

ARIZONA'S RIGHTS

IN THE

COLORADO RIVER

PROPOSALS OF ARIZONA
AND THE
COUNTER PROPOSALS OF CALIFORNIA
SUBMITTED TO THE
TRI-STATE CONFERENCE NOW IN
PROGRESS

BY
SENATOR A. H. FAVOUR

AUGUST 16, 1929

GOVERNOR JOHN C. PHILLIPS, Ex-Officio
CHARLES B. WARD, Chairman
JOHN MASON ROSS, Secretary
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Arizona Colorado River Commission

Prescott  Courier

The Santa Fe Compact, providing for a division of the waters of the Colorado River, was negotiated at Santa Fe, New Mexico, in the Fall of 1922, between the states of California, Nevada, New Mexico, Utah, Wyoming, Colorado and Arizona. This compact was subject to the ratification of the Legislatures of the respective states. All of the states except Arizona ratified the compact.

The Santa Fe Compact divided the waters of the Colorado River and its tributaries between two groups of states, or two basins. The Upper Basin, consisting chiefly of Colorado, Wyoming, Utah and New Mexico, was to receive a definite amount of water, and the Lower Basin, consisting chiefly of California, Nevada and Arizona, was to receive a definite amount of water. It was contemplated at the time the Santa Fe Compact was negotiated that there would be a supplemental compact between the Lower Basin states, and that a conference looking to that end would be called very soon after 1922. Arizona never ratified the Colorado River Compact, chiefly for the reason that this state believed that it was wiser and safer to first negotiate a tri-state compact or a compact between the Lower Basin states respecting the share which each state would receive from the waters allocated to the Lower Basin by the Santa Fe Compact; and if such a compact could be obtained, then both the Tri-state Compact and the Santa Fe Compact could be treated as one instrument and ratified together.

Arizona, Nevada, and California, comprising the Lower Basin, have since that time been represented by various official bodies and commissions, and there have been numerous conferences held between the representatives of these states, attempting to negotiate a settlement and agreement respecting the share of water which each state would receive from those waters allocated by the Santa Fe Compact. In 1927 a formal conference was called of all the seven states interested in the Colorado River by the Governors of the states of Colorado, Utah, Wyoming and New Mexico, and was held at Denver, beginning in August and adjourned from time to time until the end of the year. This conference finally resulted in the Governors of the Upper Basin states making certain definite Findings as to what they considered was the proper basis upon which to settle the share of each of the states of the Lower Basin in the waters of the Colorado River allocated to the Lower Basin. These Findings, Arizona accepted. California refused to accept them.

In 1928, the Colorado River controversy took a slightly different phase, since Congress was engaged in formulating and passing the law known as the Boulder Canyon Project Act. This Act, among other things, attempts to deal with the rights of the several states in the Lower Basin and seeks to accomplish that which the previous conference had failed to accomplish, and to arrive at a settlement of the controversy. Congress enacted this law in December, 1928. Following the passage of the Boulder Canyon Project Act, in February of 1929, a law was enacted by the Arizona State Legislature, providing for a new Commission, and the Commission was appointed. It consists of Hon. Charles B. Ward, Chairman, Hon. John Mason Ross, Member, Senator A. H. Favour, Member, and Governor John C. Phillips, ex-officio Member. Immediately following the appointment of this Commission, a new conference was called by the Governor of New Mexico and met at Santa Fe, on February 14, 1929. This conference differed slightly from the Denver conference of 1927 since the United States Government had an official representative present, Col. Wm. J. Donovan, Former Assistant to the Attorney General of the United States. Arizona, Nevada, and California were represented by their official commissions. The other states of the Upper Basin had representatives present. The conference was organized by the election of Colonel Donovan as Chairman. The conference continued in session in Santa Fe until March 7th, 1929, and adjourned, reconvening again in Washington on May 28th, where it remained in session until June 14th, and again adjourned to reconvene on October 14th at Santa Fe. There have been numerous informal conferences between Arizona and California, all seeking to arrive at some common ground upon which may be based a tri-state compact.

At these formal and informal conferences, the discussions turned largely to the meaning of the Santa Fe Compact drawn up in Santa Fe in November of 1922, and over the meaning of interpretations of the Boulder Canyon Project Act enacted by the Federal Government in December of 1928. These two instruments were discussed with relation to the requirements of the states of Arizona and California, and also with respect to the physical conditions that exist in the Colorado River Basin. It seemed to the Arizona delegation that it was necessary in the first place to define terms and to interpret the provisions of these two instruments, before attempting to make an agreement dividing the waters or providing for revenue for the State of Arizona. After several meetings, the Arizona Commission submit-

ted in writing definite proposals, upon which Arizona offered to negotiate a tri-state compact. These proposals were divided into two parts: one part pertaining to water, and the other to revenue features. The water proposal contains three definitions and five principles upon which Arizona felt that it could base a water compact and the proposals on revenue contained twelve propositions and dealt mainly with the proper interpretations of the Boulder Canyon Project Act.

The greatest difficulty in arriving at a common ground between the states, the Arizona Commission found, was the use of terms. That which has a definite meaning to the Commission of one state, we found connoted an entirely different idea to the representatives of the other states. For example, the Arizona Commission is of the firm conviction that there is no reason of justice, economics or geography justifying the inclusion of the Gila and its tributaries in the waters of the Colorado River System to be divided between the states. From a physical standpoint and from a practical standpoint, there are no waters of the Gila River that are possible of division between the states. California will take its water out of the main river above the place where the Gila empties into the Colorado River. Therefore, why discuss the Gila River in connection with dividing the waters of the Colorado River? It seems to Arizona that Congress has recognized this situation, and did exclude the Gila River and its tributaries in its Boulder Canyon Project Act.

The proposals of Arizona on the water phase of the problem submitted on March 3rd, 1929, are as follows:

DEFINITIONS

- (1) Apportioned water shall mean: 8,500,000 acre feet apportioned to the lower basin by paragraphs "a" and "b" of Article III, Colorado River Compact and shall only include water physically present in the main stream.
- (2) Surplus water shall mean: unapportioned water physically present and available for division in the main stream.
- (3) Tributories shall mean: all streams, including the Gila, entering the main stream below Lee's Ferry.

WATER DIVISION

- (1) All tributaries, excepting waters thereof reaching main stream, shall belong to the states where situated, subject to division of interstate tributaries by compact or compacts between states respectively interested therein.

- (2) Apportioned water shall be divided, without preference or priority:

To Arizona	3,500,000 acre feet
To California	4,700,000 acre feet
To Nevada	300,000 acre feet

- (3) Surplus water shall be divided equally between Arizona and California, without preference or priority.
- (4) Tributaries, excepting water thereof reaching main stream shall be exempt from Mexican burden resting on lower basin, which burden shall be borne and shared equally by Arizona and California from waters of main stream.
- (5) All-American Canal shall not, directly or indirectly, carry any water to or for the use of any lands in Mexico.

These proposals contemplated a tri-state compact which would supplement the Santa Fe Compact. Likewise, a compact that would in a certain measure clarify the provisions of the Boulder Canyon Project Act. The Arizona proposals assumed that the Gila River was excluded from any consideration in the discussion and would not be taken into consideration in dividing the water.

Arizona proposals also assumed that the waters which were divided between the States of California and Arizona were the waters in the main stream of the Colorado River. These proposals are based on the Santa Fe Compact of 1922, the Findings of the Governors at the Denver conference in 1927, and the Boulder Canyon Project Act, and are fair to both Arizona and California.

On March 7th, 1929, the California commissioners submitted a reply to our proposals and set up a basis upon which they were willing to proceed to negotiate a compact. The outstanding features of the California division was that the Gila River was included in the computation. In fact, all of the water Arizona might use from all of her streams, including the Gila must be computed, and due credit must be given to California for equivalent water out of main stream water. California also insisted that the exact words of the Santa Fe Compact be accepted, except as modified by the Boulder Canyon Project Act, but that the Compact be further construed or modified so that it would give to that state the advantage of taking a million acre feet by prior appropriation out of the main stream of the Colorado River. California denied that there were 8,500,000 acre feet to be divided in the main stream, rather, insisted that there were

only 7,500,000 acre feet of allocated water in the main stream and Arizona rivers, and the amount over that was surplus waters of which she demanded one-half. The net result of California's contention would give her practically the entire main stream water and Arizona would be left with less than she would have if she joined no compact.

The California reply or counter proposals submitted to the Conference follow:

California does not accept Arizona's proposal as to the division of water. As a counter proposal on that point California offers to enter into a compact with the states of Arizona and Nevada providing for a division of the waters of the Colorado River among said three states upon the basis set forth in the "Boulder Canyon Project Act," such offer being made upon and subject to the following interpretations affecting said act, to wit:

(a) Such proposed division of waters shall be subject to the Colorado River Compact.

(b) Of the seven million five hundred thousand (7,500,000) acre feet annually apportioned to the lower basin by paragraph (a) of Article III of the Colorado River Compact, there is hereby apportioned in perpetuity the exclusive, beneficial, consumptive use of four million four hundred thousand (4,400,000) acre feet to California, two million eight hundred thousand (2,800,000) acre feet to Arizona and three hundred thousand (300,000) acre feet to Nevada.

(c) The one million acre feet of water covered by paragraph (b) of Article III of said Compact shall be deemed subject to appropriation and beneficial use by any of said three states and the right thereby acquired by such appropriation to be governed by the law of prior appropriation on said stream.

(d) The State of California may annually use one half of the excess or surplus waters unapportioned by the Colorado River Compact, and the State of Arizona the remaining one half.

"Excess or Surplus Waters" so unapportioned shall be deemed to be all waters of the Colorado River System not covered by paragraphs (a) and (b) of Article III of said Compact.

(e) The State of Arizona shall have the exclusive, beneficial, consumptive use of the Gila River and its tributaries within the boundaries of said state.

(f) The waters of the Gila River and its tributaries, except return flow after the same enters the Colorado River,

shall never be subject to any diminution whatever by any allowance of water which may be made by Treaty or otherwise to the United States of Mexico, but if, as provided in paragraph (c) of Article III of the Colorado River Compact, it shall be necessary to supply water to the United States of Mexico from waters over and above the quantities which are surplus as defined by said Compact, then the State of California will supply out of the main stream of the Colorado River, one half of any deficiency which must be supplied to Mexico by the lower basin, and Arizona the other half.

(g) None of the signatory States shall withhold water and none shall require the delivery of water which cannot reasonably be applied to domestic and agricultural uses.

(h) As to the proposal that the All-American Canal be not used for delivery of water for Mexico use; that is not a proper subject of concern in framing the proposed pact and should be omitted therefrom.

Before we discuss the question of the water division, it would be well to take up the three definitions which Arizona sought to have the states agree upon in order that much confusion might be obviated in arriving at a water division.

Definitions of Water Terms

Definition No. 1: "APPORTIONED WATER SHALL MEAN: 8,500,000 ACRE FEET APPORTIONED BY THE LOWER BASIN BY PARAGRAPHS "a" AND "b" OF ARTICLE III, COLORADO RIVER COMPACT, AND SHALL ONLY INCLUDE WATER PHYSICALLY PRESENT IN THE MAIN STREAM.

Definition No. 2: "SURPLUS WATERS SHALL MEAN: UN-APPORTIONED WATERS PHYSICALLY PRESENT AND AVAILABLE FOR DIVISION IN THE MAIN STREAM."

Definition No. 3. "TRIBUTARIES SHALL MEAN: ALL STREAMS, INCLUDING THE GILA, ENTERING THE MAIN STREAM BELOW LEE'S FERRY."

1.

The Santa Fe Compact divided the waters of the Colorado River into certain classes, but it was not exact in its use of words in defining each class. The Boulder Canyon Project Act also separates the waters of the river into various classes; therefore it is most important that we agree on what waters constitute "apportioned" and "excess or surplus" waters.

Articles III (a) of the Compact "apportioned from the Colorado River System in perpetuity to the Upper Basin and to

the Lower Basin, respectively, the exclusively beneficial consumptive use of 7,500,000 acre feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist." In (b) of the same article of the Compact the Lower Basin was "given the right to increase its beneficial consumptive use of such water by one million acre feet per annum." This would put the waters referred to in (b) on a parity with the waters of the river referred to in (a), and by the words of (a) both become "apportioned" waters.

It is well known that Paragraph III (b) was inserted in the Compact with the intent that the 1,000,000 acre feet therein mentioned should go to Arizona as compensation for the inclusion of the Gila. Arizona's proposals at Santa Fe were based on the unconditional exclusion of the Gila. On such basis, Arizona could not claim that 1,000,000 acre feet is compensation for the inclusion of the Gila and therefore we treated the apportioned water as including the 1,000,000 acre feet or a total of 8,500,000 acre feet.

On February 12, 1923, President Hoover replied by wire to Mr. Delph E. Carpenter, one of the framers of the Compact, to an inquiry of the meaning of the foregoing, as follows:

"I concur with you, and shall so advise Congress in my report, that the intent of the Commission in framing the Colorado River Compact was as follows: First, Paragraph (b) of Article III means that the Lower Basin may acquire rights under the compact to the annual beneficial consumptive use of waters in excess of the apportionment in paragraph (a) of that article by one million acre feet and no more.

There is nothing in the compact to prevent the States of either basin using more water than the amount apportioned under paragraphs (a) and (b) of Article III, but such use would be subject to the further apportionment provided for in paragraph (f) of Article III and would vest no rights under the present Compact. Second, that Article VIII is not intended to authorize, constitute or result in any apportionment of water to the lower Basin beyond that made in paragraphs (a) and (b) of Article III."

The Deputy Attorney General of California, Mr. R. T. McKisick, acting for the Attorney General of that State, under date of February 13th, 1923, in answer to Mr. Carpenter's inquiry about the meaning of the same provision of the Compact, wired:

"Am of the opinion that paragraph (b) of article III permits increase of annual beneficial consumptive use of water of the lower basin to eight million five hundred-thousand acre feet total or one million in excess quantity apportioned to each basin in perpetuity by paragraph (a), Article III, and no more."

Governor Frank C. Emerson, the former Water Commissioner of Wyoming, and one of the framers of the Santa Fe Compact, in his report to the Legislature of Wyoming on January 18th, 1923, stated:

"The average flow of water available for use in the entire Colorado River System is estimated at about twenty million acre feet annually. Sixteen million acre feet are allocated under the terms of the compact, leaving a residue of four million acre feet to be apportioned at a future date."

The sixteen million acre feet referred to are the fifteen million acre feet in paragraph (a) of Article III and the million acre feet of paragraph (b) of Article III. It would appear that at least the first half of Arizona's definition of "apportioned" water means eight million five hundred thousand acre feet apportioned to the lower basin by paragraphs (a) and (b) of Article III, Colorado River Compact.

Mr. Carpenter puts the same thought in a little different manner in his report to the Legislature of October 30th, 1923, in which he says:

"Taking the compact as a whole and construing the provisions together, Article VIII does not authorize, constitute and result in any apportionment of water to the lower basin beyond that made in (a) and (b) of Article III."

There seems to be complete accord by those men who drew the Compact that apportioned waters were the 8,500,000 acre feet defined in paragraph (a) and (b) of Article III of the Compact.

The second part of the Arizona definition departs from the exact language of the Santa Fe Compact. At the time the Santa Fe Compact was negotiated and drawn, the provision made for the million acre feet referred to in (b) of Article III

was not included, and the Arizona representative refused to sign the compact. Then followed a discussion of some days, which finally resulted in the insertion in the original document of the provisions respecting the waters of (b) Article III. This was intended to compensate Arizona for the inclusion of the waters of the Gila River. However, in reading the compact, there is no certainty of language where these waters apply and the whole or any part of the 8,500,000 acre feet, under the strict letter of the compact, could be applied to the waters of the Arizona streams or any waters in the Lower Basin. Inasmuch as the physical conditions show that there will be at least 8,500,000 acre feet of water in the main stream, and since the Gila River and its tributaries have largely been appropriated and actually put to use, it seems to Arizona commissioners that the waters to be divided between the lower Basin states should be considered as in and confined to the main stream. Apparently this is the view of Congress in the Boulder Canyon Project Act.

The average flow of the River, at Lee's Ferry, according to the last report of the last Geological Survey for two years, September 30, 1926, to September 30, 1928, was 15,900,000 acre feet per year. To this must be added the known uses in the Upper Basin per year, which according to that same report in Utah, Colorado and Wyoming, was 1,197,500 irrigated acres, with a water duty of from one to one and a half acre feet per acre, or taking the lesser amount, and added to the gauged flow at Lee's Ferry of 15,900,000 acre feet, makes an average for the past ten years of 17,097,500 acre feet. This is not considering the water now used in New Mexico, which should be added, amounting to about 300,000 acre feet, or a total of about 17,400,000 acre feet.

At the time the framers of the Santa Fe Compact were in session at Santa Fe in November of 1922, they had before them certain data respecting the flow of the river. Mr. Carpenter, of Colorado, was of the opinion that 18,415,842 acre feet was the proper figure to determine on in arriving at a division of the waters. Mr. Hoover and Mr. Davis considered that 17,000,000 acre feet was the annual runoff, without considering the water used in New Mexico. Mr. Emerson was of the opinion that 20,000,000 acre feet was the proper figure, and the most recent United States Geological Survey over the past years, as evidenced by their recent reports, determined that 17,397,500 acre feet is the annual runoff of the river. With these figures in mind

we can understand how the framers of the compact divided between the Upper Basin and the Lower Basin, 16,000,000 acre feet of water. These figures that we have enumerated refer to the flow of the river without taking into consideration the reconstructed flow of the Gila River Basin. To hold that is was the intention of the framers to determine carefully the Lee's Ferry flow and then while emphasizing the figures which that flow produced, nevertheless, intended the compact to mean that they were not dealing with the waters of the main stream, but were "apportioning" some other waters, waters already in use in the Salt River Valley, is to give a construction to the words of the compact utterly untenable. If such a construction were possible, it would mean that, of the 8,500,000 acre feet apportioned to the lower basin after the water passed Lee's Ferry, a substantial part of this "apportioned" water, must remain "surplus" waters to which no title could be obtained by any appropriator until 1963.

The point we are making is that the definition of what constitutes "apportioned" water in the Santa Fe Compact, as proposed by Arizona, is the correct interpretation to be given to that phrase in the Santa Fe Compact and in the Boulder Canyon Project Act.

2.

The compact divided all waters into "apportioned" and "surplus" waters. When we come to analyze the effect of the Compact, we conclude the surplus waters are from several sources. First, we have the waters in the main stream over and above the amount necessary to satisfy the 16,000,000 acre feet apportioned by (a) and (b) of Article III; secondly, we have that part or portion of the waters of the 7,500,000 acre feet apportioned to the upper basin, which cannot be used in the Upper Basin which, according to some estimate and the Government Reports, will be at least 1,400,000 acre feet of the 750,000,000 acre feet and thirdly, that part of the 8,500,000 acre feet apportioned to the lower basin which will not be put to use, for by Article III, Subdivision (e) the principle is laid down that all unused apportioned water may be used until actually put to use by those entitled to same, and fourthly, we have such accretions to the river below Lee's Ferry as may come from any source whatsoever. It seems to Arizona that so far as the Lower Basin is concerned when the framers of the com-

part in Article III treated of the "surplus" waters, they had in mind only the waters in the main stream from any of the above sources and not waters outside of the main stream.

The compact provided in (c) of Article III, that the Mexican demand should be satisfied out of the surplus waters and surely Mexico must be satisfied out of the main stream. In (f) of Article III, it is provided that the surplus waters not used could be further apportioned in 1963. Certainly the waters which were outside of the main stream in the State of Arizona could not be apportioned in 1963 with Nevada and California.

The true definition of surplus waters would seem to be, that which is excess, unused and over the "apportioned" waters in the main stream. The very word defines and connotes that which is not in use. It would not be reasonable to hold that the waters of Arizona streams actually used and appropriated were to be equitably apportioned after 1963 except as to that part or portion actually reaching the main stream of the Colorado River. Any other definition than that given by Arizona leads us into an utter absurdity. To hold other than as set out in the Arizona definition would mean that a surplus of waters in the main stream was created by the very compact itself, and instead of dividing the waters of the River, what the States in effect did, was to compast each other out of the use of the water. The Upper Basin is obliged to let down seven million five hundred thousand acre feet per year at Lee's Ferry, yet after it had been delivered at Lee's Ferry, as "apportioned" water, did the compact mean it immediately lost that character and a substantial part became surplus waters to which no title could be had until 1963? To illustrate, assuming that 17,000,000 acre feet is the annual flow at Lee's Ferry on the reconstructed flow of the river; of this amount 16,000,000 acre feet is allocated by (a) and (b) of Article III of the Compact, leaving 1,000,000 acre feet surplus; this presumably is sufficient to take care of the Mexican burden. In Arizona's tributaries, the records show we are consumptively using 1,500,000 acre feet. If we are to accept the California interpretation of "excess" or "surplus" waters as including waters outside of the main stream, and particularly the Gila, then Arizona must account for this 1,500,000 feet. We would then have the seven and a half million acre feet let down at Lee's Ferry as "apportioned waters," in the main stream, and 1,500,000 acre feet "apportioned water" in the Gila, or 9,000,000 acre feet of water. This would be 500,000 acre feet more than the Compact allows. In other words, it

would mean that the compact gave, or apportioned, to Arizona, only that which she already had, and that Arizona in turn relinquished any title or right until 1963 to equivalent amount of the waters which the Upper Basin let down at Lee's Ferry as apportioned waters, and such equivalent amount became surplus waters, or of the waters now in actual use in the Gila, to the amount of 500,000 acre feet, we can get no title thereto until 1933. The Boulder Canyon Project Act uses the words "excess or surplus waters," emphasizing that it is waters not in use and which may later be put to use and it is out of the main stream where such use may be made. The Arizona definition numbered 2 hereinbefore quoted is the correct and logical definition to be given to what constitutes surplus waters.

3.

The third proposed definition needs little explanation. The Act refers to the "Gila River and its tributaries." Arizona has always maintained a steadfast purpose of retaining the use of so much of its streams as it may use within its borders. The use of this definition is to make clear that not only do we insist that we have equal treatment with the other states, but that the other streams of Arizona, such as the Little Colorado and Bill Williams shall be included along with the "Gila River and its tributaries" when we treat of the Arizona streams.

The California answer to the foregoing three definitions is found in their counter-proposals on water. As to the first definition, they contend that apportioned water shall be only that water mentioned in Subdivision (a) of Article III of the Compact, or 7,500,000 acre feet, and said 7,500,000 acre feet shall include not only main stream water, but all the Gila River and all Arizona streams. As to the waters of Subdivision (b) in Article III, the California position is that if it can use this water before Arizona, it shall have title thereto, and takes this position notwithstanding the fact that the Santa Fe Compact sought to apportion all water and do away with the doctrine of prior appropriation.

Furthermore, California has also claimed in its proposals that it is entitled to measure all water in the main stream, in the Gila and other Arizona streams. California claims it shall have the 1,000,000 acre feet if she can first appropriate it, that she shall have such part of the 7,500,000 acre feet as she can get by Compact or given her by the Boulder Canyon Project Act and

finally one half of the surplus, or one half of all waters in the Lower Basin in excess of 8,500,000 acre feet, which means, in other words, that for each acre foot we use in the Arizona streams, California gets an equivalent acre foot out of the main stream.

Arizona's Proposed Water Division

Let us now discuss the Arizona proposals on the division of water. These proposals are as follows:

(1) All tributaries, excepting waters thereof reaching main stream, shall belong to the states where situated, subject to division of interstate tributaries by compact or compact between states respectively interested therein.

(2) Apportioned water shall be divided, without preference of priority:

To Arizona	3,500,000 acre feet
To California	4,700,000 acre feet
To Nevada	300,000 acre feet

(3) Surplus water shall be divided equally between Arizona and California, without preference or priority.

(4) Tributaries, excepting water thereof reaching main stream, shall be exempt from Mexican burden resting on lower basin, which burden shall be borne and shared equally by Arizona and California from waters of main stream.

Water Proposal No. 1. "ALL TRIBUTARIES, EXCEPTING WATERS THEREOF REACHING MAIN STREAM, SHALL BELONG TO THE STATES WHERE SITUATED, SUBJECT TO DIVISION OF INTERSTATE TRIBUTARIES BY COMPACT OR COMPACTS BETWEEN STATES RESPECTIVELY INTERESTED."

Arizona believes this is the rule in all states and she is willing to accord this right to every other state in the River Basin. Conversely, it has always been claimed by the states of the Basin that they are entitled to the use of their tributaries.

Wyoming, in Section 1, Article VIII of its Constitution, provides:

"The waters of natural streams, springs, lakes or other collection of still water, within the boundaries of the State, are hereby declared to be the property of the State."

Colorado, in Section 5, Article XVI, of its Constitution, provides:

"The waters of every natural stream not heretofore apportioned within the State of Colorado is hereby declared to be the property of the public; and the same to be dedicated to the use of the people of the State, subject to appropriation as hereinafter provided."

Utah, in Section 1, Article XVII, of its Constitution recognizes the right of the people of that state to its streams.

"All existing rights to the use of any of the waters in this State for any useful or beneficial purpose are hereby recognized and confirmed."

Nevada, in its general laws, Section 1, of the law of 1907 provided:

"All natural watercourses and natural lakes, and waters thereof which are not held private ownership, belong to the State and are subject to appropriation for beneficial uses."

California goes further than the other States. Section 1410 A Kerr Cye Code of California, 1920 provides:

"The entire flow of water in any natural stream which carries water from the State of California into any other state is subject to use in the State of California, under the laws of the State of California, and the right may be, so far as not already acquired by use in the State of California, acquired and held under the laws of the State of California. The right to the use of such waters held under the laws of the State of California, shall be prior and superior to any rights to the waters of such streams held under the laws of any other state."

In other words, California by law, maintains it has the right to its streams even to the extent of recapturing the waters thereof after the water has flowed into another state.

Mr. Carpenter in his report to the Legislature above referred to, stated:

"The apportionment of seven million five hundred thousand acre feet exclusive annual beneficial consumptive use to the Upper Basin, means that the territory of the Upper Basin may exhaust that much water from the flow of the stream each year. The aggregate annual diversions in the

upper basin are unlimited. The limitation applies only to the amount consumed and all waters which return to the stream are not consumed."

Arizona has always contended that it should have the use of its tributaries except such portions as ultimately find their way into the main streams. This claim of Arizona in regard to the use of its tributaries has been accepted by our sister State. The address of Governor Young of California to the Denver conference in August 1927 at the opening of the conference, stated:

"Nevada, whose opportunities for the use of water are not great, some time ago agreed to take as her share two hundred thousand acre feet. I think that both Arizona and California would be willing to do better for Nevada than that, and I propose that after 7,500,000 acre feet for the upper basin States has been satisfied, Nevada to be permitted to take all that she can use up to three hundred thousand acre feet in addition to the water from her tributary streams."

Governor Young, at the same conference made the following proposal to Arizona and Nevada:

"(1) To Arizona and Nevada their tributary waters, subject however to the condition that any tributary water not used and reaching the main stream, shall be deemed part of the main stream flow for the purposes of this agreement; (2). to Nevada, 300,000 acre feet per annum from the main stream; (3) to Arizona her present perfected rights to 233,800 acre feet per annum, and to California her present perfected rights to 2,159,000 acre feet per annum from the main streams; the balance of the waters of the main stream below Lee's Ferry, subject to the terms of the Colorado River Compact, to be divided equally between Arizona and California, subject, however, to the provision that any part of the allocation to either State not put to beneficial use in such State within 20 years, shall thereafter be subject to appropriation and use in either State pursuant to its laws."

The Denver Conference of Governors, received the tender and the counter offers of Arizona, California and Nevada, and after hearing the respective claims of the states, resolved itself into a sort of arbitration board consisting of Governor Dern of Utah, Governor Dillon of New Mexico, Governor Adams of Colorado, and Governor Emerson of Wyoming, first submitted a preliminary finding as follows:

"(1) Give to Nevada 300,000 acre feet, (2) Give Arizona and California their vested rights as given below, (3) Give Arizona water for 675,000 acre feet for her Indian land as a vested right, (4) Deduct the totals of the three foregoing items from 7,500,000 acre feet and split the remainder between Arizona and California on a fifty-fifty basis, (5) Give each State all of the waters supplied by its tributaries, except 200,000 acre feet from Arizona tributaries hereby allocated to California, water from the the tributaries reaching the main stream above Laguna shall be considered part of the main stream and be divided equally between Arizona and California, (6) The extra million allocated by the Colorado River compact shall be considered as part of the tributary waters going to Arizona, (7) That in addition to the allocation of water made to the lower basin by the Santa Fe Compact and also the apportionment made in this compact, the States of California and Arizona hereby without prejudice to the rights of the Upper Basin States, agree to divide equally all other water in the main Colorado River that is physically available."

An analysis of this finding gave to Arizona its tributary streams except 200,000 acre feet therefrom. From the main stream Arizona got 3,062,500 acre feet of the Lee's Ferry delivery, and in lieu of the million acre feet set out in (b) of Article III, she was given her tributaries as above mentioned. California got 4,137,500 acre feet at Lee's Ferry and Nevada 300,000 acre feet. The remainder of the waters in the main stream of the Colorado River physically available, was divided equally, and without prejudice to the right of the upper basin, between Arizona and California.

On August 30, 1927, the Upper Basin Governors made their Final Findings and submitted them to the states of Arizona and California for their consideration. These Findings are as follows:

1. Of the average annual delivery of water to be provided by the States of the Upper Basin Division at Lee's Ferry under the terms of the Colorado River Compact:

- (a) To the State of Nevada, 300,000 acre feet.
- (b) To the State of Arizona, 3,000,000 acre feet.
- (c) To the State of California, 4,200,000 acre feet

2. To Arizona, in addition to water apportioned in subdivision (b), 1,000,000 acre feet of water to be supplied from the tributaries of the Colorado River flowing in said State, and to be diverted from said tributaries before the same empty into the main stream. Said 1,000,000 acre feet shall not be subject to diminution by reason

of any treaty with the United States of Mexico, except in such proportion as the said 1,000,000 acre feet shall bear to the entire apportionment in (1) and (2) of 8,500,000 acre feet.

3. As to all water of the tributaries of the Colorado River emptying into the River below Lee's Ferry not apportioned in paragraph (2) each of the States of the Lower Basin shall have the exclusive beneficial consumptive use of such tributaries within its boundaries before the same empty into the main stream, provided, the apportionment of the waters of such tributaries situated in more than one state shall be left to adjustment or apportionment between said states in such manner as may be determined upon by the States affected thereby.

4. The several foregoing apportionment to include all water necessary for the supply of any rights which may now exist, including water from Indian lands in each of said States.

5. Arizona and California each may divert and use one-half of the unapportioned waters of the main Colorado River flowing below Lee's Ferry, subject to future equitable apportionment between the said States after the year 1963, and on the specific condition that the use of said waters between the States of the Lower Basin shall be without prejudice to the rights of the States of the Upper Basin to further apportionment of water as provided by the Colorado River Compact."

The net result of these Findings was to give to Arizona, 3,000,000 acre feet of the III (a) water and the 1,000,000 acre feet of the III (b) water, plus the Arizona streams, including the Gila, provided they are used before they enter the main stream. After they enter the main stream they are subject to the division that is made of main stream water.

The Boulder Canyon Project Act has followed along the same general idea and has modified only in a slight degree these Findings of the Upper Basin Governors. In Section 4 (a) of the Act it is provided that California shall "agree irrevocably and unconditionally" with the United States and other States that "the aggregate annual consumptive use (diversion less returns to the River) of water of and from the Colorado River for use in the State of California * * * shall not exceed four million four hundred thousand acre feet of the waters apportioned to the Lower Basin states by paragraph (a) of Article III of the Colorado River Compact, plus not more than one half of any excess or surplus waters." In other words, instead of giving to California, 4,200,000 acre feet of III (a) water as set out in the

Governors' Findings, the Boulder Canyon Project Act gave to California, 4,400,000 acre feet of III (a) water. This extra 200,000 acre feet was taken from the 3,000,000 acre feet of water given to Arizona by the Governors' Findings, reducing Arizona's part of this water to 2,800,000 acre feet as provided for in Subdivision 1 of Section 4 (a) of the Boulder Canyon Project Act. In other respects the Governors' Findings were written into the Boulder Canyon Project Act.

Examining the Boulder Canyon Project Act further, we find in subdivision (2) of Section 4 (a) that in the proposed tri-State compact there is the following: "That the State of Arizona shall have the exclusive beneficial consumptive use of the Gila and its tributaries within the boundaries of said State." The construction put on this by the California delegation is that Arizona has the use of the Gila waters and its tributaries, but those waters must be taken into consideration in computing what waters Arizona and California get from the main stream from allocated waters.

Such a construction is unsound, for the words of the Act following the above subdivision (4) of Section 4 (a), are, "That the waters of the Gila and its tributaries, except the return flow after the same enters the Colorado River, shall never be subject to any diminution whatsoever by any allowance of waters which may be made by treaty or otherwise to the United States or Mexico."

If Congress had intended to mean that our sister state's claim was correct there was no need to mention the River Gila at all in the Act, and these words of subdivision (3) and (4) of Section 4 (a) of the Act would not add a particle to Arizona's present rights. The meaning is evident that the Gila and its tributaries, except the return flow, is removed from consideration for all purposes. The Arizona proposal has added all other tributaries in view of the apparent use of 4,337,500 of the figures of the Governors' Findings used by Congress in the Act.

Commenting on the Boulder Canyon Project Act, Senator Pittman, on January 28th, 1929, said in an interview which was published in the Congressional Record:

"Arizona and California each demanded 4,600,000 acre feet of water. By the act, California is restrained from taking out of the Colorado River in excess of 4,400,000 acre feet of water. This will leave 3,800,000 acre feet out of the main stream subject to perpetual use by Arizona, which together

with the reserved waters of her tributaries, will give her more water than she originally demanded."

It is true the Act gives to Arizona only the "Gila and her tributaries" and our proposals have added, in addition to the Gila, so much of the other streams in the State as we can use. This addition brings Arizona in line with the law of the use of waters of all Basin States and the Governors' Findings and the addition to Arizona, we submit, has already been charged against her in allowing California 4,400,000 acre feet.

Water Proposal No. 2. "APPORTIONED WATER SHALL BE DIVIDED, WITHOUT PREFERENCE OR PRIORITY:

To Arizona	3,500,000 acre feet
To California	4,700,000 acre feet.
To Nevada	300,000 acre feet."

The Arizona proposal of the division of the 7,500,000 acre feet allocated to the lower basin by (a) of Article III of the compact and of the 1,000,000 acre feet allocated by (b) of Article III of the compact is as above stated.

The division of water came very near to being settled at Denver in 1927. Arizona at that time accepted the Governors' Findings. California refused to accept on the grounds that she must have 4,600,000 acre feet to meet her requirements.

In the Boulder Canyon Project Act the million acre feet is not specifically mentioned, except California is limited to 4,400,000 acre feet out of the 7,500,000 acre feet, and since by the compact the Lower Basin is given the apportioned water set out in section (b) of Article III, the remainder of apportioned water must, since the Compact remains in full force, go to Arizona or Nevada.

Senator Pittman recognized this fact when he stated that Arizona was entitled to 3,800,000 acre feet out of the main stream subject to perpetual use, the 3,800,000 acre feet included the 2,800,000 acre feet set up in subdivision (1) of Section 4 (e) of the Act and the 1,000,000 acre feet apportioned to the Lower Basin in section (b) of Article III of the compact.

Arizona, however, is not contending for all the waters to which she would be legally entitled, but is content to construe the Act and the Compact in the light of the Governors' Findings, and has offered to divide the 1,000,000 acre feet between herself and California. This would give Arizona 3,500,000 acre

feet and California 4,700,000 acre feet of the apportioned waters. It is giving California 300,000 acre feet of apportioned waters more than she has "irrevocably and unconditionally" limited herself to take from the Colorado River, and that is her limitation under that Act, according to Senator Pittman. On the other hand, it gives Arizona that amount of water from the apportioned waters to which she is entitled under the Governors' Findings and less than that allowed by the Boulder Dam Project Act.

Water Proposal No. 3. "SURPLUS WATERS SHALL BE DIVIDED EQUALLY BETWEEN ARIZONA AND CALIFORNIA WITHOUT PRIORITY OR PREFERENCE."

Arizona proposes to divide the "surplus or excess" waters equally between the States. It should be noted that the surplus waters are those waters other than the 8,500,000 acre feet of apportioned waters, and particularly those waters which are physically present and available in the main stream. This is in line with Governors' Findings, which is as follows:

"Arizona and California each may divert and use one-half of the unapportioned waters of the main Colorado River flowing below Lee Ferry, subject to future equitable apportionment between the said States after the year -963, and on the specific condition that the use of said waters between the States of the Lower Basin shall be without prejudice to the rights of the States of the Upper basin to further apportionment of water as provided by the Colorado River Compact."

This would be the waters provided for in (f) of Article III of the Compact and consist of all waters other than the 8,500,000 acre feet apportioned under the first two sections of Article III of the Compact.

Referring again to the Act, we find in Subdivision 2 of Section 4 (a), "That the State of Arizona may annually use one half of the excess or surplus waters unapportioned by the Colorado River Compact," and California has by her acceptance of that act bound herself not to use "more than one half of any excess or surplus waters unapportioned by said compact." The "excess or surplus" waters are those waters **in the main stream** physically available and no other meaning can be gathered from the compact. In paragraph (f) of Article III of the Compact, any State may have a further apportionment of the waters. It is hardly within reason that the provisions of this Paragraph of the Compact meant that all waters used or to be used in Arizona according to the law of the State, the Compact, and the Act,

would remain "excess or surplus water" and no title would be obtainable thereto until 1963. Rather, the proper construction is that under (a) and (b) of Article III of the compact there are apportioned 8,500,000 acre feet from the main stream, by (f) of Article III a further equitable apportionment of the waters of the Colorado system, unaffected by paragraphs (a), (b) and (c), might be made, refers back only to those waters in the main stream and no others. The compact uses the word "surplus," but when Congress came to deal with these same waters they emphasized it by calling them "excess or surplus waters." This could mean only those waters were not then being put to any use and which were available in the main stream.

Water Proposal No. 4. "TRIBUTARIES, EXCEPTING WATERS THEREOF REACHING MAIN STREAM, SHALL BE EXEMPT FROM MEXICAN BURDEN RESTING ON LOWER BASIN, WHICH BURDEN SHALL BE BORNE AND SHARED EQUALLY BY ARIZONA AND CALIFORNIA FROM WATERS OF MAIN STREAM."

It is Arizona's position that the compact allocated 16,000,000 acre feet between the Upper and the Lower Basin and that from the waters in excess of that amount in the main stream the Mexican burden must be satisfied. In the event that there was not sufficient in excess of 16,000,000 acre feet, then the burden would fall equally, one half on each of the basins. This is provided for in (c) of Article III of the Compact as follows:

"If, as a matter of international comity the United States of America shall thereafter recognize in the United States of Mexico any right to the use of any waters of the Colorado River System, such waters shall be supplied, first, from the waters which are surplus over and above the aggregate of the quantities specified in paragraphs (a) and (b); and if such surplus shall prove insufficient for this purpose, then the burden of such deficiency shall be equally borne by the Upper Basin and the Lower Basin, and whenever necessary, the States of the Upper Basin shall deliver at Lee's Ferry, water to supply one half of the deficiency so recognized, in addition to that provided in paragraph (b)."

It is Arizona's understanding that Congress intended that as to the burden placed on the Lower Basin it was to be shared one-half by California and one-half by Arizona, or these two States were to under-write the obligation placed on the Lower Basin. In Subdivision (4) of Section 4 (a) of the Act, it is provided:

“that the waters of the Gila River and its tributaries, except return flow after the same enters the Colorado River, shall never be subject to any diminution whatever by any allowance of water which may be made by treaty or otherwise to the United States of Mexico, but if, as provided in paragraph (c) of Article III of the Colorado River compact, it shall become necessary to supply waters to the United States of Mexico from waters over and above the quantities which are surplus, as defined by said compact, then the State of California shall and will mutually agree with the State of Arizona to supply, out of the main stream of the Colorado River, one half of any deficiency which must be supplied to Mexico by the lower basin.”

The waters from which California was to supply one half thereof, are waters which are set out in 4 (a) of the act as 4,400,000 acre feet of apportioned water, and “one half of the excess or surplus waters unapportioned,” and according to the act must be supplied out of the “main stream.” Arizona’s proposal fills in the gap and offers to underwrite the other one half which must be supplied to Mexico.

The answer of California to the foregoing four water proposals was as set out above, namely, we must accept the Boulder Canyon Project Act, but with their interpretation to it and also leaving out 1,000,000 acre feet for the first user to get title to. Since the Federal Government is to build the all-American canal of sufficient capacity to carry the water, it is a foregone conclusion that the million acre feet would go to California.

In Denver, in 1927, California said it could not get along without 4,600,000 acre feet of Colorado River water, that that was its minimum requirement. During this past month in Washington the same California Commission stated that it could not get along without 5,800,000 acre feet of Colorado River water.

We now come to a little different angle of our differences but it shows how the attitude of California has changed from time to time.

All-American Canal

The Fifth Proposal in water to California was regarding the all-American Canal, as follows:

Water Proposal No. 5. “ALL-AMERICAN CANAL SHALL NOT DIRECTLY OR INDIRECTLY, CARRY ANY WATER TO OR FOR THE USE OF ANY LANDS IN MEXICO.”

The present arrangement for the water supply for the Imperial Valley is generally to divert the water at Hanlon’s Heading through a canal which runs into Mexico and then re-

turns to the United States. The arrangement between the Imperial Water Users' Association and the Mexican Government is that Mexican lands shall be as of right entitled to one half of the water carried in the canal. It has been urged for years that the building of the dam and storing of water at Boulder will force the settlement of the Mexican water allocation, and this is an agreement which earnestly is wished for by all parties. It has been the spectre which has troubled both states to the controversy and made the States hesitate about undertaking obligations with respect thereto.

At the Denver Conference the Mexican situation was discussed at some length, and on August 26th, 1927, a committee having been empowered, reported back to the Conference a memorial, which was unanimously adopted by the Conference and signed by every Governor of the seven States and a copy dispatched to the President. That memorial in part, reads as follows:

"We, the Governors of all seven of the Colorado States * * do hereby in great earnestness and concern make common petition that a note be dispatched to the * * * United States of Mexico calling attention * * * that the United States of Mexico can under no circumstances * * * hope to use water made available through storage works constructed or to be constructed within the United States of America or hope to found any right upon any use thereof."

The Boulder Canyon Project Act follows the memorial of the seven States and has specifically set out the purpose of this act to be the "controlling of floods, improving navigation and regulating the flow of the Colorado River, providing for storage and for the delivery of stored waters thereof for reclamation of public lands and other beneficial uses **exclusively within the United States.**"

It is in keeping with the record and of the Act that Arizona has asked for this most important condition to be incorporated in the tri-state compact. It is vital and essential that it be put in, for whatever waters Mexico can use in the future must not directly or indirectly be augmented by storage, ditch or canal facilities made available through the assistance of the United States or any of the States.

To the foregoing proposal, California's answer was:

"As to the proposal that the all-American Canal be

not used for delivery of water for Mexican use; that is not a proper subject of concern in framing the proposed pact and should be omitted therefrom."

Proposals on Revenue

The Arizona position on this question of revenue is based on the power given the States of California, Nevada and Arizona, and under section VIII (b) of the Boulder Dam Project Act, wherein, "the United States or any of its agencies shall observe and be subject to and controlled * * * 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 includinb power, arising from the use of water accruing to said States," and in order that there might be no question the Act states, "anything to the contrary herein notwithstanding." This is a broad, ample, and a plenary power to the States to compact, and the United States "or any of its agencies," which includes the Secretary of the Interior, would be bound by such a compact, if any, as might be arrived at between the States. We maintain that when such a compact was made between the States and accepted by Congress, then the United States and its agencies under the terms of the Act, would be bound thereby and such compact would be a law governing the Act itself.

The Act has attempted to harmonize many ideas and theories in regard to the benefits to the States, and there has succeeded one provision after another, many of which are conflicting. Many ambiguities have developed in the bill and the act is susceptible to differing meanings. In order that there might be no question hereafter raised, or that controversial matters might be reduced as far as possible, Arizona has seen fit to ask that a compact, on questions of revenue, be made, clarifying the ambiguities, defining the meanings, and harmonizing different sections. These are set out in the twelve proposals that Arizona makes as follows:

Revenue Proposal No. 1. "THE PROJECT SHALL BE CONSTRUCTED, MAINTAINED AND OPERATED BY THE UNITED STATES WITH THE PURPOSE NOT ONLY OF REPAYING FEDERAL ADVANCES WITHIN FIFTY YEARS BUT ALSO OF PROVIDING THE GREATEST REASONABLE RETURN MEANWHILE TO ARIZONA AND NEVADA."

In the act we find a conflict of meaning as to revenue under section 5 thereof. The Secretary of the Interior is "au-

thorized under such general regulations as he may prescribe, to contract for the storage of water in the reservoir," for the sale of electrical power, "upon charges that will provide revenue which in addition to other revenue accruing under the reclamation law and under the 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 payment to the United States under the subdivision (b) of section 4." The part of the section just quoted imposes on the Secretary the duty to raise sufficient funds to pay, expenses of operation, maintenance, and reimburse the Government for moneys spent under section 4 of this Act, except that part expended in building the all-American Canal.

Referring to Section 4 of the Act, reference is made to the \$165,000,000 provided to be spent, as set out in (b) of Section 2 of the Act. In Section 5 of the Act it provides that the contracts for the sale of electrical energy shall be made with a view of obtaining reasonable returns. In no place in the Act is there any direction as to the contracts for the sale of potable water except the Secretary has the right to make such Contracts.

Under section 4 of the Act it is further provided that during the period of amortization if "the Secretary of the Interior shall receive revenues in excess of the amount necessary to meet periodical payments to the United States," he shall divide 37 1-2 per cent thereof between Arizona and Nevada. A question of interpretation has arisen as to the duty of the Secretary in making contracts. Shall he be guided by the Provision to get only sufficient to pay operation, maintenance and government payments, or shall he have in mind rather that charges are to be made so that reasonable returns shall be received by him for disbursements to Arizona and Nevada? Shall he have in mind that the excess over operation, maintenance, and periodical payments to the Government shall be sufficient to insure the payment of the \$25,000,000 to the Government covering the flood control item during the period of amortization of the cost of the dam? When he comes to charge for potable water or water for domestic purposes what will be the basis of his charge? Will it be what the potable water is worth to the City of Los Angeles, or will he be guided by the fact that assuming the dam to cost approximately \$40,000,000 and to store 26,000,000 acre feet of water that therefore, the cost of storing one

million acre feet of water for Los Angeles would be the proportion of 1-26 of the cost of the dam?

It seems to Arizona that the purpose of the act is to make a reasonable charge for both the storage and delivery of water, and for the use of the water for hydro-electric energy, which will be based on what such services are worth, to the end that there will be such an income sufficient to take care of the operation, maintenance and government payments, and also be sufficient to pay a reasonable return to Arizona and Nevada in the meantime. This we believe is the true meaning of the Act.

To the foregoing proposal, California made answer as follows:

"To make "providing the greatest reasonable returns" to Arizona and Nevada during the amortization period a main or primary purpose of the construction, operation and maintenance of the project would render the legislation of questionable validity, and no doubt would antagonize Congress and cause rejection of the Compact."

Revenue Proposal No. 2. "CONTRACTS FOR ELECTRICAL POWER SHALL PROVIDE GREATEST PRACTICABLE RETURNS CONSISTENT WITH COMPETITIVE CONDITIONS IN AVAILABLE MARKETS, WITH PERIODIC READJUSTMENTS AS PROVIDED IN THE ACT TO EFFECTUATE SUCH INTENT."

Section 5 (a) of the Act provides that no contract for electrical energy shall be of longer duration than fifty years, and shall be made with a view of "obtaining reasonable returns," and shall contain provisions for readjustment after fifteen years, as may be "justified by competitive conditions at distributing points or competitive centers." This would allow the Secretary of the Interior to make contracts for fifty years for electrical energy and for the first fifteen years sell the same at such a figure as he might see fit, free from any obligation to get a reasonable return therefor. Moreover, this would put into the hands of the Secretary of the Interior the power which could result in the confiscation of every other power company within a radius where the Boulder Canyon power might be used. If a period of fifteen years should elapse during which there could be no competition, Boulder Dam Power would control, and those now in the business could not last until a readjustment period has been reached.

It certainly is not the purpose of the Government to dis-

turb private capital. The principle urged by Arizona is a normal and logical rule for the operation of the project by the Secretary. We have sought to further give meaning to the clause in the section 5 (a) of the Act, "competitive conditions at distributive points or competitive centers." There may be some doubt as to the exact meaning of this last phrase, and it has been clarified by the principle, which Arizona has stated to be the true rule that should guide the Secretary in making his contracts. Under the bill it might be well that the cost of power at Seattle could be taken as a guide for the Secretary to fix the price of the Boulder Canyon power, but inasmuch as we have confined it to those points which are competitive with the Boulder Dam markets, then any such rate as Seattle's would not be considered.

To the foregoing, California made reply as follows:

"The policy of requiring contracts for power to "provide greatest practicable return" regardless of other considerations would be calculated to give monopolistic control of the power of the project and of the power from other developments on the river. The Secretary should have sufficient discretion to protect the general consuming public."

Revenue Proposal No. 3. "POWER TRANSMISSION COSTS FROM DAM TO AVAILABLE MARKET SHALL BE UNDER THE CONTROL OF THE SECRETARY AND KEPT WITHIN REASONABLE LIMITS AS A CONDITION TO GRANTING POWER CONTRACTS."

In contracts for power, the same will be made for delivery at the dam. In deciding what price must be charged, there must be determined the competitive conditions in the available markets, and then, related back to the dam in determining the deductions to be made, and it will be necessary to take in the transmissions costs. The Secretary of the Interior should have full controls of determining these costs. In the instance of Boulder Dam, it is a long way from the market and the transmission costs are of necessity high. Without imputing any interest or purpose to those who expect to take power in southern California, it is proper that the accounting and the cost of this transmission charge or deduction should be entirely within the control of the Secretary.

California answered the foregoing proposal as follows:

"As to the control by the Secretary of power trans-

mission costs, a slight rewording of the provision would probably render it acceptable. However, the costs of steam standby should be included."

Revenue Proposal No. 4. "ANY DAM OR DAMS, OTHER THAN THE PROJECT, IN THE LOWER BASIN SHALL BE CONSTRUCTED, MAINTAINED AND OPERATED WITH LIKE PURPOSE AND UNDER LIKE CONDITIONS, AS HEREIN PROVIDED FOR THE PROJECT. THE BENEFITS ACCRUING FROM ANY SUCH DAM OR DAMS TO BE CONTROLLED BY THE COMPACT BETWEEN INTERESTED STATES OF THE LOWER BASIN."

The Secretary of the Interior is authorized by the act to construct a dam at "Black or Boulder Canyon," with a main canal connecting the Laguna Dam, "or other suitable diversion dam if deemed necessary or advisable by him."

This provision is an attempt to give the Secretary full authority to build another dam or dams below Boulder Canyon dam. The condition imposed by Arizona is that if such dam should be built, then all conditions applying to the main dam should be imposed on the regulating dam below, except that if this dam be built between the States of Arizona and California, then an additional or supplementary compact must be made between those States with a view to determining what disposition shall be made of the benefits to be derived from such dam, that is, assuming that the dam is to be built in connection with the Boulder Canyon project and by the United States. If it is built by other agencies, or by a joint agency of California and Arizona, then naturally there would of necessity, be a separate compact with respect thereto. In such a dam Nevada could have no interest.

California answered the foregoing, as follows:

"Provisions for "any dam or dams, other than the project" would be foreign and practically impossible to formulate in connection with said Act. Besides, the meaning or effect of this item is not sufficiently definite or Clear."

Revenue Proposal No. 5. "POWER FROM ANY SUCH OTHER DAM OR DAMS SHALL NOT BE DEEMED OR HANDLED AS COMPETITIVE WITH POWER PRODUCED BY THE PROJECT IN DETERMINING CHARGES FOR POWER FROM THE PROJECT."

Any other dam that is built below Boulder Canyon Dam would regulate the flow of the river and power could be pro-

duced at much less cost than power can be produced at Boulder. That being so, then the price of power at the re-regulating Dam should not be considered as being produced under competitive conditions and within distributing points in order to fix the price at which the power costs at Boulder should be re-adjusted. It undoubtedly would result in the returns from the re-regulated dam being larger than the returns from the Boulder Dam Investments, but in a measure it would be incidental thereto.

To the foregoing, California replied as follows:

"The same objections are made as in the case of Item (4)."

Revenue Proposal No. 6. "CHARGES FOR THE STORAGE STORAGE AND DELIVERY OF DOMESTIC WATER SHALL BE ON AN ACRE FOOT BASIS, NOT LESS THAN \$2.00 PER ACRE FOOT, SUBJECT TO PERIODICAL READJUSTMENT, AS ABOVE STATED, FOR THE PURPOSE OF KEEPING SUCH CHARGES ON A BASIS COMMENSURATE WITH THE VALUE OF THE STORAGE AND DELIVERY FACILITIES AFFORDED BY THE PROJECT."

The Act provides in Section 1 that moneys advanced by the United States shall be repaid "out of revenue derived from the sale or disposal of water for potable purposes outside of the Imperial and Coachella Valleys," and again, in section 5 of the Act, the Secretary is authorized to contract under such rules and regulations as he may prescribe for the storage and delivery of water from the reservoir at such points on the river or on the canal as may be agreed upon, for irrigation and domestic use. These are the only references made to contracts for storage and delivery of water. In reference to contracts for the sale and delivery of electrical energy, the act is specific and provides that a charge shall be contemplated and that the charge shall be reasonable and that there shall be readjustment of such contracts.

In the Sibert report on page 15, there is this provision:

"The operation, maintenance, interest and sinking fund for the Boulder Canyon project must be paid from the sale of power and of storage services, which latter has been estimated at \$1,500,000 per annum by the Secretary of the Interior."

That, based on the amount of water which California ex-

pects to take for potable purposes, would make approximately a \$1.50 charge per acre foot per year for storage and delivery of this water. The Sibert report, however, is not content with this amount from the storage and delivery of potable water, but states further at the end of the report as follows:

"If the income from storage cannot be reasonably increased and the capital investment reduced by the cost of the all-American Canal, together with a reduction for all or part of the cost properly chargeable to flood protection, it would be possible to amortize the remaining cost with the income from power."

Following this Sibert report, the Congress followed out the recommendations made by this Board of Engineers. The cost of the capital investment of the all-American Canal was taken out. There was a reduction of \$25,000.00 which amount was charged to flood protection. It seems not only advisable, but proper that instead of raising \$1,500,000 a year for storage and delivery of water on a \$1.50 acre feet charge per year, that it should be increased to \$2 per acre foot, making an annual amount approximately of \$2,000,000 coming from storage and delivery of water, or at the rate of \$2 an acre foot for the million acre feet which are to be taken by southern California for potable purposes.

More than this, the bill provides that of the excess revenues coming to the Government 18 3-4 per cent thereof shall be paid to the State of Arizona. Presumably the bill intended that there should be excess revenues. Unless there is a charge made for storage and delivery of water, of at least \$2 per acre foot a year, it is unlikely that there will be any such revenue.

Furthermore, we believe that the charge of \$2 an acre foot is a minimum and even with the cost of taking this water from the river to the coastal plain, the City of Los Angeles and its suburbs would still be in position to deliver water to the consumer for less than the usual cost of potable water to cities of her size and situation.

It might be pointed out that this charge of \$2 per acre foot would mean a charge of about two-thirds of a cent per thousand gallons. In the counter proposition of California, they contended that the utmost they could pay was \$1 per acre foot per year. In other words, they could not add to the charge to the consumer two-thirds of a cent per thousand gallons, but

figured that the most they could add would be one-third of a cent per thousand gallons.

To this Revenue Proposal, California answered as follows:

"As to the proposed minimum charge of \$2 on domestic water; any guaranteed minimum or other charge for storage and delivery of domestic water to produce revenue in excess of amount to be provided under Section 5 of the Act, to-wit—for operation, maintenance, depreciation, interest and amortization, would be contrary to the Act, and, besides, would be unjust and unreasonable.

There is no objection to the Compact providing that under the terms of the Act said charges should be such as in the judgment of the Secretary of the Interior will yield a sum equal to a full, fair, proportional part of the total revenues from all sources which will cover, in respect to the storage and delivery of water, all expenses of operation and maintenance incurred by the United States and the payments to the United States under subdivision (b) of Section 4.

However, if the policy of a minimum charge on domestic water is to be established, it should not exceed \$1 per acre foot."

Revenue Proposal No. 7. "ALL WATER TAKEN FROM THE PROJECT FOR USE OUTSIDE OF THE COLORADO RIVER BASIN, EXCEPT WATER DIVERTED FOR IMPERIAL AND COACHELLA VALLEYS, SHALL BE DEEMED TO BE FOR DOMESTIC USE."

This clause is intended to clear any doubt in the compact with reference to the charges to be paid for the storage and delivery of water. The Act sets out that it is the purpose to charge for storage and delivery of water outside of the Imperial and Coachella Valleys. It might be contended that water taken outside of those two Valleys for other than domestic use should not be charged for or should be charged at a different rate than that taken out to be used for domestic purposes. Rather than to have any question of accounting, it is believed advisable to make one charge for water taken outside of those two Valleys and used for any purpose whatsoever.

To this, California answered.

"As to the proposal to make charges for storage and delivery of water for irrigation use outside the Basin on the same basis as water for domestic use; as California is to have her share of the river waters set apart for

use solely in that state, the question of charges for different uses of such water concerns only that state and the Government in providing storage and delivery service."

Revenue Proposal No. 8. "AMPLE OPPORTUNITY SHALL BE AFFORDED BY THE SECRETARY TO INTERESTED STATES TO PARTICIPATE, IN AN ADVISORY WAY, AND TO BE HEARD UPON ALL MATTERS OF CONSTRUCTION, MAINTENANCE AND OPERATION OF THE PROJECT AND IN THE MAKING OF CONTRACTS FOR POWER AND DOMESTIC WATER, TO THE END THAT THE FINANCIAL RETURNS FROM THE PROJECT TO ARIZONA AND NEVADA SHALL BE AS GREAT AS REASONABLY PRACTICABLE."

It would hardly need any explanation by reason of the interest of Arizona and Nevada in every finding which the Secretary of the Interior may make. Whenever a rate is to be fixed or a charge is to be made the interested parties should have ample opportunity to be heard. This would apply equally to those who are to be charged the rate as well as to those who might expect to derive any benefit therefrom.

California answered as follows:

"Provision for advisors from interested states would be obnoxious to the Secretary of the Interior and probably not be approved by the Congress. The limited extent to which Congress might sanction such a policy is indicated in Section 16 of the Act."

Revenue Proposal No. 9. "AFTER REPAYMENT OF GOVERNMENT ADVANCES, CHARGES FOR STORAGE AND DELIVERY OF WATER SHALL CEASE, AND THE REVENUE OF THE PROJECT SHALL BE DIVIDED EQUALLY BETWEEN ARIZONA, NEVADA AND COLORADO RIVER BASIN FUND MENTIONED IN THE ACT."

The plan of the Act was to provide for the future up to to the time the United States has been reimbursed. During that period of the amortization, 37½ per cent of any excess revenues go to Arizona and Nevada and 62 1-2 per cent go to the repayment to the United States for the \$25,000,000 advanced for flood control.

The Act provides in section 5, "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 kept in a separate fund to be expended within the Colorado River Basin as may hereafter be prescribed by Congress."

The Act is not clear concerning what will happen to the 37 1-2 per cent made payable to Arizona and Nevada if after the United States is repaid for all advances, part of the \$25,000,000 for flood control still remains unpaid. The Act provides that the entire \$25,000,000 for flood control shall be repaid even after the United States has been paid its advances, but apparently Arizona's and Nevada's rights to any revenues cease with the payment to the United States for the advances made. The equities of the situation must appeal to all. Why should the States interested receive returns during the period the project is being paid for, and then when it has been paid for and substantial returns should be expected, the states then be cut off from any returns? Again, after the project has been paid for, what good reason is there for the other States in the basin receiving the entire revenue? Is it intended to establish the principle that Arizona is to benefit from the dams built in the Upper Basin, such as the dam at Flaming Gorge or at Dewey? If this principle is carried out with equal justice, the Lower Basin states should share in the benefits of every project in the upper basin. It is assumed that if the Santa Fe Compact is accepted, the Lower Basin states will get that water which they are entitled to get and no more. Once the Upper Basin states have relinquished that water going to the lower basin, and it has passed to the Lower Basin, what equity would prescribe that the Upper Basin states are still entitled to the benefits to be derived from the water? It might be said that they have contributed to the fund for the building of the dam, but so has every other State in the Union.

Congress apparently intended at a later date to decide the question and to determine who should receive the benefits therefrom after the United States had been reimbursed. It might be well at this time to determine what it to become of the benefits, and Arizona feels that it was being extremely fair when it suggested that there be an equal division between the States of Arizona and Nevada and a fund for the future development of the Colorado River Basin.

The answer of California is as follows:

"As proposed division of revenue from project after amortization; Congress has plainly indicated in Section 5 of the Act that it is unwilling to make further declaration on this subject at this time."

Revenue Proposal No. 10. "THE PERIOD FOR ARIZONA AND NEVADA TO MAKE CONTRACTS FOR ELECTRICAL ENERGY UP TO 75,000 H. P., SHALL BE ENLARGED TO FIVE YEARS PROVIDED, THE PARTY CONTRACTING SHALL ASSUME ALL OBLIGATIONS TO THE UNITED STATES THEREFOR, AND RELEASE ALL PARTIES PREVIOUSLY OBLIGATED."

The act provides in section 5 (a) for the contracts to be made for the power to be generated, and also provides who are entitled to bid on this power. It further states, "the rights covered by such preference shall be contracted for by such States within six months after notice by the Secretary of the Interior."

The time allowed is six months, and after that time the states are forever barred from contracting for any of the power. It will be years after the first contracts are made, before any of the power is actually delivered but, nevertheless, not having exercised that privilege within the six months period to bid for the power, such states are cut off.

For years Arizona has been engaged to the full extent of her ability in trying to get an adjustment of the big questions concerning the building of this dam and division of the waters. It has not had time, nor was it in a position to give thought to what will happen after the dam has actually been built. In fact it does not know what its rights will be under the project, because if a supplemental compact is not made, her rights are one thing, and if a supplemental compact is made, her rights will be different. It is, therefore, in the interest of equity and justice that a period of six months, as provided for in the act, within which Arizona and Nevada might contract for a block of the power, should be extended from six months to five years, and it has seemed to Arizona that asking for an option during that period of 37,500 horsepower to Arizona within which she might contract, was not out of line with what would be fair dealing between the states. It would be understood that if Arizona did exercise its option and it did take over 37,500 horsepower of the electrical energy generated at Boulder Canyon, then it would relieve any party contracting with the United States to the extent that the 37,500 horsepower bore to the entire contract made, and would undertake to assume such government obligations as had been incurred therefor.

To this California answered:

"As to the proposal that Arizona and Nevada be given

a five year right or option on a large portion of the power of the project; this would involve an attempt by interstate pact to amend the Act, and is, therefore, objectionable: Besides, such a provision would seriously interfere with the disposal of the power by the Government under the most advantageous conditions."

Revenue Proposal No. 11. "THE PROPOSED LOWER BASIN COMPACT SHALL EXPRESS THE SENSE OF THE SIGNATORY STATES THAT THE ACT IMPOSES NO INTEREST CHARGE UPON THE PROJECT ON ACCOUNT OF FLOOD CONTROL AND, SUBJECT TO THE CONSENT OF CONGRESS, THAT THE PROJECT SHOULD BE RELIEVED OF ANY BURDEN OF PRINCIPAL OR INTEREST ON ACCOUNT OF FLOOD CONTROL."

The Act, in paragraph (b) of section 2, provides:

"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 \$165,000,000. Of this amount the sum of \$25,000,000 shall be allocated to flood control and shall be repaid to the United States out of 62 1-2 per centum of revenues, if any, in excess of the amount necessary to meet periodical payments during the period of amortization as provided in section 4 of this Act. If said sum of \$25,000,000 is not repaid in full during the period of amortization, then 62 1-2 per cent of all net revenues shall be applied to the payments of the remainder. Interest at the rate of 4 per cent per annum, accruing during the year upon the amount so advanced and remaining unpaid, shall be paid annually out of the fund, except as herein otherwise provided.

It may be that it was the intention to put in the clause beginning "Of this amount" and ending with the reference to the \$25,000,000 fund as a parenthetical provision, and it was not the intention to charge interest on that at 4 per cent. Again, interest is referred to in section 4 (b), of the act, where it provides that "all amounts advanced to the fund under subdivision (b) of section 2 for such work, together with interest thereon, made reimbursable under this act" should be provided for by revenues made available through contracts for the sale of power and water.

The debate in the Senate indicated that it was the understanding that no interest should be paid.

This doubt applies only to the matter of the Secretary charging interest. When it comes to a matter of the United States

charging against the project the capital item of \$25,000,000 for flood control, the principle laid down by Arizona is that the States should agree to request that the United States federal Government assume this burden, since it has already done so in principle, where the work of flood control has been undertaken in other sections of the country.

The California answer is as follows:

"As to the proposed elimination of repayment to the Government of the item of \$25,000,000, for flood control and expressing the view that the Act imposes no interest on that item! These are matters resting solely within the legislative powers of Congress and no attempt to cover them by interstate agreement should be made. The proper method of making the attempt, if made at all, would be by direct amendment of the Act."

Revenue Proposal No. 12. "THE ACCOMPLISHMENT OF THE FOREGOING INTENTS AND PURPOSES SHALL BE EFFECTUATED AND SAFEGUARDED BY REASONABLE INTERPRETATIONS OF THE ACT, OR NECESSARY CHANGES THEREIN, TO BE INCORPORATED IN THE COMPACT, AND ACCEPTED BY CONGRESS."

It is our opinion in view of the broad powers given the States in section 8 (b) of the Act first referred to, it was advisable for the States to incorporate in a tri-state compact these understandings of the states, and it is our firm belief that such a compact would govern the provisions of the bill, "anything to the contrary" in the act "notwithstanding."

The California position is stated in its reply as follows:

"As to the proposal to effectuate certain intents and purposes of the Act by interpretations or changes; This is also outside of the proper scope of the proposed Tri-state agreement."

Conclusion

In conclusion, the Commission desires to again express the conviction, that the foregoing water and revenue proposals are fair and just, and will continue in the confidence that in the end Arizona will enjoy those benefits from the Colorado River to which she is entitled.

Dated:
Prescott, Arizona.
August 16, 1929.

A. H. FAVOUR.