with reference to the time asked for by this resolution.

It provides for six hours of time. Now, if this committee in its wisdom should see fit to advance this bill on the legislative calendar by granting a rule, without any reflection upon any person, I concede and I think you will concede that gentlemen who are not familiar with the doctrine of water rights out in that arid country, will find very many perplexing questions in this bill. If Congress is to vote upon this question intelligently, if it is to come to a vote, it ought not to vote upon it until there has been ample time to explain just such questions as have arisen in the mind of the gentleman from Iowa and other gentlemen who have asked questions here.

You can only vote upon it intelligently by giving sufficient time to debate and explain the bill to the membership of the House, and for that reason, gentlemen, I suggest to you that there is no more important bit of legislation proposed than this. It is vital. It affects the very life of seven States. It involves an expenditure, we believe, not of \$125,000,000, but before it is over of \$300,000,000.

I say that because the Hetch-Hetchy project originally when it was urged—that is the necessity of it; and the argument for it was the same as in this case—was estimated at \$45,000,000, and now the most conservative estimate after it is less than half finished is that it will take \$174,000,000 to finish it.

So I say it will involve in our judgment an expenditure of at least \$300,000,000.

Now, with a bill of that importance, involving so much money to be taken from the Treasury of the United States, Congress should hear a fair presentation of the problems in this bill, by both the proponents and the opponents of it.

So, gentlemen, I earnestly hope that if, after you have deliberated upon it, you conclude that it is a matter which should be brought before the House by a rule, that you give not less than 16 hours of debate in order that this matter may be placed fully before the House, both the law involved, and the effect that it will have upon the several States.

I thank you, and I trust that the committee and the gentleman who are to follow me will not feel that I am discourteous if I do not stay throughout the session of the committee.

The CHAIRMAN. Thank you, Mr. Leatherwood.

We will hear Mr. Douglas.

STATEMENT OF HON. LEWIS W. DOUGLAS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA

Mr. DOUGLAS. Mr. Chairman and gentlemen of the committee, I would like to extend my appreciation of your courtesy in delaying this hearing so that I might have recovered from a displaced vertebra which prevented me from appearing before.

Have you made a notation of the questions you would like to ask me, Mr. Ramseyer?

Mr. RAMSEYER. You proceed with your statement, and probably I will propound similar questions to you as I propounded to Mr. Leatherwood, especially the last question. Present your case in your own way; at least, that is the custom before the committee, to let the witness proceed and then cross-examine him afterwards.

The CHAIRMAN. Proceed, Mr. Douglas.

Mr. DOUGLAS. Mr. Chairman and gentlemen of the committee, I appear before you as a member of the Committee on Irrigation and Reclamation and as an opponent of the Boulder Dam bill, H. R. 5773. I assume that this committee in arriving at a conclusion as to whether a bill should be given a rule, considers the question of necessity for legislation embodied in such a bill and the question of policy, the nature of the investigation which has been given to and the authority for it. I shall therefore confine my remarks in opposition to H. R. 5773 to the issues.

In discussing the issues I shall of necessity speak in part of the merits of the measure under consideration, but I shall not go into the question in full detail as to whether the bill is meritorious or whether it is not.

However, before speaking of the issues I would like to make a few remarks with reference to certain allegations which have in the past been made both before this committee and elsewhere, and which will, I have no doubt, be made by the gentleman who follows me.

Much has been said by Members of Congress—perhaps even more has been written in a certain type of newspaper and tabloid—about the “power lobby” or “power trust.”

It seems to have become the custom to brand any one who opposes H. R. 5773 with the brand of the power lobby and the power trust.

Such allegations, Mr. Chairman, are not relevant. The bill is good or bad, regardless of who supports it or who opposes it. The bill should stand upon its own feet.

Members of Congress should not be influenced, or rather, attempts to influence Members of Congress should not be made by unwarranted appeals to prejudice. But since some of the proponents of the bill have attempted to impugn those who have opposed the bill in the past, and since they have attempted and certain newspapers have attempted to make appeals to prejudice, I think that this committee should be informed, slightly at least, of the activities of the proponents.

It is relevant to point out that the public-service commissioners of the city of Los Angeles appropriated a sum of not to exceed \$1,500 per month to the Boulder Dam Association for the purpose of—and here I quote the words of the resolution passed by the public-service commissioners of the city of Los Angeles on March 31, 1924:

inducing Congress to provide the necessary funds for the construction of a high-storage dam at or near Boulder Canyon on the Colorado River, because of the fact that such dam, besides insuring protection to Imperial Valley and other menaced sections against the flood of the Colorado River—

Mr. PURNELL. What was the date of that resolution? I did not get it.

Mr. DOUGLAS. March 21, 1924.

and greatly extending irrigation in the lower Colorado Basin, will make possible the development of a great amount of hydroelectric power.

It is relevant to point out that the secretary of the Boulder Dam Association, Mr. Burdette Moody, is also the business manager of the board of public service of the city of Los Angeles. It is pertinent to point out that the city of Los Angeles has maintained at least two of its officials in Washington to persuade Congress to appropriate the necessary funds for the construction of a high dam at Boulder Canyon; and that is a matter of record before the public service commissioners of the city of Los Angeles.

It is pertinent to inquire into the source of the boxes of grapefruit and almonds that have been presented to Members of Congress. It is pertinent to inquire as to the source of the moneys expended in the entertainment and traveling expenses of Members of Congress who have been taken to the Boulder Dam site, the Imperial Valley, and southern California. It is pertinent to inquire into the reasons for the special train which came to Washington in 1927, loaded with

lobbyists for the Swing-Johnson bill. It is pertinent to inquire into the source from which the newspaper photographs and advertisements for the project have come, and into the source of the funds or contributions in payment thereof.

It is pertinent to inquire into why, the day before yesterday, the city of Los Angeles appropriated another \$1,000 a month for the purpose of persuading the Congress to appropriate funds for the construction of a high dam at Boulder Canyon.

There are other items which might be mentioned, but which I out of courtesy will not mention, unless there are unjustifiable steps taken to impugn the honor and integrity of the able engineers who may disagree with the gentlemen from California; those are items expended by the Imperial irrigation district, and items expended by the Boulder Dam Association.

Mr. Chairman, I regret that I have gone into the subject of lobbying because, as I have said, I do not think it is relevant, but inasmuch as the proponents of the bill have chosen to more than mention the subject, I feel that this committee should have some knowledge of the activities of the proponents. What is sauce for the goose, Mr. Chairman, is sauce for the gander.

This bill is either good or it is bad, and it should be analyzed according to its provisions.

The gentleman who will follow me will doubtless speak of the necessity for flood control; he will doubtless speak of the necessity for domestic water; he will doubtless speak of the great benefits which the southwestern part of the country will derive as a result of the construction of this great project; he may speak of the necessity for power. I doubt whether he will speak of the necessity of improving navigation. He will doubtless speak of the international obligations, and difficulties. He may speak of the right of the Federal Government to allocate waters among the States.

Mr. Chairman, I shall go into these various alleged necessities in some detail because they are relevant to the issue. I shall handle them under the general head, "There is no pressing emergency on the Colorado River."

First, Mr. Chairman, I shall take up the question of domestic water. There is no question but that the use of water for domestic purposes is the highest to which it can be put. The proponents of the bill, the lobbyists of the city of Los Angeles and of the Boulder Dam Association, have maintained that the city of Los Angeles either is now or will shortly be inadequately supplied with water for domestic purposes. I have pointed out in my minority report that the Federal investigations, the investigations undertaken by Federal bureaus, indicate that the city of Los Angeles can at least more than double its present water supply from Owens Valley, the present source of its gravity water, and that by so doing, the city of Los Angeles will be able to develop sufficient power largely to compensate for the cost of obtaining such additional water when and if necessary.

I shall now quote the report of Mr. W. M. McClure, State engineer of California, submitted to Governor Richardson of California, and dated December 26, 1924:

Keeping in mind the failure of every one to properly measure the increasing needs of the city at this time, and taking a long view, it appears quite consistent

to assume that southern California west of the Colorado River drainage area will within the next 40 or 50 years need water from the Colorado River and that on or before such time as such waters may be available, all the supply in the Owens Valley and Mono Lake Basin will be needed.

As a matter of fact, the waters from Owens Valley have not been used entirely for domestic purposes, but have, on the contrary, been used in the irrigation of lands. The city of Los Angeles and the Owens Valley have for many years been in conflict over water rights, as disclosed by Mr. McClure's report; and here again I quote:

Owens Valley people would not have felt their losses so keenly had the water been taken direct to domestic consumers in Los Angeles, but to have it applied on a large area of land to the advantage of San Fernando landowners to the assured disadvantage of the valley landowners is, in their minds, a just cause of grievance.

In this connection, Mr. Chairman, it is pertinent to point out that Bulletin No. 6 of the Department of Public Works of the State of California states that as urban districts encroach upon irrigation districts, the demand for water does not increase. The situation so far, then, with reference to domestic water, in the words of State engineers of California, is that "the city of Los Angeles has an ample supply of water for 40 or 50 years."

The CHAIRMAN. Who was the gentleman who made that statement?

Mr. DOUGLAS. Mr. McClure, the State engineer of the State of California, and he made it in a written report to the Governor of California.

Now, Mr. Chairman, let us see what the city of Los Angeles itself has said with reference to a domestic water supply, and this was said before it concocted the appeal of necessity for a water supply. On May 14, 1923, in a resolution passed by the public service commissioners, the city of Los Angeles officials stated the following—and, as I say, this was stated in a resolution which was passed by the public service commissioners authorizing the submission to the people of Los Angeles of a proposition to vote \$35,000,000 to develop power on the Colorado River:

Through its aqueduct system, the city is provided with a water supply sufficient for 2,500,000 people. The city's available power supply should be equal to its water supply.

I point out, Mr. Chairman, the words, "its aqueduct system." Since Owens Valley can furnish at least as much water again as it is now furnishing, another aqueduct system, largely compensated for by the development of power, will furnish the city of Los Angeles with a supply of water adequate to take care of a population of 5,000,000 people. The present population of Los Angeles is 1,398, 00. I obtained that from the report of the California State Comptroller of April 18, 1928.

Mr. BANKHEAD. Would it interfere with you presentation if I asked you a question in that connection?

Mr. DOUGLAS. I have timed this very carefully to keep within my limit. I should be delighted to answer as many questions as the members of the committee would like to propound to me, but I would like also to finish what I have written, if I may. Is that satisfactory to you, sir?

Mr. BANKHEAD. That is entirely satisfactory to me.

Mr. DOUGLAS. Mr. Chairman, from the statements of engineers of California and from the statements of its own officials the city of Los Angeles is not in need of domestic water. I am sure that the proponents of the bill will not impugn either the officials of the city of Los Angeles or the engineers of California and attempt to paint them with the tar brush of the power interests. The appeal for domestic water is a powerful one. In this case it is clear that it has been made for an ulterior purpose. It is obvious that it has been made to persuade the Congress to appropriate the money for a high dam at Boulder Canyon, not with the view of obtaining a domestic water supply but, Mr. Chairman, for the purpose of obtaining power at the expense of the Federal Treasury. It must also be made clear that 40 or 50 years from now, when the city of Los Angeles may need water from the Colorado River, not more than 1,500 second-feet will be required. Now, 1,500 second-feet is equal approximately to 1,000,000 acre-feet.

Why construct a dam containing 26,000,000 acre-feet?

There can be but one reason—height, for head, for power.

The gentleman who follows me may claim that there is necessity for improving navigation on the Colorado River. The Colorado River may, in law, be a navigable stream, although the bill which is now before this committee contains a provision which states that the stream has "ceased to be navigable for commerce."

The question is not whether a stream is navigable in law, but whether there is sufficient navigation on a stream to justify the Congress in an expenditure of money for the purposes of improving that navigation.

Is there sufficient navigation on the Colorado River to justify Congress in improving navigation through an expenditure of money on a high dam which contains no locks and no gates?

Senate Document No. 103, Sixty-fifth Congress, first session, page 12, states that there has not been any commerce on the Colorado River since 1876. Paragraph 4a of the Colorado River compact, the ratification of which by Congress is provided for in the bill now under consideration, states:

The Colorado River has ceased to be navigable for commerce.

Maj. R. R. Raymond, of the Corps of Engineers of the United States Army, in House Document No. 1141, Sixty-third Congress, second session, states:

Attention is invited to the conclusion reached by officers who have examined this river heretofore, which agree with my own. The development of the country by irrigation in recent years makes the improvement even less desirable to-day than it was formerly.

So much for the extent of commerce on the Colorado River in relation to the necessity for improvement of that stream for such commerce. It should now be pointed out that navigation and irrigation on the Colorado River are incompatible. One can not withdraw water from a stream for the purpose of reclaiming lands and still leave that water in a stream for the purpose of improving navigation. Dr. Elwood Mead states:

The utilization of the river's waters for irrigation far outweighs any utilization thereof for navigation."

Maj. R. R. Raymond in the report referred to above states:

The improvement of the Colorado River for navigation would defeat its own ends and would be a detriment to the adjacent country, except, possibly, that flood control would be beneficial."

It is clear, Mr. Chairman, the conclusion is compelling, that there is no necessity for the improvement of navigation on the Colorado River. It is equally clear, and the conclusion is equally compelling, that to improve navigation on the Colorado River would defeat the use of the waters of that stream for irrigation.

It has been urged that there is a necessity for desilting the waters of the Colorado. Probably, a removal of the silt from the stream would alleviate some of the difficulties in which the Imperial Irrigation district finds itself. It must be pointed out, however, that a high dam at Boulder Canyon will not desilt the waters of the Colorado at the point at which they are to be diverted, either for irrigation, or for any other purpose.

Boulder Canyon Dam is 308 miles upstream from the point at which waters are to be diverted to the Imperial Valley. The stream below Boulder Canyon, or the bed, has been so silted that for many years to come all waters which will be drawn out of Boulder Canyon will pick up so much additional silt that Boulder Canyon for desilting purposes just as well may never have been built, and I refer this committee to competent engineers, even to engineers retained by the Los Angeles Bureau of Power and Light.

It will be urged that there is necessity for Boulder Canyon Dam to supply waters for irrigation purposes. Mr. Chairman, there have been, I think, 3 or 4 years in the last 25 in which there has been a shortage of water in the Imperial Irrigation district; two of them, sir, not because of lack of water, but because of the fact that the district could not divert the waters.

Upon investigation, it can hardly be argued that a storage of 26,000,000 acre-feet of water is necessary to provide an adequate supply.

I have had great difficulty in obtaining a supplementary volume by F. E. Weymouth of the Reclamation Service to his 8-volume report on the Problems of the Colorado River Basin, of February, 1924. This report is the basis for the Boulder Dam bill. The supplementary volume was written in June, of 1924. I was finally, however, given access to that volume, in the Office of the Bureau of Reclamation. I find that on page 3 there is the statement that under present conditions less than 1,000,000 acre-feet of storage is required to insure adequate irrigation supply for the Lower Colorado areas.

In volume 1 of the Weymouth report, it is stated in effect that to irrigate the 700,000 acres below Boulder Canyon, no storage is necessary, except that incidental to flood control.

Mr. Chairman, the conclusion is compelling that 26,000,000 acre-feet of storage is not necessary to provide an adequate water supply for irrigation.

While on the subject of irrigation, it should be pointed out that the contention has been made that the crops grown in the Imperial Valley do not compete with crops grown elsewhere. In this connection, it is interesting to quote a letter of April 21, 1928, written by the gentleman from California to the national commander of the

American Legion, in which he speaks of bringing additional lands under cultivation.

True, the bill does not provide for bringing this land under cultivation at the present time, out of difference to the present depressed condition of agriculture.

Now, if there were no competition between the crops of the Imperial Valley and the crops grown elsewhere, then the gentleman from California had no justification in making that statement. He must, however, have known that there is competition between crops grown on irrigation districts and crops grown elsewhere, and in support of that, sir, I submit that in the Imperial Valley 76 per cent of the acreage last year was devoted to competitive crops—alfalfa, barley, cotton, corn, Bermuda pasture, wheat. (Minority views, p. 24, Mr. Leatherwood, of Utah.)

It is clear that the gentleman from California is correct in his implicit conclusion that the depressed condition of agriculture does not warrant the irrigation of additional lands.

There are, Mr. Chairman, however, practically 600,000 acres of easily irrigable land situated in the delta of the Colorado in the Republic of Mexico. As I shall prove later, the construction of the project authorized in the Boulder Dam bill will make available for those Mexican lands at least 5,000,000 acre-feet of water. The crops grown on those lands will, Mr. Chairman, compete with the crops grown elsewhere in this country.

It must be pointed out, Mr. Chairman, that the authorization in the bill now under consideration of an appropriation of \$125,000,000 will not reclaim lands except those privately owned in the Imperial Valley, and I submit, sir, for your information this map of the Reclamation Service, on page 96 of the volume, 1927-1923, Problems of the Imperial Valley and Vicinity. You can trace on that map the All-American Canal and come to the conclusion beyond the question of a doubt that the only lands which will be served by that canal are privately owned lands.

It will require \$15,377,000 more to bring the public lands under cultivation—that is an overstatement—to bring the 166,000 acres of public lands under cultivation.

It is my opinion that it is not a sound policy for the Government to appropriate moneys unassisted by those private landowners for the purpose of providing them with water and increasing their land values.

In that connection, let us see that the Senate bill contains:

Provided, however, That no charge shall be made for water or for the use, storage, or delivery of water for irrigation or water for potable purposes.

The conclusion is compelling that for irrigation purposes the storage of waters on the Colorado in excess of the amount incidental to flood control is not necessary, unless it be contended that there is a necessity for the construction of the Boulder Dam project by the Federal Government in order that the Republic of Mexico may profit therefrom. Surely, the gentleman from California will not contend that there is such a necessity.

Some years ago, Professor Durand appeared before the Committee on Irrigation and Reclamation and made the statement that by 1927 there would be a power void in southern California; incidentally, Mr. Chairman, Professor Durand for 19 years has been retained by the

Los Angeles Bureau of Power and Light and as such was appointed by the present Secretary of the Interior to act as an impartial adviser with reference to this project.

Mr. BURTON. What Professor Durand is that?

Mr. DOUGLAS. W. F. Durand. He appeared before the committee and testified some years ago that there would be a power void in southern California; that there was an emergency; that the necessity for power was so great that the Federal Government should assume the risks and the hazards of constructing the largest power project in history for the purpose of meeting that emergency. It is pertinent to point out that in 1923, at the time approximately that Professor Durand gave this testimony before the House Committee on Irrigation and Reclamation, representatives of California were opposing the issuance of licenses by the Federal Power Commission for a power project on the Colorado River, which would have served the void of which Professor Durand spoke.

It must also be pointed out that in the year 1927, both the city of Los Angeles and the southern California Edison Co. reduced their rates on electric power for the purpose of increasing the consumption. Where is the void of which Professor Durand so earnestly spoke?

There is no void in electric power in southern California. There is, therefore, no necessity for the expenditure of Federal funds for the development of the largest power project in history, the largest power project in the world.

There remains, Mr. Chairman, one further urge for congressional action—flood control. And this is important. From the evidence which has been submitted by engineers of the Reclamation Service, of the United States Geological Survey, of the Federal Power Commission, and of other engineers, one must conclude that there is a necessity to protect the communities bordering on the Lower Colorado River from the danger of floods. The peril, if there be one, of damage to property as the result of a break in the banks of the Colorado River is not one which in any sense can be likened to that which occurred on the Mississippi River. The peril, if there be one, lies in the first place in drought, not in inundation, and, in the second place, in a deflation of land values.

I do not make this statement on my own authority. I submit as evidence in support of my contention the statement made by Mr. C. W. Remele, of the Imperial Valley Credit Association, which appeared in the *Toreador*, published by the University Club of Los Angeles. He was speaking of Senator Copeland's having been in Imperial Valley. It reads in part:

But he also said: "Floods are greatly feared." And this is the statement to which I particularly wish to object as a misleading one. The reason that it is misleading is that the word "flood" conveys to most people a concept of a disaster like the recent one in the Mississippi River. Nothing of the kind is possible here. Twenty years ago the entire Colorado River flowed into the Salton Sea for 16 months, but the women and children were never in any danger.

This is a matter of record, page 433, Part III, hearings on H. R. 5773, Seventieth Congress, first session.

During the flood of 1905 and 1906, the only one that the Imperial Valley has ever experienced, eight lives were lost, and all of those lives were lost because of carelessness. Six of them were due to falling off the levees on which they were working and two fell into

the river because they attempted to cross the river on temporary cableways.

I also include herewith excerpts from a letter to Mr. C. W. Remele from Mr. R. H. Gilmore, resident representative of the Hoagland-Allum Co., of Los Angeles.

I have repeatedly pointed out to my friend that the constant emphasis upon the flood danger to the Imperial Valley was doing the valley more harm than it could possibly do good. Of course, a flood in the Imperial Valley is nothing like a flood in the Mississippi Valley.

I agree with you that there is a distinct disservice being done, not only to the valley, but to all of southern California and Arizona by the representation of a dire and immediate danger from floods, with a resultant great injury to credit and the market for bonds.

Now, Mr. Chairman, let us see what an official of the Imperial irrigation district himself has said. On April 6, 1928, he made the statement which I shall quote, and this is taken from the Los Angeles Times:

Congressman Phil Swing and members of the lobby which the irrigation district is maintaining at Washington realize the Imperial Valley is in need of a flood-control project, not because of any immediate flood menace but in order to restore confidence and revive slumping land values. Brockman said: "While they still are hopeful that the original Boulder Dam bill will be passed before adjournment of Congress, they recognize the danger of disputes and litigation, which may defer construction work for many years."

These letters and this statement, Mr. Chairman, constitute an expression of opinion from those who are interested in land values in the Imperial Valley; from those who are intimately acquainted with the danger, if any, to the Imperial Valley; from those who know what the truth may be.

With reference to the second allegation, that a break in the banks of the Colorado River would result in a drought rather than an inundation, I need merely point out that the channel which the waters of the Colorado River must seek in the event of a break in their banks toward the Salton Sea has already been excavated as a result of the flood of 1905. Any break which may in the future occur will result in the waters following the old channel, namely, that of the Alamo and the New Rivers. There are no lands under cultivation in those old channels. So that if the Colorado should break its banks and follow the old channel, it would not inundate the Imperial Valley, because 15 years would be required for inundation of the Imperial Valley (Report United States Geological Survey), but it would cut the canal which carries water to the Imperial Valley.

I might say this, too, that it is hardly conceivable that the people of the Imperial Valley would permit the Colorado to flow for 15 years into the Salton Sea. The Colorado River was turned back into its course in 1905 and 1906, when there was practically no equipment. To-day, equipped with rolling stock, steam shovels, and rock quarries, the Colorado can be turned much more easily.

I do not say all this by way of negating the contention that there is a flood menace, because there is such a menace, but it is not as serious a menace as the proponents of the bill would have you believe, nor does that menace justify an expenditure of \$125,000,000 for the purpose of preventing it.

Let us analyze the situation from a different point of view. What is the value of property in the menaced areas? The Secretary of Commerce, Mr. Hoover, has stated the value of the property to be

\$75,000,000, and that includes all up and down the Colorado below the Boulder Canyon.

The majority report has stated the value of the property to be in excess of \$100,000,000. The United States Geological Survey has stated the value of the property to be in the neighborhood of \$100,000,000. In the report of the board of equalization of the State of California for the years 1925 and 1926, the assessed valuation of all real estate and improvements for the entire county of Imperial is but \$36,125,953. Judging from the general extravagance of the majority report on the measure, it is sound to conclude that had the property to be protected been worth more than \$100,000,000 the majority report would have stated so. It therefore seems conservative to estimate the value of the property which is menaced by the flood waters of the Colorado River as certainly not in excess of \$100,000,000.

Over a period of 17 years, or from 1905 through 1922, including the cost of closing the break in the banks of the Colorado River, which occurred in 1905, the cost of protecting the Imperial Valley has been, as of 1923, \$5,000,000, excluding the appropriation by the Federal Government; or, over a 17-year period, a sum equal to the annual interest charge on a sum of \$125,000,000. It follows inevitably as the night follows day that it is not good business to appropriate \$125,000,000 to protect property which is not worth that amount of money.

How, Mr. Chairman, can reasonable and economical protection against whatever menace there may be from the flood waters of the Colorado River be given? The engineers of the Reclamation Service, of the Federal Power Commission, and of the United States Geological Survey, have estimated that that protection can be given for an amount ranging from \$10,000,000 to \$22,000,000. The \$22,000,000 figure is the figure of the Reclamation Service. At the time the Reclamation Service made that figure, it had been committed to Boulder Canyon; it had used \$40,000 appropriated by Los Angeles and affiliated agencies for the purpose of investigating Boulder Canyon and it therefore padded the reports on all flood-control dams, and I can prove that to you, sir, beyond a question of a doubt.

For example, with reference to the dam at Mojave, the Santa Fe Railroad has to be relocated. The additional mileage will be 2 miles, but the new location will have lighter grades than the location and will have less curvature. Yet the Bureau of Reclamation has capitalized the cost of the increased 2 miles. Instead of capitalizing it and charging it against the dam, it should be credited, because the operating expenses of the Santa Fe over the new location would be much less than they are over the present location.

They have charged rails. Mr. Chairman, those rails should be credited against relocation rather than charged.

They have estimated the rights of way at over four times the assessed valuation of those rights of way. Those are just a few of the examples; I could give many more.

If the estimate of the Reclamation Service be analyzed again on an equitable basis without going into their basic figures at all, the cost of the dam at Mojave will be approximately \$15,000,000.

In the mysterious ninth volume of the Weymouth report, on page 33, it is stated that a dam at Parker which will store 3,500,000 acre-

feet of water will cost, including every item, but \$9,000,000. The United States Geological Survey and the Federal Power Commission have estimated that a 10,000,000 acre-foot storage dam at Mojave will cost not to exceed \$15,000,000.

I submit, therefore, Mr. Chairman, that of all the necessities which have been urged to influence the Congress to pass legislation for a high dam at Boulder Canyon, there is but one which commands attention. That one, flood control, directs the Congress toward the consideration of a flood control dam on the coastal plain and away from a high power dam in the canyon section. In order that there might be no delay in obtaining this necessary flood control, I introduced a bill on April 11, 1927, which authorizes the President to appoint a board of engineers, and provides for an appropriation of \$15,000,000, for the construction of flood-control structures at sites to be located by those engineers, and contains a provision with reference to a ratification of the compact or an agreement by all the States and the Federal Government, that title to water, in excess of the present perfected rights, which may be stored shall not be acquired.

[H. R. 12915, Seventieth Congress, first session]

A BILL To create a board of engineers to make recommendations relative to flood control on and development of the Colorado River, to authorize the erection of flood-control structures on the Colorado River, and for other purposes

Whereas there is now pending before the Congress a bill (H. R. 5773) known as the Boulder Dam bill, which authorizes an appropriation of at least \$125,000,000 for the purpose of constructing an unprecedentedly high alleged flood-control dam on the Colorado River, and

Whereas the proposed high dam involves one of the least, if not the greatest, engineering undertakings in the history of industry, great engineering risks, unnecessary hazards to life and property, and appropriations which will probably exceed \$300,000,000, and

Whereas all Government engineers who have examined the Colorado River, except those of the Bureau of Reclamation, have disapproved the proposed high dam at Boulder Canyon; and

Whereas almost all engineers, except those of the Bureau of Reclamation and the Los Angeles Bureau of Light and Power, have cast suspicion upon the economic soundness of the Boulder Dam bill; and

Whereas the engineers of the Federal Power Commission and the United States Geological Survey have all estimated that every object, including adequate flood control but excepting the development of the largest power project in the history of industry, can be obtained for an expenditure of not to exceed \$15,000,000, and

Whereas in view of the magnitude of the Boulder Dam venture, its engineering hazards, its economic unsoundness, and the lack of necessity therefor, it is unwise for the Federal Government to initiate a project which will probably cost in excess of \$300,000,000, and

Whereas said Boulder Dam bill is unconstitutional in that, among other things, it provides for allocation of water among seven States by a compact to which but six of the seven States are signatories; and

Whereas said Boulder Dam bill if enacted into law will cause interminable litigation and therefore interminable delay in obtaining, if in fact it ever will obtain, the alleged necessary flood control; and

Whereas the charge that the Boulder Dam bill is for the purpose of making available to the city of Los Angeles and affiliated agencies hydroelectric power at the expense of the Federal Treasury is evidenced by appropriations by the city of Los Angeles and affiliated agencies of \$140,000 for investigations by the Bureau of Reclamation of only Boulder Canyon, and by appropriations by the city of Los Angeles and affiliated agencies for the purpose of defraying the expenses of a lobby in Washington to further the legislation known as the Boulder Dam bill; and

Whereas it is not the function of the Federal Government to advance the capital, assume the hazards, and bear the losses for the advantage of municipal or private power interests; and

Whereas should the Boulder Dam bill be enacted into law and the dam, if possible from an engineering point of view, be constructed, Mexico, in the absence of a treaty, will receive five million acre-feet of water to the perpetual detriment of the future development of lands within the United States of America; and

Whereas there is inadequate engineering data relative to the best systematic program of development of the Colorado River: Now therefore

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the President of the United States is hereby authorized to appoint a board of five engineers of unquestionable national reputation, which shall examine into and investigate the Colorado River for the purpose of making recommendations to the President as to the most feasible method and cost of obtaining flood control, as to the best systematic general program of development: *Provided, however,* That not more than one engineer appointed to such board shall have been in the past or shall be now in the employ of or retained by the Bureau of Reclamation, or shall be resident of any of the States of the Colorado River Basin.

SEC. 2. That the Secretary of War is hereby authorized to construct on the Colorado River flood-control structures, recommended by and located at a site or sites to be selected by the above-mentioned board of engineers.

SEC. 3. That for the purposes of erecting such flood-control structures on the Colorado River and of defraying salaries and expenses of said board of engineers as fixed by the President, there is hereby authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, the sum of \$15,300,000, or as much thereof as may be necessary.

SEC. 4. That construction of said structures, if they be dams, shall not be commenced until the Colorado River compact, signed at Santa Fe, New Mexico, November 24, 1922, shall have been ratified by the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming, and shall have been approved by the Congress of the United States; or until all of said States and the Congress shall have agreed, by compact, that no title to waters, in excess of present perfected rights, which may be stored by such flood-control dam, shall be acquired.

SEC. 5. That the Republic of Mexico is hereby placed on notice that waters stored by any dam which may be constructed under this act are for use solely within the United States.

This bill should be amended.

Mr. RAMSEYER. Does your bill provide for ratification of this compact?

Mr. DOUGLAS. Will you ask me that later on?

It does, either the compact or a compact to the effect that no right to water in excess of present perfected rights shall be acquired as the result of storage of waters in excess of such perfected rights. This bill should be amended to continue the embargo on the issuance of licenses. If the bill comes before the House, I shall submit that amendment.

Mr. MICHENER. The embargo is the Taylor law?

Mr. DOUGLAS. Yes.

Mr. RAMSEYER. Let me ask you a question right there. Does your bill provide for a ratification of this compact prior to the ratification of the compact by all seven of the States?

Mr. DOUGLAS. I think probably the best course for me, inasmuch as my time is limited, is to continue——

Mr. RAMSEYER (interposing). You have got to answer some questions.

Mr. DOUGLAS (reading):

That construction of said structures shall not be commenced until the Colorado River compact, signed November 24, 1922, shall have been ratified by the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming, and approved by the Congress of the United States, or until all of said States and the Congress shall have agreed by compact that no title to waters in excess of present perfected rights which may be stored by such flood-control dam shall be acquired.

Now, if flood control is so urgent, surely California is willing to agree that she will not increase her perfected rights.

Now, Mr. Chairman, just a word about policy. If it be contended that it is the function of the Federal Government to provide works for domestic water supply at the expense of the Federal Treasury, then, Mr. Chairman, I submit that it is highly proper for the Congress to appropriate at least \$287,000,000 to construct the aqueduct from the Delaware Water Gap to the city of New York. I submit that there is no end to the appropriations which may be made by Congress for the purpose of supplying various municipalities with domestic water. I submit, further, that if it be agreed that it is the function of the Federal Government to supply power to communities, then the Federal Government, in violation of the rights of States and of the Empire State, New York, should construct great hydroelectric plants on the Niagara at the expense of the Federal Treasury.

I am not now dealing with the legal phases of the question; I am simply stating a common sense application of such a policy. I submit that the Columbia River Basin project should be passed with provisions for great power stations; that the Umatilla Rapids project should be passed with a provision for a great power station, not incidental to some other purpose but, on the contrary, as a major object.

If, Mr. Chairman, the Federal Government is to adopt the policy of developing power or of going into any other industrial enterprise for profit or for the purpose of making a project solvent, then, sir, I suggest that in this particular case, instead of expending at least \$35,000,000 on a power plant at Boulder Canyon, the Federal Government appropriate a lesser amount of money for the construction of a modern steam plant at the load center, Los Angeles. Were the Federal Government to authorize the construction of such a plant, I have no doubt but that, in time, it would be reimbursed for its development of the Colorado.

In this connection, Mr. Chairman, it should be stated that the issue with reference to the power in the Swing-Johnson bill is not one of public ownership private ownership; on the contrary the issue is one of Federal ownership, versus any other kind of ownership, State, municipal, or private. If the city of Los Angeles or a group of cities of southern California choose to expend their own money on, assume the hazards in and bear the losses from the development of a power project on the Colorado, that is their business. It is disassociated from the business of the Federal Government, except in so far as those municipalities comply with the Federal laws. The public which is to be served, rather than the public which is not to be served, has a perfect right, provided it complies with State and Federal laws, to develop power, domestic water supply, or desilting projects on the Colorado. If those municipalities choose to take the risk themselves, the Federal Government can have nothing to say.

The issue, therefore, Mr. Chairman, as I have said, is not one of public ownership versus private ownership; it is one of Federal ownership versus any other municipal, State, or private ownership.

And in this connection, sir; I believe that the records of the Federal Power Commission will indicate that the city of Los Angeles has filed on, I think, six power sites on the Colorado.

A refusal on the part of the Federal Government merely constitutes an inhibition against public ownership of a power project by those who are not to be served.

So much, Mr. Chairman, for the matter of policy.

Now, I mention the matter of engineering. I do not claim that the project can not be constructed. I do submit, however, that it has been inadequately engineered and that it can not be constructed for the estimated cost.

It is difficult to picture the magnitude of the project to be authorized by the Swing-Johnson bill. The dam is to be over twice as high as any dam heretofore constructed. The excavation for its base is in the neighborhood of five to six times the excavation for the base of any now in existence or contemplated. The concrete is to be over three times the amount of concrete in any dam heretofore constructed or contemplated. The flood waters of the Colorado during the period of excavation must either be diverted or all work including construction of permanent coffer dams must be completed in nine months; either 200,000 second-feet must be passed around through tunnels, or every preliminary step must be completed in nine months, including the construction of a dam 220 feet high, or a dam almost equal to the largest dam now in existence; that must all be done in nine months.

Two hundred thousand second-feet means a body of water each day and every day sufficiently large to make a lake of 600 square miles, with a depth of 1 foot; or 60 square miles with a depth of 10 feet, or 30 square miles with a depth of 20 feet. So, Mr. Chairman, I submit that if one believes that matter does exist, that it is not merely a translation of ideas, then that body of water is quite a bit of matter and that task of diverting it is quite a task.

Inasmuch as the Reclamation Service has estimated that the diversion tunnels should be only 100,000 second-feet, it follows, Mr. Chairman, both by deduction and by report of that service, that the temporary upper and lower cofferdam, containing 921,000 cubic yards of rock; that the excavation of 580,000 cubic yards of sand, gravel and great boulders to a depth of 127 feet below the level of the river; that the pouring of the upper permanent and lower permanent cofferdams, amounting to approximately 230,000 cubic yards of concrete, or a dam almost as large as any now extant, must all be completed within a period of eight or nine months, or within a period uninterrupted by the normal flood waters of the Colorado; and the Reclamation Service has estimated that that is the amount of time that will be required.

Let me, however, give you a slight picture, if I am able, of what that task amounts to. Speed, terrific speed, is the essence of the undertaking. If there should be any delay; if any of the academic estimates of rapidity should be in error, the temporary cofferdams will be overtopped and destroyed, the excavation, if any, will be filled up, the task done once will remain to be done twice, provided that the 300,000 acre-feet of water stored by the cofferdam which will have been destroyed will not have wiped out all of the communities below Boulder Dam which are to be protected.

Now, let us analyze for a minute, Mr. Chairman, the mining operation involved. The Bureau of Reclamation has estimated that the 921,000 cubic yards of loose rock or 614,000 cubic yards of rock in place, a mass greater in size than the Capitol building, will be drilled, blasted, loaded, transported to the cableways, loaded on the cableways and carried at an elevation of 700 feet over the bed of the river and dumped within a period of 69 days. That 69 days figure is the

figure of the Reclamation Service. This, Mr. Chairman, amounts to 9,000 cubic yards a day. Such a mining operation, Mr. Chairman, will constitute the third largest in history.

The Utah Copper Co., which is to-day the largest surface mining operation extant, drills, blasts, and loads approximately 29,000 cubic yards of capping and ore in 24 hours. In its mining operation only it has 70 miles of standard-gauge track, twenty-three $3\frac{1}{2}$ to $4\frac{1}{2}$ yard electric shovels, 20 mining benches, forty-six $3\frac{1}{2}$ -inch piston drills, great compressor plants, one hundred and fifty 30-cubic-yard side-dump cars, forty 75-ton standard-gauge locomotives, exclusive, Mr. Chairman, of 800 standard railroad ore cars, and uses approximately 10,000 kilowatts a year. The operation of the Utah Copper Co., as represented by its present efficiency, is the result of 20 years' experience and an expenditure of more than \$15,000,000 in equipment and preparation. These figures come from the general manager of the Utah Copper Co. It would cost to replace its present mining equipment over \$7,500,000, exclusive of the labor of preparing the mining phases.

The mining operation for the quarrying and loading and dumping of rock for the temporary cofferdam at Boulder Dam is approximately one-third the size of the operation of the Utah Copper Co., one-half the size of the operation of the Michigan Light & Chemical Co., and from two to five times the size of any other surface mining operation. And yet, Mr. Chairman, the Bureau of Reclamation passes the mining operation as though it were a simple accomplishment.

To equip for that mining operation, the United States Government would be compelled to expend a minimum of from \$5,000,000 to \$6,000,000, exclusive of the cost of preparing the mining faces. The Reclamation Service has estimated that the cost per yard will be but \$1.30, or, applied to 614,000 cubic yards in place, approximately \$1,000,000. Roughly, their actual estimate is \$1,148,000. As a matter of fact, Mr. Chairman, in view of the life of the operation, that cost will amount to more than \$10 per yard.

I merely cite this, Mr. Chairman, as one of the features of inadequate engineering, as one of the phases of the project in which the valor of ignorance has been decorated.

Now, Mr. Chairman, let us compare the excavation of the 580,000 cubic yards of sand and gravel and bowlders, or a mass greater in size than the Capitol building, with the greatest mining operation in history.

Is this boring, or uninteresting?

The CHAIRMAN. You may use your time as you see fit. We thought we would give you about an hour. We do not want to go too much in detail, and it is the main points that we would be willing to listen to information on here.

Mr. DOUGLAS. Second, the mining phase, for the excavation, is equally as great, if not greater, than any other, because it involves hoisting from 300 to 1,000 feet over 8,000 tons a day out of the walls of the canyon.

Mr. RAMSEYER. The issue here is, what is your proposal to protect these States and their rights to the future use of the water?

Mr. DOUGLAS. That is not the issue, but whether or not the Federal Government shall construct a great power dam or whether it shall not.

If the issue as stated by you is correct, then why does the bill contain provisions for a great power dam?

If this is to be taken out of my time, then I suggest that I be asked the questions when I have finished.

Mr. RAMSEYER. Then you are not going to have any time to answer questions.

Mr. DOUGLAS. I might state that the Reclamation Service itself has said that the designs are preliminary and, should the dam be built, many more steps will have to be taken. I quote all of that in my statement and mention these points, Mr. Chairman.

The CHAIRMAN. That may be filed with your statement.

Mr. DOUGLAS. As the height of the various dams has been increased, the factor of safety in so far as it pertains to foundation pressures, has been decreased. I quote herewith in confirmation of that statement, a letter from the Federal Power Commission, dated April 16, 1928.

Your understanding as to the maximum pressures permitted in the design of the Boulder or Black Canyon Dams of various heights included in the Weymouth report seems to be correct, and your deduction that "as the heights of the dams have been increased, the factor of safety has been decreased" is also correct so far as consideration of maximum pressures on the foundations are concerned.

Mr. Chairman, the foregoing is submitted merely as a picture of the magnitude of the operation involved in the construction of the project and as a comment on the inadequate engineering.

Doubtless the gentleman who follows me will claim that the project has been adequately engineered. He will doubtless mention the names of Mr. Wiley, Mr. Hill, Mr. Munn, possibly, though not certainly, Mr. Mulholland, Mr. Davis, Professor Durand, Mr. Painter, Secretary Hoover, and General Goethals.

I defy the gentleman to introduce any testimony from Mr. Hill, or General Goethals, which they have by way of indorsing the designs and estimates of the Bureau of Reclamation submitted to the committee. Inasmuch as the reports of the Reclamation Service were drafted in Washington and inasmuch as the only record of Mr. Wiley or Mr. Munn with reference to the cost of the dam at Boulder Canyon is to be found in their estimate of a 26,000,000-acre-foot dam at a cost of \$50,000,000 whereas the estimate of the Reclamation Service is \$41,500,000 it can hardly be contended that they have approved the engineering of the project. There have been no approvals of record by any engineers other than those of the Reclamation Service and of the Los Angeles Bureau of Power and Light of the estimates and designs of the project authorized by this measure. The gentleman from California can not find any statement by Mr. Hoover in which he testifies to an examination and approval of the designs and estimates. He has approved the general idea of a dam at Boulder, but has stated that there should be a definite plan for local contribution to the cost and that the power privilege should be licensed under the Federal water power act. Mr. Mulholland, Mr. A. P. Davis, Mr. Panter, and Professor Durand are all in the employ of the Los Angeles Bureau of Power and Light. All other engineers who are said to have approved the project are or have been in the employ of the Reclamation Service, with the exception of Governor Schrugham of Nevada and Governor Emerson of Wyoming. Neither of these two engineers questioned the accuracy of the Weymouth

report. Their judgment proceeded from that as a basis for their conclusions. Secretary Work has cast suspicion upon the engineering; the Federal Power Commission has disapproved the project; the United States Geological Survey has disapproved the project; and the United States Corps of Engineers has been prohibited by law from investigating. In addition to that, Mr. Chairman, five of the most eminent engineers in the country perhaps even in the world conducted for the American Engineering Council an exhaustive investigation of all reports and documents relative to the project and have disapproved that project. I submit therewith this report and call your attention to their qualifications.

STATEMENT CONCERNING BOULDER DAM PROJECT ISSUED BY AMERICAN ENGINEERING COUNCIL

American Engineering Council, representing 43,000 professional engineers, is an organization conducted for the purpose of affording a means through which engineers may express their views concerning national questions of an engineering character. National problems such as flood control, utilization of natural resources, and the like, come within its purview of activity.

Consequently council has given careful consideration to the Boulder Dam project which has been under consideration by the Congress. In keeping with its usual practice, the council appointed a special committee composed of most eminent engineers experienced in such matters to review all data and information available relating to the Boulder Dam project. This committee, after due deliberation, submitted a report to the council which has been approved by the executive committee thereof. The report is as follows:

"Your committee is unanimously agreed that the information set forth in the reports which have been submitted to us is not conclusive as to the engineering feasibility of the plan outlined in the Swing-Johnson bill and that before either the Government or private capital would be justified on engineering or economic grounds in committing themselves to the expenditure involved, the development of the river for the purpose in view should be further and most thoroughly investigated to determine how the results which it seeks to accomplish can be secured with a reasonable assurance of success.

"FRANCIS LEE STUART, *Chairman.*

"ALLEN HAZEN.

"CLEMENS HERSCHEL.

"J. WALDO SMITH.

"LEWIS B. STILLWELL."

TRAINING AND EXPERIENCE OF MEMBERS OF THE COMMITTEE

Allen Hazen: Consulting civil engineer, vice president American Society of Civil Engineers, vice president Hazen & Whipple, engineers, 25 West Forty-third Street, New York City. Education: Massachusetts Institute of Technology, Boston, Mass. Honorary degree Sc. D. New Hampshire and Dartmouth Colleges. In charge State Board of Health Experiment Station, Lawrence, Mass., 1888-1893. In charge sewage disposal. World's Columbian Exposition, Chicago, 1893. In private practice, Boston, 1894-1897, and in New York City since 1897, work mainly on city-water supplies. Chief Engineer, Albany Water Filtration Plant, built 1889-1899, and other putrification works. Consulting engineer for water purification works, Washington, D. C. Author *The Filtration of Public Water Supplies*, 1895-1900; *Clean Water*, 1907; *Meter Rates for Water Works*, 1917; also numerous articles on water supply and sewage disposal; joint author, *Hydraulic Tables* with Gardiner S. Williams, 1905. Member American Society of Civil Engineers, American Public Health Association, etc.

Clemens Herschel: Consulting civil and hydraulic engineer, past president, American Society of Civil Engineers, 2 Wall Street, New York City. Education: S. B. Larence Scientific School (Harvard) 1860. Hydraulic Engineer, Holyoke (Mass.) Water Power Co., 1879-1889. Railroad Commissioner of Massachusetts, 1881-1883. Consulting engineer of several of the large water-power companies of Niagara Falls 1884-1904. Engineer and superintendent of East Jersey Water Co., 1889-1900. Inventor of Venturi water meter for which was awarded Elliot

Cresson gold medal of Franklin Institute. Member American Society of Civil Engineers; Boston Society of Civil Engineers; Institute of Civil Engineers of Great Britain. Author Continuous Revolving Drawbridges, 1875; One Hundred and Fifteen Experiments, 1897; *Frontinus and the Water Supply of the City of Rome*, 1899; also various contributions on engineering topics in technical journals.

J. Waldo Smith: Consulting civil engineer, past vice president American Society of Civil Engineers; construction engineer for Board of Water Supply of New York, Municipal Building, New York City. Education: Phillips Academy, Andover, Mass., S. B. Massachusetts Institute of Technology, 1887; Director of Engineering, Stevens Institute of Technology, 1918; Director of Science, Columbia University, 1918; chief engineer of his home town at age of 17; assistant engineer, Holyoke (Mass.) Water Supply Co., 1887-1889; resident engineer (two years), principal assistant engineer (six years), East Jersey Water Co., on design and construction of a supply of 50,000,000 gallons of water per day for Newark, 1890-1897; chief engineer and superintendent, Passaic, Acquackanonk and Montclair Water companies in New Jersey on maintenance, extension, and operation of water supply, 1898-1900; consulting engineer, Jersey City Water Supply Co.; built filtration plant at Little Falls, N. J., and directed design and construction of supply of 50,000,000 gallons daily for Jersey City, 1901-1903; Chief engineer for Aqueduct Commissioners, New York, N. Y., in charge of all construction work of Croton water system, involving completion of New Croton Dam, Muscoot Dam, Jerome Park Reservoir and design of Cross River Dam, 1904-5; chief engineer Board of Water Supply, New York, to secure an additional supply of 500,000,000 gallons of water per day from Catskill Mountains from 1905-1922; consulting engineer for Board of Water Supply of New York, and in connection with water supplies for Philadelphia, Providence, Boston and Kansas City, and consulting engineer for the Moffat Tunnel; awarded John Fritz Medal in 1918 for achievement providing city of New York with water. Chairman Military Engineering Committee of New York which organized a course of military engineering, lectures given by officers of Corps of Engineers; Eastern Department, U. S. A., immediate result of which was voluntary drilling of considerable numbers and many applications for first Plattsburgh Camp, 1915-16; on Declaration of War Commission under direction of Chief of Engineers, United States Army, recruited Eleventh Engineers Regiment; Member American Society of Civil Engineers; American Society of Mechanical Engineers; Institution of Civil Engineers of Great Britain; American Water Works Association; and various other scientific and allied technical societies.

O. Lewis Buckley Stillwell: Consulting electrical engineer; past president American Institute of Electrical Engineers, Century Club, New York City. Education, Wesleyan University, 1882-84; Lehigh University, E. E. 1885; M. S. 1907; D. Sc., 1914; Wesleyan University, Sc. D. 1907. Assistant electrician, Westinghouse Electric & Manufacturing Co., 1886-1890; chief engineer (electrical), 1890-1898. Electrical director, Niagara Falls Power Co., 1897-1900; in practice as consulting electrical engineer in New York since 1900. Consulting engineer, Manhattan Elevator Railway Co. (electrification of elevated lines in New York City), 1899-1906. Electric director, Rapid Transit Subway Construction Co., 1900-1909. Consulting engineer, Hudson Co., 1905-1913. Member Erie Railroad Electrification Commission. Consulting engineer, United Railways & Electrical Co. of Baltimore, Md., 1906-1920; Interborough Rapid Transit Co., 1909-1920; New York, New Haven & Hartford Railroad Co. (Hoosac Tunnel electrification), 1910-11; New York, Westchester & Boston Railroad Co., 1911-1915; Lehigh Navigation Electric Co., 1912-1918. Consulting engineer, Holland Vehicular Tunnels, 1924. Member, Board of Economics and Engineering of National Association Owners Railroad securities, 1921-22; National Research Council; American Institute of Consulting Engineers; American Society of Civil Engineers; British Institute of Electrical Engineers; President Engineering Foundation; Royal Society of Arts, Great Britain; Franklin Institute; Life Trustee of Princeton University; Board of Directors, Chamber of Commerce of United States, 1921-1923.

Francis Lee Stuart: Consulting engineer, past vice president American Society of Civil Engineers, 949 Broadway, New York City. Education: Graduate, Emerson Institute, Washington, D. C. Entered Baltimore & Ohio service, 1884, experience in the various engineering departments of railroads; district engineer of eastern side of Nicaragua Canal, Nicaragua Canal Commission, 1897; division engineer, Isthmian Canal Commission, 1899-1900; assistant engineer and later engineer of surveys, Baltimore & Ohio Railroad, 1900; chief engineer Erie Railroad, 1905-1910; chief engineer Baltimore & Ohio, 1910-1915. Began private

practice 1915 and has continued to date, during which time has served in following capacities: Chairman Terminal Port Facilities Committee of War Industries Board and member depot board, War Department, 1917-18; chairman Budget Committee, United States Railroad Administration, 1918-1920; engineering expert, port development commission, Baltimore, 1921; member technical advisory board, New York Port Authority, 1921; member Transit Advisory Board of Philadelphia, 1923; retained by 11 trunk-line railroads serving port of New York, investigate and report on transportation matters; consulting engineer Cunard Project and Hydro-Electric Power Commission, Niagara Falls, Canada, 1920-21; consulting engineer, Greater Harbor Committee of Two Hundred of Los Angeles Chamber of Commerce, connection with railroad and harbor problem; member board of review, Sanitary District, Chicago's lake leveling controversy and remedial program; chairman Committee on Value Diverted Water for Transportation from Lake Michigan to Gulf Mexico; member Committee Great Lakes Regulation; Giant Power Advisory Board, State of Pennsylvania; president International Conveyor Corporation, Terminal Operating Corporation, Stuart Patents Corporation; more than 40 patents, mainly for inventions substituting improved machinery and methods for present practices. Member American Society of Civil Engineers, American Academy of Political and Social Science, American Association of Port Authorities, and various other scientific and allied technical organizations; past president New York Society of Terminal Engineers.

Mr. MICHENER. It is the opinion of the outside engineers against that of the Army engineers.

Mr. DOUGLAS. No, sir. The Army engineers have been prohibited by law from investigating this project. The Federal Power Commission has disapproved the project, and the United States Geological Survey has disapproved this project.

And, finally, Mr. Chairman, in the mysterious ninth volume of the Weymouth report, I find, on page 33, the statement made that the cost of the 555-foot dam at Boulder Canyon was predicated upon a curve; that there was no actual estimate of cost made therefor. I find further, Mr. Chairman, on page 69 of volume 5 of the Weymouth report, the following statement: "The designs are of a preliminary nature and should the dam be built a great many additional studies would be required." Mr. Chairman, it follows as a result of independent investigations and from the very words of the engineers who drafted the report on which this bill is predicated that the project has been inadequately engineered.

I can not believe that this committee, in view of the lack of necessity; in view of the inadequate engineering, can conscientiously give the bill now under consideration a rule.

There is a further consideration, Mr. Chairman. For approximately five years, the Committee on Irrigation and Reclamation has had under consideration H. R. 5773, or a bill similar to it. Never once has that committee endeavored to arrive at the soundness of the project from an economic point of view. Four years ago, it was warned that at the expiration of 15 years the Federal Government would have upon its hands an operating deficit of \$67,000,000 and yet, Mr. Chairman, the chairman of that committee did not consider it necessary to investigate the truthfulness or falsity of that warning. There have been many dogmatic statements made to the committee by proponents; by people retained by the Los Angeles Bureau of Power and Light, to the effect that the project was economically sound. But Mr. Chairman, the chairman of the committee on Irrigation and Reclamation never took the trouble to investigate the truthfulness of that contention. I do not intend to go into the economic soundness of the project at this time, unless it be the wish of this

committee that I do so. I merely make the statement that there has been no real investigation into the economic soundness of this project and I defy any member of this committee or of the Committee on Irrigation and Reclamation to refute my statement.

In my judgement, I am absolutely confident that I can prove beyond a question of doubt that my judgment is correct, the Federal Government can not be reimbursed for the expenditures undertaken or to be undertaken by the terms of the Boulder Dam bill. If this be a timorous statement or a timorous attitude to take, then Mr. Chairman, I can not but conclude that discretion is the better part of valor.

Mr. RAMSEYER. Do you yield for a question now?

Mr. DOUGLAS. I want to finish this statement if I can, and then I will be glad to answer any questions.

Mr. Chairman, the gentleman who follows me will doubtless state that the construction of the Boulder Dam will solve international difficulties. He will paint a picture of the avarice of Mexican land-owners; of the great hardships endured by the Imperial irrigation district as a result of a contract which that district itself made with Mexican water users. He will tell you, doubtless, of how the water from Boulder Dam can be thrown into the Salton Sea and not be permitted to flow into Mexico, there to be applied to beneficial use and there to be acquired, against future use in this country. Mr. Chairman, I refer you and the members of this committee to page 33 of the secret volume, known in the Bureau of Reclamation as the ninth volume to the Weymouth report, upon which this bill is predicated. You will find on that page a statement that a minimum of 10,010,000 acre-feet must be discharged from Boulder Canyon to develop the amount of power upon which the economic set-up of the Director of Reclamation has been predicated. The very maximum, Mr. Chairman, as represented by the contentions of California itself that can be applied at some indefinite future time to beneficial use in California, is not to exceed 5,000,000 acre-feet of water. The State of Arizona uses a negligible amount. The State of Nevada uses none. This leaves, Mr. Chairman, over 5,000,000 acre-feet of water which must flow into Mexico. It can not be used in this country; nor can it be thrown into the Salton Sink unless the Imperial Valley desires a self-imposed inundation in 45 years.

In confirmation of my last statement, I refer you herewith to pages 270 of the hearings on H. R. 5773 (1928), with reference to a contract between the Imperial irrigation district and the Southern Pacific Railroad. I likewise refer you to the report of the Geological Survey, which I can obtain for you if you choose, in which the statement is made that no additional waters other than the present run-off from the Imperial irrigation district can be discharged into the Salton Sink. (P. 278, pt. 3, hearing H. R. 5773, 70th Cong., 1st sess.) This simple means, Mr. Chairman, that the 5,000,000 acre-feet of water must flow into Mexico, there to be applied to beneficial use for the purposes of making valuable 600,000 acres of land outside of our country and of creating crops competitive with those in this country; of deterring those American ex-service men and others who in the future would otherwise apply that water to beneficial use in this country.

The gentleman who follows me, two or three weeks ago completely repudiated the Judson-Harmon opinion which he may quote in this

connection. He made an eloquent appeal for a distribution of the waters of the Rio Grande, not on the basis of the dominant country, but on the basis of comity of nations. On that basis, Mr. Chairman, once a nation has applied waters to beneficial use, nothing short of war can deprive it of those waters.

And now, Mr. Chairman, I come to one final consideration—the legal aspects. There are so many; they can be discussed at some length that I will mention but one. If you, and you must concede that States have control over, with the exception of the constitutional authority of the Federal Government to regulate commerce, and are sovereigns of the unappropriated waters flowing within their boundaries, then, Mr. Chairman, you must, and the members of this committee must, conclude that the Federal Government in conjunction with six States, can not allocate waters among seven, and yet, Mr. Chairman, 'that is exactly what this bill in effect would do. It contemplates a ratification of a 6-State Colorado River compact to which 7 States are parties, but to which only 6 are signatories.

It will doubtless be contended, Mr. Chairman, that equality between States refers only to political equality. Mr. Chairman, property and political rights of States are so intimately connected that they can not be segregated. If a State has no jurisdiction over property within its boundaries, then, Mr. Chairman, that State's political authority is reduced to nothing. If a State has rights as a sovereign, then, Mr. Chairman, no other sovereign can interfere with them.

I submit, therefore, that equality as between States precludes the Federal Government from exercising the right of a sovereign with reference to whatever property it may have within the boundaries of another sovereign. I contend that the Federal Government—with the exception of authority delegated to it to improve commerce, but not to appropriate waters—has no more right to confiscate the property of a State on the ground that it itself is a property owner within that State, than has an individual owning property within that State, I submit, therefore, Mr. Chairman, that it is untenable to make the contention that the political rights of a State can be equal with those of all other States when the Federal Government as a property owner, confiscates the property of that sovereign State.

If you believe with the President of this country that the rights of States to govern those matters which are pertinent to the States, which have been reserved to the States, which have not been specifically delegated to the Federal Government, then, Mr. Chairman, you can not but conclude that the bill now under consideration denies every principle of a sovereign nation of sovereign States.

I can not believe that this committee will give this bill, predicated upon a lack of necessity, an unsound governmental policy, inadequate engineering, futile if at all present economic investigation, indeterminate detriments to the future development of the southwestern country and a denial of the very fundamentals of the Government of this country, a rule.

On December 19, 1927, the upper basin governors passed a resolution, which has up to this date not been rescinded or repudiated by those upper-basin governors, requesting that there be no action on the Colorado until the seven States of the basin had agreed to a

compact. The upper-basin governors, acting for their own protection and in support of a principle, have expressed their wishes.

Their representatives appeared before the House Committee on Irrigation and Reclamation and the Senate Committee on Irrigation and Reclamation in January, 1928. All except the representative of the Governor of New Mexico requested delay until the seven-State pact shall have been agreed to.

Governor Emerson stated (p. 206, hearings before Senate Committee on Irrigation and Reclamation, 70th Cong., 1st sess., S. 728 and S. 1274):

Few realize the real magnitude of the great project that is proposed at Black or Boulder Canyon—a dam twice as high as any dam that has been constructed in the world heretofore; a reservoir seven or eight times the capacity of any reservoir that has been constructed heretofore. The magnitude of this project is so great that we should be sure we are right before we go ahead. There is no such urgency for relief from conditions applying to the physical situation upon the lower river as to warrant any course but to allow all reasonable time and effort for the completion of the seven-State agreement by the approval of all the seven States.

I feel that it would be a decided mistake to see a project authorized at this session of Congress, as by so doing it is certain that an advantage would be given in negotiations to one of the three States of the lower basin. The carrying on of negotiations looking forward to the complete acceptance of the seven-State compact would thereby, in my opinion, be seriously handicapped.

I wish to submit that the approval by all seven States of the Colorado River compact, representing an equitable agreement for the use and distribution of the water of the Colorado River system, will be most valuable to each of the seven States. It is essential, it seems to me, not only in consideration of the matter of equity to all of the States, but also as a means of clearing the situation in a practical way for the orderly development of the river.

Mr. Boatwright, attorney general of Colorado, speaking for Delph E. Carpenter, river commissioner and special representative of the Governor of Colorado (p. 348, pt. 3, hearings before the House Committee on Irrigation and Reclamation, 70th Cong., 1st sess., H. R. 5773), stated:

As we are informed it is the first duty of Congress to protect integrity and autonomy of the States, and we are unable to conceive that Congress, with undue haste, would set in motion those forces which would destroy several States for the benefit of a few. Surely it can not be said that the upper States can do more, or that they have been derelict in their duty, or that they should be punished and their territory invaded, and in effect occupied against them in perpetuity for the benefit of States which have failed on their part, but would reap all the fruits of such invasion.

We join in the request that all proceedings on the pending measure be suspended until the interstate problems are settled by compact.

Governor Dern, of Utah (p. 191, pt. 2, hearings before the House Committee on Irrigation and Reclamation, 70th Cong., 1st sess., H. R. 5773), stated:

As Governor of the State of Utah, I protest against the passage of the Swing-Johnson bills and convey to you the definite pronouncement of the Utah Water Storage Commission, which is the official State body in charge of the State's water resources, and also a resolution passed by the Legislature of Utah, February 25, 1927.

The representative of the Governor of the State of New Mexico was not opposed to the passage of H. R. 5773.

Mr. Ward Bannister, who testified to similar effect, was not representing any State or any governor of any State of the Colorado River Basin.

It follows from the foregoing that four of the seven members of the Colorado River Basin are opposed to the present legislation.

Mr. RAMSEYER. Let me ask you a question right there. Just put it the other way around and say that Colorado is holding out for reason or no reason. Do you contend that there is no power in the Federal Government that can be exercised in connection with the other six States, including Arizona?

Mr. DOUGLAS. Sir, your question implies that Arizona is the one that is holding out. I submit this to the gentlemen of this committee—

Mr. RAMSEYER. I have a right to submit to you a hypothetical question.

Mr. DOUGLAS. All right; wait a minute.

Mr. RAMSEYER. In order to get your attitude on it.

Mr. DOUGLAS. I wish to come to it. Arizona acceded to every demand of the upper basin at Denver with clarifications of language and clarifications of language only. California rejected them. They discussed the question of royalty, and Arizona said, "We will waive the consideration of power provided you agree there is to be no power development in the lower Colorado for California." California rejected the proposal.

Now, then, the second answer is this: The unappropriated waters flowing within the boundaries of a State are the property of that State. The Supreme Court of the United States has upheld that doctrine time after time. If you hold that the Federal Government, because it may own a little land on the Colorado as a proprietor, can go into a State and confiscate either by way of appropriating or allocating the property of a sovereign, then you, sir, are denying the principle of a sovereign nation of sovereign States.

Mr. RAMSEYER. Do you answer my question, yes or no?

Mr. DOUGLAS. I think, sir, the Federal Government has no right whatsoever to go into the boundaries of a State against its will and against its laws and appropriate, either for its use or for any of its beneficiaries, or allocate the waters of that State.

Mr. RAMSEYER. This compact that was entered into at Santa Fe, N. Mex., does not say a word about Boulder Dam, nor the Imperial Valley, nor Los Angeles, but undertakes to protect all the States in their equitable rights to the water. Would Arizona, including yourself, be willing to support a simple resolution ratifying a compact entered into and signed by the representatives of all the States—

Mr. DOUGLAS (interposing). Is this on my time?

The CHAIRMAN. You can submit to some questions, of course.

Mr. RAMSEYER (continuing). Including Herbert Hoover, representing the Federal Government?

Mr. DOUGLAS. Would I ratify that compact?

Mr. RAMSEYER. That is the question.

Mr. MICHENER. Wait a minute. I do not think Mr. Ramseyer has exactly stated the condition, because California has not unconditionally ratified.

Mr. RAMSEYER. I have not said a word about the legislatures. It was signed by the representatives of the seven States, including Herbert Hoover, representing the Federal Government.

Mr. DOUGLAS. I will answer your question, and be very glad to. The Colorado River compact is for the purpose of protecting the

upper basin States which can not apply waters to beneficial use as rapidly as the lower basin States. Arizona is in the same position with reference to California that the upper basin States are with reference to the lower basin States. Now, since it is the purpose of the compact to protect States, then I say to you, sir, that the very minute California will be reasonable in her water demands, the State of Arizona will ratify the compact immediately.

Mr. RAMSEYER. There is nothing in the compact in regard to California or any other State being reasonable or unreasonable.

Mr. DOUGLAS. I did not say the compact was reasonable or unreasonable. It is for the purpose of protecting the upper basin States.

Mr. RAMSEYER. You say you are ready to ratify as soon as California is reasonable. There is nothing in the compact on that at all.

Mr. DOUGLAS. It is the compact—I will discuss that with you later. I have given you my answer as to exactly what Arizona will do, Mr. Chairman.

Mr. RAMSEYER. I do not get your position, but if that is the way you want to leave your answer, all right.

Mr. DOUGLAS. Is there any member of the committee who has any doubt as to what my position is?

Mr. MICHENER. Simply this, reasking Mr. Ramseyer's question: Would you be controlled by that agreement as entered into by the representatives of those States provided California did not place additional conditions in her ratification by the State legislature?

Mr. RAMSEYER. That is not exactly my question.

Mr. DOUGLAS. He asked me whether Arizona would ratify the compact, but he did not mention any conditions, and I gave him an answer in which I said the State of Arizona would, the very minute the State of California was reasonable in her water demands, ratify the Colorado River compact, and I stated to the members of this committee what the State of Arizona did at Denver.

I ask this committee to reject appeals to prejudice, to discount appeals to imagination, and to analyze the facts, and to judge accordingly. I ask this committee to decide whether the bill which is now before you is predicated upon adequate economic investigations, upon adequate engineering, whether it is based upon a sound national policy, whether it will solve international conditions, whether it is consistent with the theory of a sovereign nation made up of sovereign States. I ask this committee to decide whether a bill of this character should be submitted to the House; whether the House of Representatives should be the engineers and the economists of the project; whether it should pronounce judgment upon the engineering hazards and the financial chances, when, without assuming any such knowledge, without taking any such chances or hazards, the only necessity, flood control, can be given and given speedily at a cost of not more than \$15,000,000. I invite the attention of this committee, in this connection, to my substitute bill.

I take it that the length of time which has been devoted to a bill is no standard but which this committee judges the merits or demerits of that bill. I take it, on the contrary, that relevant questions on provisions embodied in the bill are what compel this committee to arrive at a conclusion.

If, in your discretion, sir, and in the discretion of this committee, it should be seen fit to bring this wholly inadequately investigated proposition before the House of Representatives, then, sir, I submit that not less than 16 hours general debate will be adequate in which to discuss the questions. They are not entirely sectional by any manner or means. They are national. There is a national policy involved. There is the question of State rights involved. There is the question of international difficulties and of international obligations involved. There are the questions, as I have pointed out, of economic unsoundness, of engineering unsoundness, and in addition, sir, there are many other questions which I have not even mentioned here this morning.

So, if the House is to be adequately informed in its decision on this measure, then, sir, I submit that 16 hours are necessary.

I thank the members of the committee.

The CHAIRMAN. Thank you very much.

There are 15 minutes left for the proponents of this measure, in charge of Mr. Smith. It is up to him to say who desires to be heard.

Mr. SMITH. Mr. Swing.

The CHAIRMAN. We will be very glad to hear Mr. Swing.

Mr. SWING. I will take whatever time the committee gives me.

The CHAIRMAN. We will give you 15 minutes. I think that we have been very generous in hearing this proposition. You have had three hours before, and this will divide the time equally.

Mr. SWING. You announced that you would give an hour and a quarter to the gentlemen who spoke just preceding me, and I think it was about an hour and a half.

The CHAIRMAN. They have had an hour and thirty-five minutes.

Mr. SWING. All right.

The CHAIRMAN. We want to be fair with all of you. You may have 15 minutes.

STATEMENT OF HON. PHILIP D. SWING, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. SWING. The opposition to this bill from the first has been from Arizona and Utah. Their Representatives in the House have been consistent and persistent opponents of it.

You have listened to a learned argument here by the Representative of Arizona, giving many objections to the bill, but just to state the bald, plain, unvarnished truth Arizona is fighting this bill because they desire that they should first be assured revenue.

My distinguished colleague, who preceded me, was at one time in the legislature of Arizona, and he cast the deciding vote which made Arizona stay on the outside of the friendly family of Colorado River Basin States.

Every candidate running for governor in that State, on either ticket, the year following the repudiation of the compact by the legislature, contained in his platform the plank that he would demand revenue for Arizona before consenting to the compact or to the development of the river.

While this demand has not been presented to this committee to-day, you recall that Congressman Hayden was very frank in his statement a year ago, and in his minority report made revenue a condition precedent for their acquiescence, either in the compact, or in legislation.

The statement with reference to what they agreed to at Denver is water that has passed under the bridge. Whether it is called agreeing with interpretations and explanations, or agreeing to it with conditions and limitations and restrictions, it amounts to the same thing. The fact is they did not agree to any water settlement.

THIS PROJECT IS PRIMARILY FOR FLOOD CONTROL

The reason we are here is because on the lower Colorado River there exists a flood menace, which proportionate to population is greater than that of the Mississippi. There is nowhere a situation which compares with the menace which exists there.

You have the great Imperial Valley below sea level with 65,000 American citizens and \$149,000,000 worth of property in that basin alone, and other lower basin communities there is additional property to make in the aggregate \$200,000,000 of property, all below the level of the river.

The CHAIRMAN. What other communities below the level of the river are they?

Mr. SWING. Yuma Valley, Palo Verde, some small communities in Arizona, and Needles.

Mr. FROTHINGHAM. Are they all in California?

Mr. SWING. No. Yuma Valley is in Arizona. What is the population of Yuma Valley?

Mr. DOUGLAS. Twelve thousand.

Mr. SWING. Twelve thousand.

I resent the way the opposition has undertaken to minimize and belittle the serious and growing menace to life and property in many communities in the lower Colorado River Basin. They damn this situation with faint praise. The trouble is that Arizona's greed and her desire to hold up the project until she can compel revenue has deadened her ears to the appeal of humanity and made her blind to an impending catastrophe which imperils her own people, only somewhat less than it threatens citizens in California. Before the bitterness over her fight for royalty and revenue arose, Arizona's public men made a record on this phase of the situation to which I will call your attention. Addressing the Senate committee at Phoenix, Ariz., November 2, 1925, Mr. McClouskey, then secretary to Governor Hunt, and now one of Arizona's Colorado River commissioners, stated:

A portion of Arizona is menaced by the stream. Down there in the Yuma country the stream is a menace. You have seen it yourself. The Imperial Valley is menaced. We want that menace removed. (Senate hearings, pt. 3, p. 363.)

Thomas Maddox, civil engineer, once candidate for governor and now one of Arizona's Colorado River commissioners, addressing the Senate committee, said:

We (Arizona and California) are both playing a game, with the future on the stakes. Arizona is risking some slight possible damage in the vicinity of Yuma, but California is gambling that a flood like that of 1884 will not drown out her whole Imperial Valley before flood protection is finally secured. * * * We are approaching a wet portion of our cycle in rainfall. Two years have been wasted already in talk. (Senate hearings, pt. 3, p. 411.)

Governor Hunt in his message to the 66th Legislature of Arizona said:

The danger of the loss of life and destruction of property which hangs over the Yuma and Imperial Valleys, due to the menace of the uncontrolled flood waters of the Colorado River, makes it imperative that this menace be removed at the earliest possible time. (House hearings, 1928, pt. 2, p. 178.)

The Colorado River committee of the Arizona State Assembly of the American Society of Engineers declared:

Lands in Arizona along the lower Colorado are menaced by floods as well as the Imperial Valley. From Arizona's standpoint this is not as big an item as water for irrigation and power, but the risk is imminent and the need for action is immediate. (House hearings, 1928, pt. 2, p. 178.)

Senator Hayden, former member of the House, presented to the Committee on Irrigation and Reclamation during the Sixty-eighth Congress information setting forth the views of various citizens of Arizona on the Colorado River project, including extracts from speeches made by himself. He has made a long study of the Colorado River problem and his views are interesting and sound. He says:

The engineers agree that sooner or later a calamity is bound to occur, because the Colorado is continually raising its delta by the deposit of over 100,000 acre-feet of silt each year. The river can not continue to run on top as a ridge. It must break over some time.

The only way that such a disaster can be prevented is to build a great dam in the canyon of the Colorado which will be high enough to create a reservoir of a size sufficient to store the entire flow of the river for over a year. Such reservoir sites have been found and the question now is to determine which site is the best and how the dam shall be constructed. * * * A solution must be found and the work commenced without delay. If nothing is done, California will be the first to suffer, but Arizona can not escape sharing the tremendous loss of life and property which is sure to come if we do not exert every effort to control the floods of the Colorado River. (House hearings, 1928, pt. 2, pp. 175-176.)

Prof. George Smith, of the University of Arizona, in Bulletin No. 98, published in 1922, said:

The people of the Imperial Valley for 16 years have been fighting a defensive battle against the Colorado, sometimes gaining sometimes losing, but in the main, losing. They can not hold out for many years more. At least once every year, in June, and sometimes at other seasons, the river threatens to change its course from the Gulf of California to the Imperial Valley, as it did in 1905. The only protection at present is the system of levees called, respectively, the first, second, and third lines of defense. Frequently the floods break through the first and second lines of defense and reach the third line.

Each year the river, through silt deposition, builds up that part of the alluvial fan in front of the levees, in some years as much as 4 feet; and each year the levees must be raised an equal amount. Over one-quarter of a million dollars is expended each year by the farmers of the Imperial Valley in this work. The limit will be reached soon. Levees 40 or 50 feet high can not be maintained. (House hearings, 1928, pt. 2, p. 176.)

I want to read from a pamphlet published by Senator Mulford Winsor, president of the Arizona State Senate and spokesman before the House committee for the Arizona Colorado River Commission. His pamphlet is entitled "The Menace of the Colorado." He lives himself in the Yuma Valley by the side of the Colorado River and knows what he is talking about when he says:

There can be no question that the impelling force behind the movement, now under way, for the conversion of a national menace into a national asset, is recognition of the necessity for prompt action to protect and preserve imperiled lives and property. In every public discussion this phase of the subject holds

first place. In every stated order of importance of the ends to be achieved by development of the Colorado River, the prior right of flood control is conceded. It is the heart of humanity responding to a just call for succor. The safety of women and children is threatened; homes and towns and cities are in the path of destruction; an agricultural empire faces extinction. * * * The necessity for protection is imminent. It will not permit of delay. * * * Nor has the necessity for control of the Colorado's floods been overdrawn. * * * The necessity for control of this unruly giant of rivers is positive, irrefutable, imperative.

With the foregoing it ought not to be necessary to call other witnesses, but I will read an extract from a statement by Governor Dern of Utah, who says:

Imperial Valley is below sea level, and the river flows on the crest of the flat rise between the gulf and the valley. In the flood season the river tends to flow into the valley, threatening the destruction of nearly half a million acres of land and the homes of 75,000 people.

Speaking for Utah, I feel free to say that we think California is entitled to protection from floods, elimination of silt, stabilization of irrigation water supply, and domestic water for her cities. (House hearings, 1928, pt. 2, p. 235.)

Edward E. Spafford, National Commander of the American Legion, has had occasion to study this problem, and in a recent letter to Chairman Addison T. Smith, he said:

I had an opportunity of personally visiting the Imperial Valley and to there visualize the great danger of the life and property which now exists because of the uncontrolled Colorado River. If something is not done in the near future the Government of the United States will have more to answer for than they did during the flood of the Mississippi Valley.

Some time ago the War Department had occasion to send Col. T. H. Jackson of the Army Engineers from San Francisco to the Imperial Valley to study the flood menace and make a report on the flood situation. In this report, made November 17, 1926, Colonel Jackson stated:

That the present situation is a serious one can not be denied, and it is obvious that action, prompt and vigorous, is necessary to prevent it from becoming more serious. * * * There are two methods of controlling the floods in the lower Colorado River. One is by storage of the flood waters in reservoirs in the upper river. Such storage will eliminate the bulk of the silt and in doing so make control in the delta a simple matter irrespective of the amount of water flowing into it at any time, for when relieved of its silt burden the river will scour out its channel below Yuma, and create a well-defined channel lying well below its banks. In my opinion it is reasonable to expect that under such a condition the river bed in this stretch will lower as much as a foot per year for the first 25 years after the silt is removed by storage.

The second method of control is by levees. In view of the magnitude of the silt problem and the peculiar topographic situation in the delta, the control of floods by means of levees will be difficult and expensive. Further, it is probable that such control will become more difficult and more expensive each year. * * * To meet the present situation, therefore, it is necessary that some plan be adopted at once and carried out promptly. * * * The information available warrants, in my opinion, the following conclusions:

(a) The floods of the Colorado River present a serious problem and one that will increase in magnitude until the silt carried by the river is removed by storage. Thereafter the menace of the floods will decrease.

The situation is so serious that the Federal land bank in this district has taken notice of it. They sent their engineer to Imperial Valley to study the problem several years ago, and after he had made his report they ceased making loans. On November 4, 1927, the following letter was written to Messrs. W. A. Potter & Son, who sought a loan on some farm land in Imperial Valley:

GENTLEMEN: Answering your favor of October 29, this bank ceased making loans in the Imperial Valley some years ago, and we must stay out of that territory until the flood hazard has been eliminated.

Yours very truly,

THE FEDERAL LAND BANK OF BERKELEY,
By SIMS FLY, *Treasurer.*

No one who is not blinded by partisan passion or controlled by prejudice can fail to visualize the desperate situation of the 65,000 people who live in this valley, shaped like a saucer, with the uncontrolled Colorado River running around a portion of the circumference of that saucer, threatening to break into the valley and destroy it, because the fall of the country towards the valley is three and one-half times as great as the fall toward the Gulf of California. Mr. Douglas would minimize this great danger to life and property. There is no necessity to speculate as to what might happen if the river broke into Imperial Valley. That has already happened and we know what took place in 1905-6. Eight lives were lost, 100,000 acres were permanently inundated by the newly created Salton Sea, and 25,000 additional acres were so washed over and cut up as to be permanently worthless. Much of this 25,000 was in a high state of cultivation.

Mr. Douglas desires to calculate the number of years it will take to completely fill up the Imperial Valley, but he seems unconcerned with what would happen at the first rush of water if the river broke at Volcano Lake levee at the height of flood season, with 100 square miles of water, 10 to 15 feet deep, backed up against the levee as I have myself seen it in the past. With 10 to 15 times the population and with 10 times the values in property, of course, the loss is bound to be very heavy. The river has temporarily been forced away from the Volcano Lake levee but no one believes it can be kept away for long unless control reservoirs are built. The river broke into the city of Yuma and inundated the business section 4 feet deep, with heavy property losses, in the year 1916. Another break into the Yuma Valley inundated 1,200 acres in 1921. The river broke into Palo Verde Valley and inundated 30,000 acres, and the town of Ripley in the year 1922. And the river will keep on breaking into first on valley and then another, as long as these communities are compelled to depend upon levees for their protection with the flood waters and silt uncontrolled, keeping a constant menace hanging over their heads, no matter how many millions of dollars they spend for this kind of protection, and they have spent \$10,000,000 up to date without any real or permanent relief.

There is no basis whatever for the statement that the flood-control works will cost more than the present value of property to be protected. Such is the extreme to which blind passion will drive men in debate. The Imperial Valley basin, on conservative estimates, holds in excess of \$149,000,000 property values. Yuma Valley, Palo Verde Valley, Needles, and other smaller communities, add values to make a grand total in excess of \$200,000,000. These values are growing every year with the growth of the communities and will increase rapidly if the impending menace of flood is once removed. As against \$200,000,000 of present actual values is the cost of \$41,000,000 proposed for the flood-control dam.

ENGINEERING FEATURES FULLY INVESTIGATED AND ARE DEPENDABLE

There has never been a project proposed to Congress in which there has been more thorough engineering investigation than the Boulder Dam project. The first survey was authorized by the Kinkaid Act in 1920. Thereafter, pursuant to said act, the Reclamation Service, under Arthur P. Davis, made its first and preliminary report in 1921. They made their final report in 1922.

Congress, after receiving this report, considering the magnitude and importance of the problem, continued to support with appropriations a further study of the subject under the direction of F. E. Weymouth, who succeeded Mr. Davis as chief engineer of the Reclamation Service. In 1921, the Interior appropriation bill carried \$100,000 for the study of the Colorado River problem. The same appropriation bill for 1922 carried another \$100,000, and in 1923 an additional \$25,000 to complete the study and make the report. In addition to this, the local communities affected put up \$185,000 of their own money which, together with the first \$20,000,000 appropriated under the Kinkaid Act, makes \$430,000,000 for surveys and engineering studies of the project. The Weymouth report was not only the result of the exhaustive study and matured judgment of the best Reclamation Service engineers, but in addition, there was called in the best engineering talent of the West to act as an advisory board. This board consisted of Louis Hill, well-known consulting engineer of Los Angeles, James Munn of Denver, Colo., and A. J. Wiley of Boise, Idaho.

When the report, with the approval of this consulting board, came to Washington, the Secretary of the Interior referred it to a group of six engineers for further study, two of whom criticized the report in some respects. The severest criticism came from Col. William Kelly. It is interesting to note however that promptly upon making this adverse report, Colonel Kelly was rewarded by a high salaried position as consulting engineer for the National Electric Light Association, regarding which we are hearing so much now for its propaganda against this very project.

An effort has been made to have it appear that the American Engineering Council has criticized the engineering features of the Boulder Dam project. Such is not the necessary import of the language embodied in their resolution. They simply say:

The information set forth in the reports which have been submitted to us is not conclusive as to the engineering feasibility of the plan outlined in the Swing-Johnson bill.

The fact is that on January 10, 1928, the American Engineering Council criticized the Swing-Johnson bill primarily because it provided that the Government might build a power plant, and they expressed themselves as opposed to the Government going into business. The recommendation at that time, as set forth in the letter of the executive secretary to Mr. Douglas, found in the appendix of the House hearings (1928), page 580, provided that the executive secretary should make particular efforts to bring the action of the council to the attention of Members of Congress. There is no record of any particular study of the subject preceding the adoption of the resolution on January 10, 1928, but it was provided "that a special committee be appointed, if necessary," to oppose the Swing-Johnson bill. In other

words the council declared its decision first and sought evidence to support it afterwards. Some time thereafter a committee was appointed of which Mr. Francis Lee Stuart was the chairman and he evidently made some considerable study of the problem and made a rather full report on the project to Mr. A. W. Berresford, president of the American Engineering Council. This letter was published in full in the United States Daily, April 23, 1928. It is interesting to note some of the things that Mr. Stuart, on behalf of the Engineering Council, reported about this project. He says:

In regard to the power question per se of the Colorado River, owing to the fact that the river rises in, flows through, or bounds on seven States and discharges into the ocean through a foreign country, that the question has intrastate, interstate, and international aspects, and that there must be continual conflict between the use of water for flood prevention, drought, and irrigation purposes, desilting, domestic use, and the generation of power, I am strongly of the opinion that the matter should not be left to private interests but should be under the control of the Federal Government for all such purposes, to the fullest extent which does not confiscate State rights, including, if necessary, the making of prime power for sale to other agencies at the hydroelectric plants in order to avoid political turmoil which will ensue from conflicting interests of private parties.

Regarding the "engineering feasibility of the plan" to build a high dam at Boulder Canyon, Mr. Stuart declares that "undoubtedly such a high dam could be built, and, if of a generous gravity section, it can be built in such a way as to insure the safety of the people below it from earthquake or other disasters." He further declares, "I am not in favor of trying to block the bill." He does recommend, however, that the bill be amended to contain an option for the Secretary of the Interior to build two dams, instead of one, to create a storage capacity of not less than 20,000,000 acre-feet. Mr. Stuart's principal objection is based on what he thinks is lack of information regarding present knowledge of the silt problem. He seems to be unfamiliar with the fact that the Reclamation Service and the Imperial Irrigation district have both conducted important studies of this very problem over a long period of time during the past 20 years. He also seems to be unfamiliar with a 93-page pamphlet published probably since his report was written, setting forth the exhaustive studies of this very problem by two eminent irrigation engineers of the Department of Agriculture, Mr. Samuel Fortier and Mr. Harry F. Blaney. After a thorough study of the silt problem of the Colorado River, they approve and join in the recommendation of the building of a high dam "such as is proposed at Boulder Canyon." They say:

The most feasible and economical means of solving the silt problem of Imperial Valley is to impound the river silt behind a high dam, such as is proposed at Boulder Canyon. * * * Owing to the magnitude of the normal quantity of silt transported into the lower basin, it would be unwise to attempt to control the river by a relatively low dam located below the canyon section, since a reservoir of 12,000,000 acre-feet capacity would have one-third of its capacity taken by silt in 30 years, if no other reservoirs were built above it during this period.

In passing, it might be well to call attention to the fact that the Engineering Council of the State of Utah appointed five engineers to make a study of the Colorado River problem and of the Boulder Dam project. They called to their aid five lawyers appointed by the president of the Utah Bar Association. This body made a six months' study of the Colorado River water-rights problem and questions

raised in connection with the proposed construction of Boulder Dam. They concluded their study and made a report which was published in the Salt Lake Tribune March 4, 1928, in which they recommended "the passage of the Swing-Johnson bill or comparable legislation." The Colorado Engineering Council, representing approximately 2,000 members in that State, indorsed the Swing-Johnson bill and the plan therein contained, in 1926. There is no doubt that if a vote could be taken the engineers of all the other States in the Colorado River Basin who are nearest to the problem and therefore best informed on its features would also indorse the project.

PRIVATE POWER COMPANIES SEE NO ENGINEERING OR ECONOMICAL OBSTACLES TO BUILDING DAMS IN CANYON SECTION OF COLORADO RIVER

R. H. Ballard, then vice president and general manager, Southern California Edison Co., now president, testified before the House committee (1924 Hearings, p. 492) that the engineers of his corporation had gone thoroughly into the question of the practicability, from both an engineering and economical standpoint as to building dams in the canyon section of the Colorado River. Mr. Barre, their executive engineer, had gone thoroughly over the various sites, including Boulder and Black Canyons, and had made a study of their possibilities and had made 20 or 30 different reports to the company thereon, recommending development. I read from the hearings:

Mr. RAKER. What I was trying to get, that from your engineer, Mr. Barre, and his consultation with other engineers, from the examination made, they have determined that these various dams could be placed on the Colorado River at a price that would justify their construction.

Mr. BALLARD. Yes, sir.

Mr. RAKER. Has the board of directors of the company discussed this matter to the extent that the board is of the opinion—that is, the governing board is of the opinion—that it is feasible and practicable, as you have stated Mr. Barre has advised you?

Mr. BALLARD. Yes, sir; the board has discussed it and the president has discussed it with the board, the feasibility and practicability of it, with the result that the president's letter to you gentlemen states the willingness of the company to proceed at once with an expenditure of \$30,000,000 to \$40,000,000 of power on the work (p. 492).

Mr. SWING. What is the aggregate horsepower of all the sites covered by your filings?

Mr. BALLARD. I think about 3,000,000 horsepower.

Mr. SWING. And you stated you filed those in good faith and within a week after your permit was granted you would go to work?

Mr. BALLARD. Yes (p. 527).

Thus we see the fears expressed by opponents of the bill about diverting the water from the site and putting in the foundation between floods do not alarm private power companies. These contentions apply only if the Government is to do the job.

SHAMEFUL TO USE SAINT FRANCIS DAM DISASTER AS ARGUMENT AGAINST BOULDER DAM

The shock of the tragedy which followed the failure of the Saint Francis Dam, left a marked impression on the public mind of the country, but there has never been one bit of question as to the origin

or cause of the failure of that disaster. Every group of engineers or public officials who have studied that disaster have unanimously agreed that "the dam failed as the result of defective foundations." That is, the concrete work of the dam proper was rested upon rock or conglomerate formation which when wet did not possess the power of resistance needed to support the weight of the dam and the pressure of the water. All the engineers who studied the Saint Francis Dam agreed that there is nothing in that failure to indicate that the accepted theory of gravity dams is in error, or that there is any question about the safety of concrete dams designed in accordance with that theory when built upon sound bed rock.

When this disaster occurred, I promptly called on those who had any knowledge of both the Boulder Dam site and the Saint Francis Dam site to advise me as to what effect or bearing, in their judgment, the Saint Francis Dam disaster had on the proposal to build a high dam at Boulder Canyon.

I received replies as follows: Former governor and former State Engineer, J. G. Skrugham, of Reno, Nev., special advisor to the Secretary of the Interior, states:

Saint Francis Dam disaster has no bearing on Boulder Canyon construction as physical conditions are entirely different. Boulder Dam founded on Monolithic Rock braced between almost vertical canyon walls.

Dr. W. F. Durand, one of Secretary Work's special advisors on Boulder Dam, states:

Do not consider Saint Francis Dam disaster cause for any modification my report to Secretary Work. Geological and physical conditions entirely different in the two cases. Dam site and foundation condition Boulder Canyon carefully and thoroughly examined by deep rock borings and extended study by geological experts. Safety high dam Boulder Canyon based upon these two lines evident.

Governor and former State engineer, Frank C. Emmerson, of Wyoming, also a member of Secretary Work's advisory board, states:

I do not consider that the failure of the Saint Francis Dam would require modification of my report as a special advisor to Secretary Work upon the Colorado River project. The said report states, under the discussion of conclusion 5, that at either Boulder Canyon or Black Canyon is found available an "excellent dam site both as to foundation conditions and side-wall materials." Either the granites of Boulder Canyon or the breccia of Black Canyon are of such strength as to safely carry the heavy loads that would be entailed by the weight of the dam itself and the pressures that would result from the impounding of water.

Mr. A. J. Wiley, member of the American Society of Civil Engineers and member of the American Institute of Consulting Engineers, of Boise, Idaho, who studied the Boulder Dam project for the Secretary of the Interior, and who also acted as chairman of the governor's board for the examination of the Saint Francis failure, states:

The Saint Francis Dam did not fail because of any defect in the accepted theory of solid concrete gravity dam design. It failed simply and solely because the material upon which it was built was not strong enough to resist the pressure transmitted to it by the dam * * *.

As compared with the strength of 523 pounds per square inch when dry to practically zero when wet as shown for the red conglomerate foundation under the west wing of the Saint Francis Dam, the granite bedrock at the Boulder Canyon site of the Boulder Canyon dam has a compressive strength of 22,200 pounds per square inch when dry and 19,000 pounds per square inch when wet. The breccia foundation of the Black Canyon, which will probably be the adopted site for the Boulder Canyon dam, has a compressive strength of 13,900 pounds

per square inch when dry and 11,100 when wet. The maximum compressive stress on the foundation will be about 550 pounds.

Prof. F. L. Ransome, professor of economic geology of the California Institute of Technology, formerly of the United States Geological Survey, who spent more than a month carefully studying the Boulder Canyon site on the ground and made a favorable report thereon to the Interior Department, states:

The disaster of the Saint Francis Dam was clearly due to the placing of the dam on an improper foundation. Nothing in the failure indicates that the design and construction of the dam itself was at fault. The gravity type concrete dam is still regarded by engineers as one of the safest and most permanent of man-made structures. I still regard the Boulder Canyon and Black Canyon sites as excellent for a high dam. There is no possibility at either of these sites for such a failure of foundation rock as occurred at the Saint Francis Dam. "During my careful examination of the Boulder and Black Canyon sites, I saw no earthquake cracks and no evidence of the geological recent movement of the rocks. Had such cracks as are mentioned by Mr. Douglas been present, they could not have escaped my notice.

I can not understand how men in serious debate can draw on their imagination to supply arguments which do not exist in fact. The unfounded assertion that this dam is to be built in the heart of an earthquake area has only been advanced because of the knowledge that the public generally is only vaguely informed as to the location of the Boulder Dam site and its geological formation. There has been no geologist who has made a study of the Colorado River Canyon who has asserted that the sanyon is a fault. On the contrary, all agree that this canyon is the result of millions of years of erosion.

Mr. Douglas, although referring in his minority report to cracks which he has seen in the earth, caused by earthquake disturbances, does not undertake to place these in the vicinity of Boulder or Black Canyons. Why then should he refer to them at all?

Mr. W. G. Clark, a witness who appeared before the House Committee in 1924, made some reference to what he thought was an earthquake when rocks fell in the canyon while he was camping on the southern rim of the canyon. Rocks, of course, fall from time to time in the canyon due to erosion, weather conditions, etc. Clark was interested in a scheme of development which made it important for him to have earthquakes in this locality as a part of the proof of his case.

I have personally talked with many of the oldest residents of the town of Las Vegas, only 25 miles away, on the north side of the canyon, and none of them ever recollect at any time anything more than the slight shaking of the windows.

I have just received a letter from Mr. Charles A. Palmer, president of the Comanche Mining & Reduction Co., referring to Clark's testimony, in which he states:

I was out on the river with Mr. P. J. Sullivan, my wife, and a party of several others when the earthquake of San Francisco occurred, and we were right on the river and we did not feel any sign of the disturbance that had occurred at San Francisco or along the coast and knew nothing of it until 10 days afterwards when parties came from Las Vegas and told us that San Francisco had been totally destroyed by earthquake and fire.

Now, as I have been along the Colorado River for years and am an engineer myself, I question if Mr. Clark was on the south side of the Boulder Canyon and could see the rock falling on the north side, thousands of tons, without feeling the tremor on the south side. I do not think that any engineer would take that

statement seriously, that an earthquake could make a movement of such unusual crash and not have caused the south side of the canyon to shake.

I have been along the Colorado River for years in the investigation of water, power, and mining projects and have studied the conditions there thoroughly and in my opinion I do not think that there is any more chance for earthquakes in that location than in any other part of the United States, and I can say one thing, that I have never felt a tremor anywhere along the Colorado River.

Furthermore, Mr. Clark's fears were negated by General Goethals, who was called as a witness by Mr. Clark:

General GOETHALS. I have seen the fault which Mr. Clark pointed out that he had noticed there.

Mr. HAYDEN. Are you convinced that the danger from earthquakes is so serious that a rigid masonry type of dam should not be adopted at that site?

General GOETHALS. No. As between the masonry dam and the concrete or the rock-filled dam going to that height I would rather put in a rock-filled dam, that is all.

Mr. HAYDEN. Any type of dam, if properly constructed, would be a safe dam at Boulder Canyon?

General GOETHALS. I think so.

General Goethals was here advocating a dam a thousand feet high.

A LOW DAM WILL NEITHER SOLVE THE FLOOD PROBLEM NOR MEET THE NECESSARY CONDITIONS WHICH EXIST IN THE COLORADO RIVER BASIN

A low flood-control dam, as has been suggested by some, will not solve the flood problem on the Colorado River, except as a temporary expediency. Either the dam will be built with a hole left in it as was done in the Dayton flood-control dam and so the silt will pass through the reservoir and on to the delta section of the river where it will continue its menacing work of building up the bed of the stream, making overflow in high-water season more likely, or the dam will hold back the silt and quickly fill up.

Such a low flood-control dam does not meet the requirements of the Federal Government. It will furnish no means of repayment to the Government. There will be no power available because the head or pressure in the reservoir will violently fluctuate as the flood waters are first caught and then discharged. The farmers are unable to bear the burden of flood control. It will not make possible a source of supply from which the Federal Government can perform its obligation with Mexico in case a treaty is completed under pending negotiations. The low flow of the stream is now fully appropriated and used. The Government must possess a storage reservoir which it can control and from which it can comply with treaty obligations.

A low flood-control dam, from the very manner in which it must be operated, to-wit, filled up in flood season and turned loose in low flow, means that Mexico will thereby have an augmented flow during low season which will enable her to increase her present cultivated area. A high dam with the all-American Canal will enable the Government to artificially fluctuate the flow that goes into Mexico at irregular intervals by discharging the surplus through the all-American Canal, from time to time, into the Salton Sea, thereby restricting and limiting Mexico's beneficial use of the water to the area which it now has in cultivation.

California can not afford to support such a proposal, because under the Colorado River compact, California must surrender her present water rights to the natural flow of the river and look to storage instead. A low dam would offer no dependable source of water. Also, under a six-State pact, California will become the guarantor to the upper States of the entire amount of water that might be used in the lower basin. Therefore, to insure herself against extreme uses by the State of Arizona, California must insist upon substantial storage, large enough to carry over not only from one month to another but also from one year to another.

The upper basin States will not consent to storage as has been testified to by their Representatives in the House hearings this year. Governor Dern of Utah declared:

In some quarters it has been advocated that a mere flood-control dam for the Imperial Valley should be built at once by the Federal Government. I must earnestly object to that proposition because it absolutely omits protection of the rights of the State of Utah, and I know the rest of the upper-basin States share my views. A flood-control dam, constructed before the Colorado River compact is ratified by the seven States, would be scarcely less dangerous to the upper-basin States than would the proposed Boulder Dam. * * * The official position of Utah is that we are opposed to any and all development of the lower Colorado River in advance of the completion of the compact.

Governor Emmerson of Wyoming states:

We would object to a flood-control dam or any reservoir proposed for large storage of water if a compact to protect the interests of the upper States were lacking.

Mr. L. Ward Bannister of Colorado:

In respect to mere flood control bills, I could not state the case any better than it was stated by Governor Dern. It is evident that the Government has no way of controlling the acquisition of priorities below a mere flood-control dam, and therefore no way of protecting the upper States. Again, if a dam were a mere flood-control dam there would be no storage in it and therefore no way of satisfying existing priorities during the low flow of the river. There would be no imposing of the limitations of the Colorado River compact upon the basin in order to exercise as far as possible the statutory powers of Congress. So there is nothing in a dam for mere flood control.

Mr. Wilson, representing New Mexico:

We are unalterably opposed to a mere flood-control dam, without a seven-State compact, because we do not believe that such a dam will satisfy any of the necessary conditions surrounding the situation. It certainly would not furnish flood control except as a temporary expedient. It could not take care of the silt from the river, and therefore in our view would not operate ultimately as a sufficient factor in that respect. * * * The construction of a flood-control dam would only add fuel to the flames and force the upper-basin States into litigation to protect their rights against the increased uses of water by the lower-basin States. * * * The flood-control dam proposals seem to us to represent an effort on the part of those who do not want to see the project constructed to add to the controversial matter now before Congress.

THE BOULDER DAM PROJECT IS ECONOMICALLY SOUND AND THE
GOVERNMENT TAKES NO RISKS IN LENDING ITS CREDIT

Having demonstrated that there is a tremendous, imminent and increasing flood peril to the entire lower basin of the Colorado River from the uncontrolled condition of the river, and having shown that there is an engineeringly sound remedy in the Government's proposal

to build a high dam at Boulder Canyon, I now offer the proof to show that the Government can undertake this vitally necessary humanitarian project without the risk of the loss of a single dollar to the United States Treasury. The project is unique in this respect. God in his wisdom has prepared a place for man by one undertaking to control for centuries to come the flood menace on this river, and at one and the same time, as has been so ably said by Secretary Work "turn a national menace into a national asset."

The pending bill contains a provision which has never been inserted in any legislation heretofore and provides that before a dollar can be appropriated or before any contracts can be made or any money expended, there must be in the hands of the Secretary of the Interior solvent and binding contracts from agencies, public and private, agreeing to take the benefits of the project on terms dictated by the Secretary of the Interior which will guarantee the return to the United States Government of not only every dollar expended but 4 per cent, interest as well.

Mr. Douglas goes into a long, minute, and fine-spun argument to show that if the cost of steam production continues to decline in the future as rapidly as it has in the past few years then a question may arise as to whether hydroelectric power will be cheaper 50 years from now than steam power. This hypothetical situation need not worry Congress. It is the problem of the local communities who are advocating the project and who must obligate themselves to take water and power at rates to be fixed by the Secretary of the Interior before the project can ever begin. If the flood menace is so serious to them, if domestic water is so necessary, if agricultural development at a future date is so desirable that they are willing to pay something more than the actual cost of the power in order to secure the whole project, that is their problem and their decision to make. But without contracts which will fully repay the Government there will be no project.

However, every person who has made any study of the oil situation knows, first, that nature is not now engaged in the creation of new oil supplies; second, that nowhere in the world have the oil fields and possible oil fields been so thoroughly explored and developed as in southern California, and nowhere is the supply being taken out of the ground and exhausted more rapidly than there. The history of every oil field is the history of every oil well. It may start as a gusher but in a few years it must be pumped, and finally it fails as a commercial producer. While there have been ups and downs in the price of oil in the past 10 years because of unnatural and undesirable overproduction, nothing is more certain to minds who have studied the problem than that the price of oil in southern California must of necessity climb in the future. Hence, since the cheapness of steam power in southern California is based primarily upon cheap fuel oil, the cost of steam power in the future is bound to increase.

The hypothetical proposal of how many "British thermal units per kilowatt-hour" will be required in the future to develop electricity by steam is purely theoretical, and the proposal that the cost of steam production in California will continue to be reduced is purely imaginative.

I quote Mr. C. P. Dunn, chief engineer of the Portland Electric Power Co., from his article "Steam and hydraulic generation" published in the *Electrical World*, April 21, 1927, in which he states:

We read in the current discussions of steam versus hydro that there is still room for further advances in steam economy while hydro efficiency has practically reached the ultimate, with the present 92 or 93 per cent efficiency obtainable in hydraulic prime movers. This sort of statement is only partly true and is misleading. It is true that there is room for further improvement with respect to thermal efficiency in steam plants, and some such improvement will take place in the near future. The economic benefits of this improvement will be partially offset by the gradual upward trend of fuel prices. It is true that the efficiency of waterwheels and generators has practically reached the theoretical limit, but this does not by any means indicate that the ultimate economy in hydro construction has been reached.

The fact is the private power companies to-day have pending before the Federal Power Commission, applications on every available power site in the Colorado River, including the Boulder Dam site itself.

Senator Phipps, of Colorado, who is himself heavily interested in a private power company, stated to the Senate in the Congressional Record of May 2, 1928, that he knew of a power company that was to-day ready to proceed with the building of a dam 380 to 400 feet high in the canyon section of the Colorado River for the purpose of producing hydroelectric power and would do so even if the Government proceeded with the Boulder Dam project.

Senator Phipps, last Congress, stated in the Congressional Record:

One thing is admitted on all sides—by those who favor Government ownership and by those who advocate private operation—there is a real need for this additional power in the West.

Again, this year, in the Record of May 2, he says:

Mr. President, bear in mind that the demands for power, hydroelectric or steam electric, in California and that section of the country, have increased so rapidly that they have doubled in the last five or six years. Personally I am of the opinion that no matter what developments may come in the lessening of cost of electrical power produced by steam, it will still be found practicable and economical to construct hydroelectric plants and produce power on our western rivers. * * * I think there is ample leeway in the possibilities of a hydroelectric plant such as would be erected at Boulder Canyon Dam to enable the department to safely figure upon a return.

UNTRUE THAT BOULDER DAM PROJECT BENEFITS CALIFORNIA ALONE

Proportionate to population and wealth, Arizona will benefit more than any other State. The citizens of Arizona and Nevada, under the Swing-Johnson bill, are entitled to the benefits of the project upon identically the same terms that the citizens of California are entitled to its benefits. This has all been freely admitted, even by the leading citizens of Arizona before they became blinded by their desire for revenue.

I refer again to the statements of Senator Windsor, president of the Arizona State Senate and spokesman for the Arizona Colorado River Commission, in a letter written in 1923 to the State Commander of the American Legion. He recited the numerous benefits that would flow to the State of Arizona from the early development of the Colorado River including the protection of property from the flood menace, reclamation of additional land, use of electricity, the stimulation of industry, etc., and concludes with the following:

A very small part of the power of the Colorado will prove the source and basis of a growth to Arizona beyond the pretensions of optimism. In the interior and favored valleys it will lift water out of the ground, and cause fields and orchards and vineyards—hundreds of thousands of acres of them—to spring up, to supplement if not to exceed the areas reclaimed by direct diversion, and the homes of people to dot these fertile lands. Out of the air it will draw at low cost the huge supplies of nitrogen so necessary to agricultural productivity and vitally important throughout the wide compass of chemistry. It will insure lessened costs for the production of mineral wealth stored in 10,000 hills, and make practicable the opening of many of these storehouses. It will stimulate the search for oil. It will render feasible the rearing of manufactories for the conversion of Arizona raw products—of herd and field, mine and forest—into finished articles, in part at least for use at home, thus lowering the cost of living and supplying materials for future growth. It will cause towns to multiply, cities to expand, markets for Arizona products to enlarge. Transportation enterprises thus fed will span the State and join its farther quarters with electrical ribbons of steel. Wealth will be created and wealth will be attracted, as like ever serves as a magnet to like. The eyes of the East and the West, the North and the South, will be turned Arizonaward, and her beckoning hand, suggestive of opportunity, will persuade men of means, of labor, and of science. Population will multiply. Prosperity will reign. Arizona will come into her own. (House hearings, 1924, information, p. 203.)

It is impossible to understand why, when confronted with a project which offers so much of promise to the State of Arizona, they want more and demand in addition revenue in the form of royalties.

Senator Hayden, when a Member of the House committee, put into the record his own statement on this subject from which I read:

As a State in the Union, Arizona has a right to ask that this great work be undertaken without delay, not only for her own benefit but on behalf of the Nation as a whole. (House hearings, 1924, pt. 2, information, p. 41.)

And again, referring to California's share in the benefit, he claims that even this will benefit Arizona:

Suppose that cheap power does double the present population of Los Angeles and southern California by making that city and section a great manufacturing and industrial center, how will Arizona be injured? Will there not be more mouths to feed and more backs to clothe, and will not that create a demand for the products of Arizona's irrigated farms and stock ranges? How can we fail to share in the prosperity of so close a neighbor? It seems to me that there can be no just cause for jealousy, but, upon the contrary, we should rejoice at the prospect thus presented, for anything which promotes the welfare of the great Southwest, of which we are an integral part, is bound to redound to our benefit. (House hearings, 1924, information, p. 49.)

Again, Arizona engineers, speaking to the Colorado River committee of the Arizona State assembly of the American Association of Engineers, declared in 1923:

The development of the Colorado River is the biggest thing on Arizona's industrial and agricultural calendar. It means new industries, lower costs in present industries, more land under cultivation, and security of the Yuma and Imperial Valleys. It means prosperity and progress in the Southwest and millions of dollars turned loose for development. (House hearings, 1924, information, p. 25.)

But not only will the Boulder Dam project benefit Arizona and Nevada, as well as California, but the Swing-Johnson bill which authorizes its development, will perform a great service for the upper basin States.

L. Ward Bannister, in testifying before the House committee (hearings 1928, p. 329) says:

It was said that * * * this bill * * * is solely a measure for the benefit of California. I want to point out to this committee that there are as many as 12 ways in which this measure, predicated though it be upon a six-State

basis, is of distinct advantage to the upper basin and therefore to the city of Denver which I represent.

Mr. Bannister then proceeds to narrate and amplify the 12 benefits which will flow to the upper basin States from the Swing-Johnson bill. He then concluded:

It was said that the bill was for the benefit of California. If where there is any State that would get any more out of this bill than would any other, it probably is the State of California, but I maintain that the upper States of this river receive a benefit which is only second, if indeed it is that, from the passage of this bill, whether it goes on a seven-State basis or on a six, for it is only by a bill of this kind, if we can not have seven States, that our upper States water rights can be protected, even as to those now existing, to say nothing of those we yet expect to create to water that million and more of acres in my own State, 600,000 and more, I believe Governor Emerson has said, in his State, half a million or more in Utah, and four or five hundred thousand or more in New Mexico. This bill is decidedly a bill for the protection of the upper basin. We can not get along without it (p. 341).

California's position on the compact and on the river problem was reviewed by Governor Dern whose statement is found in House hearings, 1928, page 234. He said:

California delivers the ultimatum that her ratification must always be predicated upon adequate storage. I want to say here and now, and without any mental reservations, that I think California's position in this respect is reasonable, and that she is justified in this demand.

If I were a Californian, I would take the same stand. I can see no reason why California should ratify the compact without being assured of storage. She is already using the whole river at low water and has acquired a prior right to it, without any compact, and a compact will not improve that right so far as the natural stream flow is concerned; therefore, a compact means nothing to California. But California wants more water than she can get from the natural stream flow. The only way she can get it is by impounding flood water. It is only in order to get this flood water that she has any interest in the Colorado River compact. In fact, the Colorado River compact was negotiated chiefly for the purpose of enabling California to get storage water.

California, in the solution of her serious flood problem on the lower Colorado, has been willing to cooperate with her neighbor States in the Colorado River Basin and to accord to them benefits of the project and legislation heretofore referred to. California is not selfish and is not trying to get something for herself alone.

GOVERNORS' RESOLUTION ADOPTED IN DENVER, 1927, NO EMBARGO

The governors' resolution adopted in the 19th day of December, 1927, suggested "no legislation" before the negotiations "now in progress" have been completed. At that time, the States of California, Arizona, and Nevada were in a tri-State conference, looking to a tri-State treaty. These negotiations ended unsuccessfully. The House Committee on Reclamation and Irrigation, when it voted to report out the Swing-Johnson bill, adopted a resolution providing for a period of six weeks for the negotiations between the lower three States. Negotiations were resumed in accordance with that resolution and those negotiations were concluded on March 15, without success. Since that date nearly two additional months have passed and it is generally agreed that further negotiations at this time would be fruitless.

The resolutions are not effective now and do not apply to the present situation and were not intended to so apply.

In this connection, let me call attention to one of the signatures to the governors' resolution, Gov. M. C. Mechem "representing New Mexico." It has come out through the Federal Trade Commission investigation that Mr. Mechem who sat in all of the conferences and inside meetings of the upper governors, was at the time, in the pay of the power corporations and received \$5,299 from the joint committee of national utility associations for this work. The significance of his presence at the meeting is best explained by a memorandum found in the files of Josiah T. Newcomb, head of the power company lobbyists, which made the following suggestion:

In this connection, it occurs to me that there is opportunity for some effective work in the Colorado River States prior to this conference of seven Western governors. If Utah and perhaps one other State can be influenced to continue the battle against Boulder Dam, it is going to be much more difficult to obtain approval in Congress on any appropriation bill of such proportions as will be required for the Boulder Dam development.

I do not charge and I do not believe that any other member of the governors' conference who signed the resolution was directly or consciously influenced by power company money or propaganda, but with the former governor of one of the States in close and confidential communication with all the delegates and ardently arguing for an embargo, unconsciously the others were doubtless to some extent affected. Others, however, have now changed their position, or rather held that the governors' resolution is no longer applicable.

L. Ward Bannister who signed for the city of Denver and testified before the House committee in January of this year (p. 329) said:

I wish to refer to the resolution which was passed by the governors of the upper States, and which was signed by me in behalf of the city of Denver. The resolution speaks for itself, gentlemen. It declared against development under Federal legislation during pending interstate negotiations and efforts to reach a seven-State agreement. It was not a pledge among upper State interests as to what action they would take upon the expiration of the period of pending negotiations and efforts now being made for agreement among these seven States. It was an announcement of policy only for that period and not for the period to follow. * * *

I see no reason why this committee should wait, with all that it has yet to do, for results from the States, and I think that the bill ought to be reported out some time during this session of the Seventieth Congress, in sufficient time to permit its passage * * * (p. 345).

Mr. Francis C. Wilson, Interstate River Commissioner for New Mexico, another signer, takes the same position as Mr. Bannister, and in testifying before the House committee (pp. 288-9) said:

The resolution which Governor Dern read is what we adopted, and I want to draw the committee's attention to the phraseology employed, and to explain that at that meeting there were some divergent views upon the subject of what position we should take here. * * *

Now, my reasons, representing New Mexico, for opposing the form which some desired to have this resolution take, to wit, that we should oppose all legislation until the seven-State compact should be ratified, was because the act of the Legislature of New Mexico ratifying a six-State compact still stands upon our statute books unrescinded and unaltered. In that case the chief executive of my State, and myself representing him in this connection, must consider that to be a legislative mandate. * * * I construe this resolution not to commit the upper basin States to a period of time indefinite, but to a reasonable period of time, and if one of the lower basin States has already, through its chief executive postponed that period to an unreasonable time, then, so far as New Mexico is concerned I shall seek here such protection as I may get by the support of such legislation as may afford that protection, * * * I am here to say for New

Mexico, that we shall seek such protection as we may obtain here, and in view of the fact that our legislature has adopted or ratified a six-State compact, I shall pursue that course which will permit us to be included in such a compact if Congress so authorizes.

I have felt it necessary to make this very clear, because it seemed to me that Governor Dern's exposition purported to commit all of the upper basin States to the attitude expressed by him concerning the necessity of a seven-State compact.

Governor Emmerson of Wyoming, in an authorized interview, published in the Washington newspaper April 26, said:

I believe the legislation now embodied in the Johnson bill in the Senate is in such form as to warrant its passage at this session.

I understand, furthermore, that Governor Emmerson has wired the chairman of the Rules Committee not to construe the governor's resolution as an embargo against legislation by this session of Congress.

PRESIDENT FAVORS CONGRESS ACTING ON BOULDER DAM LEGISLATION THIS SESSION

In conclusion, I desire to call the committee's attention to the statement of the President as reported in the United States Daily of May 5. It is as follows:

BOULDER DAM PROJECT FAVORED BY PRESIDENT—EXPRESSES HOPE CONGRESS WILL ENACT LEGISLATION

President Coolidge is hopeful that legislation to authorize construction of the Boulder Canyon Dam project will be enacted at this session of Congress. This was stated officially, May 4.

The President's views are as follows:

In his various messages to Congress the President has recommended the construction of the Boulder Dam project. He is greatly in hopes that some solution of the problem may be had at this session.

The President desires adoption of the Boulder Dam project for the purpose of flood control and to give Southern California a better domestic water supply. He has understood there would be some power development, but does not believe that feature should stand in the way. A good deal of the power would be used to dump the water over the hill in Southern California, he points out, and some method ought to be devised by those interested in the project who do not wish the Government to go into the power business.

The President understands that the Boulder Dam project is one that has been before the Senate and House for a number of years. It also has had mature consideration by the Department of the Interior, which has worked out a reasonable solution which the President feels should be adopted.

The CHAIRMAN. Now, Mr. Swing, you have consumed all of the time. We have been fairly generous with all of you, and it does not seem necessary that we should have to hear all of the arguments that will be presented on the floor. We gave you three full days before and two full days this time, and for the present I think we will conclude, but the committee will decide if it wants to open this up further.

I would be glad to have the gentleman from Colorado, Mr. White, note his appearance here and to file any statement that he desires and also the gentleman from New Mexico, Mr. Morrow, and anyone else from those States.

The CHAIRMAN. Now, Mr. Douglas.

Mr. DOUGLAS. I just want to state this, that that letter by Mr. Stewart was released by me on the condition that it be used in its entirety or not at all, because one can unquestionably take paragraphs

from any part of it to prove any side or the controversy that one chooses.

He is a man of international reputation, and he did not want any statement coming out over his name to be used for any such purpose. He says that a high dam, provided it has a generous base, can be constructed for Boulder Canyon, and he is unquestionably right.

Mr. SMITH. May I make a statement here, that we appreciate the consideration that has been given our committee by the Committee on Rules, but I wish to have the record note that there are here waiting to be heard the representative from Utah, Mr. Colton, the representative from Colorado, Mr. White, the representative from New Mexico, Mr. Morrow, and the representative from Wyoming, Mr. Winter, all of whom are members of our committee and who live in and represent the States in this water basin.

The CHAIRMAN. That will be very satisfactory.

Mr. BANKHEAD. Do they desire to file their statements to go into the record?

Mr. SMITH. If you close the hearings.

Mr. WHITE. I personally very much desire to appear and orally present my views upon this matter, and I ask that privilege of this committee, representing, as I do, the city of Denver, which is in the first congressional district, and which has a little over one third of the population of the entire State and which city is dependent and will be dependent in a large measure in the future for water for domestic purposes on the Colorado River.

The CHAIRMAN. Mr. White, that is a matter that we left entirely to you gentlemen, the division of the time between the proponents and the opponents. We never interfere with that, and we feel that we have been very generous in the whole proposition.

Mr. WHITE. I do not doubt that you feel you have been very generous, but clearly justice is not done unless those who desire to present the views of their constituents whose very existence is in a large measure dependent upon this project are given that opportunity.

The CHAIRMAN. Of course, the question of justice would have to be decided later. We will take this up, as to whether we shall open the hearings any further, and I will be glad to present your request.

Mr. MORROW. I take the same position as the gentleman from Colorado. I do not want this committee to get the impression that this is a controversy between the two States, California and Arizona. There are seven States vitally interested in the protection of that water; it is their future existence, and I think we ought to have an opportunity to present our views to the committee.

Now, in explanation as to why some of us were not before the committee, I am a member of another committee that had under consideration a bill at that time and I could not get here, and therefore I have not presented my views. I should like at a future time to present the views of my State, but I want to say that my State is in favor of this legislation and that the "Governor" proposition in Denver has been practically dissolved, and they say that the legislation should go forward.

At this point I desire to read into the record a communication from Francis C. Wilson, Interstate River Commissioner from New Mexico, representing the views of the governor of New Mexico:

MY DEAR CONGRESSMAN: This morning I arrived from New Mexico to consult with you and our two Senators in connection with the Boulder Dam legislation,

and I find that apparently a misapprehension exists in the mind of Congressman Snell, chairman of the Rules Committee, as to the intent and purpose of the resolution adopted by the governors and interstate river commissioners of the upper basin States on December 19, 1927, at Denver. At the time the resolution was under consideration negotiations were in progress between Arizona and California on the subject of their differences over the apportionment of water allocated to the lower basin by the Colorado River compact. We did not want legislation in Congress to be pushed to such an extent as would interfere with the orderly progress of those negotiations, but it was our purpose not to discourage legislation indefinitely. The negotiations in question have been terminated, and there seems no present hope of their being resumed, and thus it is apparent that the resolution itself is no longer effective.

It can be said further that "every reasonable effort" has been exhausted without success and the field is therefore open to legislation. I do not wish you to understand from the foregoing that the Swing bill is satisfactory to New Mexico in its present form, but it should be reported out so that we can offer the amendments and have them incorporated in the bill in such form as will make the bill conform more closely than it now does not to the needs of the upper basin States. In any event the bill should not be kept in committee upon any theory that the resolution referred to above in any manner justifies at this date and under present conditions the withholding of the legislation from the consideration of the House of Representatives.

Yours very truly,

FRANCIS F. WILSON,
Interstate River Commissioner for New Mexico.

Mr. SWING. I would like to have the privilege of adding in the record some information I have here as an answer to what the gentleman has said who preceded me—I mean, by way of extending my remarks.

The CHAIRMAN. You do not want to print all of that article that appeared in the United States Daily?

Mr. SWING. No.

The CHAIRMAN. That will be all right.

The committee stands adjourned.

(Whereupon, at 12 o'clock noon, the committee adjourned.)

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