

5-11-1981

## Trial Transcript, Vol. 56, Morning Session

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case # 4993

File # 163

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IN THE DISTRICT COURT FOR THE FIFTH JUDICIAL DISTRICT  
WASHAKIE COUNTY, STATE OF WYOMING

IN RE: )  
 )  
THE GENERAL ADJUDICATION )  
OF RIGHTS TO USE WATER )  
IN THE BIG HORN RIVER )  
SYSTEM AND ALL OTHER )  
SOURCES, STATE OF )  
WYOMING. )

Civil No. 4993

BEFORE: The Honorable TENO RONCALIO, Special Master  
Presiding.

FILED \_\_\_\_\_  
\_\_\_\_\_ 5/20 1981  
*Margaret V. Hampton*  
\_\_\_\_\_ DEPUTY

VOLUME 56

BE IT REMEMBERED that on this 11th day of May,  
1981, at Room 302, State Capitol Building, Cheyenne,  
Laramie County, Wyoming, the above-entitled matter  
resumed for hearing before the Honorable Teno Roncalio,  
Special Master Presiding, whereupon the following pro-  
ceedings were had, to wit:

PROCEEDINGS:

**ORIGINAL**

APPEARANCES

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FOR THE STATE  
OF WYOMING:

HALL & EVANS  
2900 Energy Center One Building  
717 17th Street  
Denver, CO 80202  
BY: MR. JAMES MERRILL, Special  
Assistant Attorney General  
and  
MR. SCOTT KROB

FOR THE UNITED STATES  
OF AMERICA:

MR. JOSEPH MEMBRINO  
Attorney at Law  
Land and Natural Resources Division  
Department of Justice  
P.O. Box 7415  
Benjamin Franklin Station  
Washington, DC 20044

and

MR. THOMAS ECHOHAWK  
Attorney at Law  
Land and Natural Resources Division  
Department of Justice  
1961 Stout Street  
Denver, CO 80294

FOR THE SHOSHONE  
and ARAPAHOE TRIBES:

WILKINSON, CRAGUN & BARKER  
1735 New York Ave., N.W.  
Washington, DC 20006  
BY: MR. R. ANTHONY ROGERS

CLERK TO THE  
SPECIAL MASTER:

MR. LEO SALAZAR  
Attorney at Law  
701 Rocky Mountain Plaza  
Cheyenne, WY 82001

1 THE SPECIAL MASTER: All right, shall we come  
2 to order, please?

3 Are there any additional counsel this week that  
4 were not of record last week?

5 Mr. Rogers, do you want to show --

6 MR. ROGERS: Your Honor, I'm Tony Rogers, this  
7 week representing both the Shoshone and Arapahoe  
8 Tribes.

9 THE SPECIAL MASTER: Very well.

10 MR. MERRILL: Your Honor, before the Tribes  
11 begin their cross-examination of Mr. Dornbusch, I  
12 would ask the Court whether it wants to hear oral  
13 arguments concerning Wyoming's brief to -- excuse  
14 me, concerning Wyoming's Motion to Strike Mr.  
15 Kersich's testimony which, as you recall, we made  
16 during Mr. Toedter's direct testimony. I brought  
17 this up last week and you mentioned that you might  
18 want to defer it until Monday of this week. Mr.  
19 Echohawk and I are prepared to proceed on the motion  
20 or if you would like to decide it on the briefs or  
21 however the Court would care to handle it.

22 THE SPECIAL MASTER: You gentlemen have what,  
23 about five minutes apiece -- This is a Motion to  
24 Strike all of Kersich's testimony?

25 MR. MERRILL: That's correct, Your Honor.



1 THE SPECIAL MASTER: Well, let's proceed with  
2 your argument.

3 MR. MERRILL: Thank you, Your Honor. A:

4 As Your Honor will recall during the direct  
5 testimony of Mr. Kersich when we were over in the  
6 Administrative Hearing Room in the Federal Building,  
7 at one point Mr. Kersich testified that in forming  
8 his own professional opinions and conclusions, he  
9 relied upon the opinions and conclusions of others  
10 working in his engineering firm. At that time  
11 Wyoming objected to the admission of exhibits which  
12 reflected Mr. Kersich's opinions on the grounds  
13 that they were based upon the opinions of others  
14 and, therefore, were not admissible because Wyoming  
15 was denied an opportunity to cross-examine the  
16 bases of each of the opinions on which Mr. Kersich's  
17 opinion was based. At that time you overruled that.

18 THE SPECIAL MASTER: Had you not been given  
19 that opportunity when Mr. Kersich was testifying and  
20 the exhibits were introduced, or are you talking  
21 just about the exhibits introduced during the --  
22 after he had testified?

23 MR. MERRILL: The ones after he had testified,  
24 Your Honor, are the ones that created the problem,  
25 and I believe they were the maps showing the gravity

1 and sprinkler arable land bases which essentially  
2 reflected a summary of his opinions concerning  
3 the future arable land base. At that time we  
4 moved to strike his testimony and you denied the  
5 motion. Then, as you will recall, a couple of  
6 weeks ago in the Supreme Court Chambers, Mr.  
7 Robert Toedter, also of HKM, was testifying con-  
8 cerning drainage. Mr. Membrino was doing his  
9 direct examination, and during that direct exami-  
10 nation Mr. Membrino asked Mr. Toedter if he had  
11 done any fieldwork concerning drainage following  
12 Mr. Kersich's direct testimony in this case. Mr.  
13 Toedter testified, "Yes, I did." And when asked  
14 why you did that, Mr. Toedter said, "I reviewed  
15 the documentation that we had in-house and was not  
16 able to reach a subsequent conclusion, so I spent  
17 some additional time in the field doing work drill-  
18 ing holes, reviewing cut sections along stream  
19 channels, roads and the like in order to determine  
20 whether or not these lands had sufficient depth to  
21 meet our standards."

22 And at that time we again made another Motion  
23 to Strike. You overruled that motion and invited  
24 briefs on the point. And, as you recall, we filed  
25 the brief last week on the point.

1 THE SPECIAL MASTER: Okay.

2 MR. MERRILL: It's probably unfortunate that  
3 we have made so many Motions to Strike thus far in  
4 the proceedings. We have certainly sympathized  
5 with the Master's desire to maintain a very com-  
6 plete record of these proceedings, but I believe  
7 that this Motion to Strike is far and away the  
8 most significant that the State of Wyoming has  
9 made because it addresses a very fundamental evi-  
10 dentiary defect in the case that the United States  
11 has put on in support of the future arable land  
12 base, and that defect quite simply is that at the  
13 time that Mr. Kersich testified on direct examina-  
14 tion as to his opinions, it is now evident from  
15 the testimony of Mr. Toedter that he didn't have  
16 enough evidence and facts and data on which to base  
17 his own opinion on which Mr. Kersich supposedly re-  
18 lied.

19 THE SPECIAL MASTER: Mr. Toedter didn't have  
20 enough to base his, Mr. Toedter's opinions?

21 MR. MERRILL: That's correct.

22 THE SPECIAL MASTER: That's correct.

23 MR. MERRILL: And Mr. Kersich testified that  
24 he had based his opinion on Mr. Toedter's opinion,  
25 which we now find out was itself without sufficient



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information to even be an opinion. Mr. Toedter said, "I didn't have enough evidence to reach a subsequent conclusion."

So the nature of the problem here is foundation. It's a very simple foundation problem. And if one expert doesn't have enough information to form his opinion and a second expert testifies that he relies on the first, then the whole house of cards falls down. It cannot stand.

Therefore, that's why we originally made such a major point during Mr. Kersich's testimony because had Mr. Toedter appeared as a witness before Mr. Kersich, it might have been apparent at that time that there was insufficient evidence for them to form a professional opinion, and we would have found that out before Mr. Kersich's testimony ever came on.

\* \* \* \* \*

1 MR. MERRILL: (Continued) That's essentially  
2 the gist of Wyoming's position. I would reiterate  
3 the points that were raised in the brief that we  
4 filed during Mr. Kersich's testimony concerning  
5 the proper bases for proper opinions and conclusions  
6 which do not include the opinion and conclusions  
7 of other experts for precisely the reasons illus-  
8 trated by what's happened in this case. Thank you,  
9 Your Honor.

10 THE SPECIAL MASTER: You bet. It may be your  
11 most serious and significant motion to strike offer,  
12 but I notice that it fails to cite a single specific  
13 case of any kind in point, and there ought to be  
14 some law in something of this kind, I would think.

15 MR. MERRILL: Your Honor, there is quite a  
16 bit of law on that point. I would refer the Court  
17 to the trial brief that we filed during Mr. Kersich's  
18 testimony, the original motion to strike. Rather  
19 than burden the Court with that argument again,  
20 I simply incorporated it in this later brief. I  
21 can supply the Court and counsel with copies of  
22 that brief if you like.

23 THE SPECIAL MASTER: Go ahead, Mr. Membrino.

24 MR. MEMBRINO: Thank you, Your Honor.

25 I think we'll have a much better understanding of

1 what went on with HKM's research into the arability  
2 of the lands if we look at what Mr. Toedter testified  
3 in context. Unfortunately, the excerpt in this  
4 brief is severely truncated.

5 The ultimate point here is that Mr. Toedter  
6 did not change one jot, his conclusions that the  
7 84,000 acres of future and approximately 7300  
8 acres of historic lands were arable. It's hard,  
9 in looking at Mr. Toedter's testimony on page 3809  
10 when he says, "I reviewed the documentation that  
11 we had in-house. I was not able to reach a subse-  
12 quest conclusion". To understand what subsequent  
13 conclusion means.

14 One thing it could mean is that a conclusion  
15 other than he had reached, which was that the lands  
16 were arable.

17 At the time Mr. White made his objection  
18 there was a long colloquy and we finally got  
19 back into the testimony of Mr. Toedter and Mr.  
20 Toedter was asked if he had changed any of his  
21 conclusions and he said: "Well, what I did, my  
22 conclusions actually ended up changing both  
23 up and down, that is, the more work that could  
24 be done in the field to fine tune the conclusion  
25 might produce some fluctuations in hydraulic

1 conductivity and depth to barrier. However,  
2 in no case did any of these lands fall outside  
3 the minimum criteria for arability.

4 Turning on into the testimony, the following  
5 day, Mr. Toedter further elaborated on what his  
6 observations were regarding the field work that  
7 took place after Mr. Kersich's testimony began,  
8 and he said: What we had to do -- and this is, this  
9 starts at page 3822 of the transcript, Mr. Toedter  
10 described his responsibilities as being two; first,  
11 to see if the lands were arable according to the  
12 minimum standards set out in the land classification  
13 standards that HKM had devised, and the second,  
14 to do the actual hydraulic conductivity and depth  
15 to barrier analysis. And he very clearly pointed  
16 out seeing if something met minimum standards  
17 and what the actual depths were because the latter  
18 information was needed to precisely align your  
19 drain spacing.

20 In the spot checking that was done as a result  
21 of questions raised in Mr. Kersich's testimony,  
22 I think was a prudent thing to do. Here we had  
23 done our work, we thought it was good, there was  
24 some challenge to our work in the testimony, we  
25 ran out and did some spot checking and we did see,



1 yes, we did just right, and we have no -- we have  
2 no doubt that the original conclusions were correct,  
3 and that Mr. Toedter's testimony was actually  
4 testimony about conclusions reached prior to  
5 Mr. Kersich's testimony on which he could fairly  
6 rely.

7 THE SPECIAL MASTER: All right. I think  
8 I'm ready to rule on the matter. I will base  
9 my ruling on the -- on my review of the evidence  
10 and on the briefs submitted to me on the point  
11 and the oral arguments, if nothing else. I'm  
12 going to overrule the motion only because I think  
13 it's a combination in-house judgment rendered by  
14 a group of specialists who inevitably find it  
15 necessary to challenge each other's positions  
16 occasionally to come up with HKM's official house  
17 version and I do not believe that while it may  
18 strain some of the accepted rules of what should  
19 be admissible or not, I think a case by its very  
20 nature sometimes has qualifications and exceptions  
21 to rules of evidence.

22 For example, if two witnesses were to  
23 dispute, "I thought he had the gun." "No, I  
24 thought he had the gun", and you leave a question  
25 of doubt of who had the gun, I can well appreciate



1 that your motion should prevail, but in a general  
2 mainstream adjudication of massive complexities  
3 such as this. I don't think that strict rule  
4 can apply evidentially, and therefore I will  
5 overrule the motion, making the worst case of  
6 this if my action is in error. I'm quite certain  
7 it's not reversible error, and I'm quite certain  
8 it isn't erroneous otherwise I would do otherwise.

9 All right, you may proceed. All right, we  
10 are ready to begin the cross examination of  
11 Mr. David Dornbusch.

12 CROSS EXAMINATION

13 BY MR. ROGERS:

14 Q May it please the Court, Mr. Dornbusch, did the  
15 study you performed for the United States for this  
16 case, was it -- was its intention to determine  
17 the value of Indian Land on the Wind River Reser-  
18 vation for purposes of a declaration of taking?

19 A No, it was not.

20 Q What was the purpose for which you did the study?

21 A The purpose was for the five project areas, to  
22 determine the feasibility of determining irrigated  
23 agricultural projects, and to do that, we per-  
24 formed an analysis of those projects.

25 dornbusch-cross-rogers

1 Q As I understand from your testimony, that in  
2 going about this you determined costs and  
3 benefits associated with the development of  
4 these lands, projected them in the future; is  
5 that correct?

6 A That's right. We determined the costs as they  
7 would occur and the benefits as they would occur  
8 for a hundred years into the future.

9 Q And then by some process you also returned those  
10 costs and benefits, so projected, back to present  
11 day or present value; is that correct?

12 A That's right. The problem that you're faced with  
13 when you have costs and benefits that don't all  
14 occur at the same point in time is to compare  
15 them at a comparable point in time. In other  
16 words, future values have -- are different according  
17 to when they occur in the future. The idea is the  
18 notion of discount into the present value. Maybe  
19 I can explain it better if I draw a picture.

20 Q Fine, if you would.

21 A Is there a marking pen I can use?

22 (Off the record discussion.)

23 A What I'm going to describe is the same sort of thing  
24 I tried to do in words last week. The idea is that  
25 if this is time into the future, what I'm trying to

1 explain here is that suppose you were to do some  
2 work for me as a lawyer and you were to charge me  
3 a fee and your fees were, let's say, a thousand  
4 dollars, and that this time, let's say. time zero,  
5 if I were to say to you, Okay, I'm willing to give  
6 you that thousand dollars now or I'm willing to  
7 give it to you -- I didn't draw a very straight  
8 line, but what I'm going to try to show is, one  
9 year, also a thousand dollars. Suppose I were to  
10 say to you I will either give you now today a  
11 thousand dollars or a thousand dollars after one  
12 year. I think you'd say, no, I won't take the  
13 thousand dollars after a year, I'd rather have  
14 it now, and the reason is you could take the  
15 thousand dollars, you can put it in a bank or you  
16 could invest it somewhere and get some return on  
17 it. And let's say you were able to get ten percent  
18 return, and if you were, what you'd be able to do  
19 with a thousand dollars today is get \$1100 at the  
20 end of a year. So you'd say to me, well, I really  
21 don't want a thousand dollars at the end of a year,  
22 but if you give me \$1100 at the end of a year that  
23 would be the same thing to me as a thousand dollars  
24 now, I could invest it at ten percent, I could get  
25 dornbusch-cross-rogers



1 \$1100 at the end of the year, and the two are  
2 equivalent to me. And what I'm saying then is  
3 that this would be a notion of your time value  
4 of money, okay.

5 You can work it the other way around.  
6 Suppose you were to do that work and I were to  
7 say I don't have any money now, I can't pay you  
8 your thousand dollars, but I can pay you some-  
9 time in the future. And I were to offer you  
10 instead of a thousand dollars, \$1100. You would  
11 say to yourself, okay, \$1100, let's see, if I  
12 were to take my thousand dollars and invest it  
13 at ten percent I could get \$1100. Dornbusch is  
14 offering me \$1100, my present value of that \$1100  
15 is a thousand dollars. You can imagine what we  
16 call discounting that back to the present and  
17 because of your time value, \$1100 discounting  
18 back to the present would give you a present value  
19 of a thousand dollars. Okay.

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25 dornbusch-cross-rogers

1 A. (Continued) That was for an interest rate for what  
2 you might call a discount rate, too, of 10 percent.  
3 Now, suppose that you actually could invest that  
4 money at 20 percent instead of 10 percent, that would  
5 change things because now instead of \$1100, you would  
6 want \$1200, and what you would be saying is if I  
7 offered you \$1100 a year from now, you would say, no,  
8 that's not really enough, I could invest that \$1000  
9 now at 20 percent and I could get that much more  
10 money for it. So you would want -- you would want  
11 to return \$1200. And the same point in reverse, if  
12 you were to say -- if I were to say to you, "I don't  
13 have any money right now, I can't give you the  
14 \$1,000, what would you take a year from now?" You  
15 would say, "Well, my opportunity for investment is  
16 20 percent, so I need \$1200." And my present value  
17 then is \$1,000 because now your discount rate is  
18 20 percent. That's the idea that's going on here.

19 Q. That's the effect of using different discount rates?

20 A. That's right, that's exactly right.

21 Q. Okay. Now, the problem that we are faced with is  
22 that we have a similar situation, again time going  
23 off to the right, and we have, to simplify it, we  
24 have a very large, let me draw an arrow down as the

25 dornbusch - cross - rogers



1 investment that must be made in developing all of  
2 these systems, and let's say just for argument sake  
3 that they all occur at time zero. They don't because  
4 of the construction period, but just to keep it  
5 simple, let's put it at time zero. But our benefits  
6 come back in an annual stream. Every year we grow  
7 our crops and we sell our crops, and what we get  
8 back are benefits that look like this (indicating).  
9 And, let's say, this were to continue on indefinitely.  
10 We have to form a basis by which we can compare this  
11 annual stream -- I'm drawing in the years now, this  
12 annual stream of benefits on into the future to this  
13 big amount of costs, and it would be wrong just to  
14 add up all of these benefits and say the costs were  
15 \$100,000 and each of these benefits were \$100. It  
16 would be wrong just to add them all up because, as  
17 you go into the future, the present value of those  
18 future benefits, as I showed here, is less. It's  
19 less according to the percentage, the discount rate  
20 that you use. So what I'm trying to show is that  
21 future values have a diminishing value in terms of  
22 present time, and they are affected by the discount  
23 rate that you use. That's the idea we were headed  
24 to. And what I did was I took this stream of future

25

dornbusch - cross - rogers

1 benefits, discounted them to the present so I could  
2 compare them on an equivalent basis to the present  
3 costs in order to compute my benefit-cost ratio.

4 Q You also, in terms of projecting costs associated  
5 with the accrual of those benefits over the years  
6 took into account replacement of certain capital  
7 equipment, did you not?

8 A Yes, that's what I had in mind when I said it's  
9 more complex than just one investment in time.  
10 What you actually have is a lot of investments  
11 during the construction period. Then you have  
12 replacement of a lot of your equipment, not only  
13 the on-farm equipment, but even a lot of your sys-  
14 tem components. So what you would have is some  
15 major investments up front and then some investments  
16 on out into the future that may look like this  
17 (indicating), and it becomes very complex. And  
18 what you must do and what I did was to take each of  
19 these future investments and each of these future  
20 returns discounting them the same way I just des-  
21 cribed to one point in time to compare them with  
22 the benefit-cost ratio.

23 Q So they are all -- both the benefits and the costs  
24 are brought back to the present values using the

25 dornbusch - cross - rogers

1 discount rate that you --

2 A. That's right.

3 Q -- that you determined to be appropriate?

4 A. That's right, it is the discounted present value  
5 of benefits and the discounted present value of the  
6 costs, and I compared them to get the benefit-cost  
7 ratio.

8 Q So that when you were asked the question last week  
9 as to whether or not the value of or the benefit  
10 of, I think it was, \$636 something for per irrigated  
11 acre, that's only part of the picture, is that right,  
12 that's only the present value of the benefit?

13 A. That's right.

14 Q You also could have answered, if asked, that there  
15 was a present value for the costs associated with  
16 that benefit?

17 A. Yes, that's right.

18 Q And that the ultimate conclusion you made, is it  
19 correct to say, was that you took the net of the  
20 benefits and they exceeded those costs brought back  
21 to present value?

22 A. No, I took all of the benefits back to present  
23 value and I took the systems cost back to present  
24 value and compared them --

25 dornbusch - cross - rogers

1 Q To arrive at the benefit-cost ratio?

2 A To arrive at the benefit cost -- if I understood  
3 your question, I thought you said I was subtracting  
4 the cost out. I didn't take them out.

5 Q I thought you matched them to benefit to arrive at  
6 a net benefit?

7 A That's right.

8 Q In this instance, a positive one?

9 A That's correct. That's correct.

10 Q It's still a little difficult probably for some of  
11 us to appreciate, I guess, in a day of 19 percent  
12 prime rates, 16 percent mortgage rates and the like,  
13 that a 4 percent discount rate is an appropriate  
14 number to pick. How could you explain that more  
15 fully?

16 MR. MERRILL: Your Honor, I object to this  
17 line of questioning. This is supposed to be cross-  
18 examination. Thus far it has been nothing but a re-  
19 hash of everything that has been gone over on the  
20 witness' direct examination. No new points have  
21 been flushed out, there has been no disclosure of  
22 facts and data underlying. So far the witness has  
23 simply described the discounting procedure and the  
24 costing and present value distinctions that he

25 dornbusch - cross - rogers



1 described fully in his direct testimony. I think  
2 Mr. Rogers can refer to the transcript if he needs  
3 more information.

4 MR. ROGERS: Your Honor, I believe --

5 THE SPECIAL MASTER: I'm going to overrule the  
6 objection only because I heard someone last week  
7 attack the 4 percent discount rate as being ridi-  
8 culous or absurd. I think that was you, Mr. Merrill.

9 MR. MERRILL: That's correct, Your Honor, I did.

10 THE SPECIAL MASTER: So I think I'll allow a  
11 few questions on it.

12 Q (By Mr. Rogers) Could you explain the selection of  
13 a 4 percent discount rate when we are faced with the  
14 kinds of rates in other fields that we have today?

15 A. Yes. First of all, you are quite right that the  
16 prime rate is up on the order of, I'm not sure what  
17 it is now, 18, 19 percent, something like that. How-  
18 ever, to begin with, the proper rate to be used, the  
19 fully inflated proper rate to be -- would be one  
20 that is fully reflective of long-term costs of  
21 borrowing to the Federal Government. In these  
22 kinds of projects you don't use prime rate because  
23 the source of money is the Federal Government and  
24 their long-term rate is more appropriate. So we

25 dornbusch - cross - rogers



1 are talking about initially an inflated rate of  
2 long-term borrowing of, let's say, 12 percent. I'm  
3 not sure what it is, but, to begin with, that would  
4 be the comparable rate to begin with. Let's just  
5 say for argument's sake on the order of 12 percent.  
6 Okay, that rate is a fully inflated rate. By this  
7 I mean when somebody loans you money, you are going  
8 to pay them back money with future dollars. They  
9 want a return on their investment, but they are  
10 also worried with the fact that your future dollars  
11 might be cheaper, have less value, have less  
12 ability to buy something than the present dollar  
13 that they are loaning you. It's the reason why in  
14 a large inflation economy people don't keep their  
15 money, they don't want to hold it very long. They  
16 go out and buy something right away because if they  
17 don't buy it now, if they hold on to their dollars,  
18 in another year the value of those dollars to buy  
19 that thing will not be as great. The prices are  
20 going to go up because of inflation. So when you  
21 loan money, you seek to get back at least the  
22 amount of dollars or the value that you have loaned  
23 out and, let's say, if inflation is going to be,  
24 say, 30 percent in a country like Brazil, it is

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dornbusch - cross - rogers

1 even higher. If you know that you've got to loan  
2 somebody \$100 and they are going to pay you back  
3 dollars that are going to be 30 percent lower in  
4 value, you are going to want \$1.30 back at least,  
5 okay? Over and above that, you are going to want  
6 some return on your money, and so the interest rate,  
7 the loaning rate that you're talking about has some  
8 components, and the first component is that amount  
9 which you want to earn on your money; another com-  
10 ponent is the inflation component, that's the amount  
11 to compensate you for the fact that you're getting  
12 back less valuable dollars. So now, if you look  
13 at the long-term federal borrowing rate and you're  
14 looking at that 12 percent and you recognize that  
15 part of it has inflation in it and the other part  
16 is really the amount which is to pay for the time  
17 value of the money, then you recognize the follow-  
18 ing: That you have a real rate and a nominal rate,  
19 the nominal rate being the fully inflated rate, the  
20 real rate being the lower rate with inflation re-  
21 moved.

22 Okay. So let me just talk in those terms.  
23 The real rate is something less than 12 percent.  
24 The nominal fully inflated rate would be the 12

25 dornbusch - cross - rogers

1 percent. Okay, in doing some research I found that  
2 there is agreement over the fact that when you do a  
3 benefit-cost analysis that you really have the op-  
4 tion of using prices, costs that have inflation  
5 built into them into the future. You may project  
6 your costs and your prices into the future recogniz-  
7 ing inflation, recognizing that they will increase  
8 into the future. If you do that, you would be cor-  
9 rect in using the fully inflated rate, the nominal  
10 rate that I talked about. Let's say it is 12 per-  
11 cent. There is an alternative method, and that  
12 method is to project prices and costs into the  
13 future without trying to project inflation, assum-  
14 ing inflation is zero, and you could do that as  
15 long as you did it for both your costs and your  
16 returns and you were consistent; that you began  
17 them at the same point in time, you assumed no in-  
18 flation into the future, and you did that for both  
19 of them, but also --

20 Q If you do it for both, it is a washout?

21 A It is a washout, but only if you then use a discount  
22 rate which also has inflation removed. So, on the  
23 one hand, you have the method which has costs and  
24 prices inflating into the future and a discount

25 dornbusch - cross - rogers



1 rate which also inflates into the future because  
2 you want to recover more dollars to account for  
3 that inflation. But the equivalent method would  
4 be to use costs and prices that do not inflate  
5 into the future, that hold constant into the future,  
6 remove inflation, remove the problem of having to  
7 figure out what future inflation might be that no-  
8 body can really predict. It saves you that problem,  
9 but then you would only be correct in using a dis-  
10 count rate which also is net of inflation, which had  
11 the inflation component removed.

12 Now, two sources immediately that I could cite:  
13 One is Charles Howe, who is a professor of economics,  
14 I believe he specializes in natural resources, water  
15 resources, at the University of Colorado. In fact,  
16 I think he's editing a series of books now on water  
17 resource economics as well as the Water Resources  
18 Council itself, which is interesting because the  
19 Water Resources Council is the one that first recom-  
20 mends -- or tells you to use costs and prices that  
21 do not inflate into the future that hold constant,  
22 but then they come back and tell you that you must  
23 use a discount rate that they themselves recognize  
24 has some inflation in it. And they published or

25 dornbusch - cross - rogers

1 prepared a working paper in 1979 where they looked  
2 at their own recommendations and criticized them  
3 and said what we are recommending is inherently  
4 inconsistent and wrong; that the method that we are  
5 suggesting of not inflating costs and prices is not  
6 -- is correct, but the discount rate that they are  
7 recommending is incorrect in the face of that method.  
8 And they recognized that fact and they said that, in  
9 fact, as Howe said, you should be using the real  
10 rate completely net of inflation if you use that  
11 method.

12 Q I take it that you looked at this and you did not  
13 choose the 4 percent discount rate you employed  
14 purely on your own judgment?

15 A No, I did not. Again, I did some research to see  
16 what other economists who had specifically analyzed  
17 this problem had determined. I was aware that the  
18 rate was less than the 7 1/8 or even 12 percent  
19 when you remove inflation. However, I depend upon  
20 other economists who I said did research -- for  
21 example, Paul McCracken, who is the former Chairman  
22 of the President's Council for Economic Advisors,  
23 did state in the Wall Street Journal that, I believe  
24 he said the rate was, well, let me check my notes

25 dornbusch - cross - rogers



1 just to be sure. Yes, Paul McCracken said the true  
2 interest rate is 2 to 3 percent. There are others,  
3 Jorgenson and Auerbach, Harvard University economists,  
4 in Fortune Magazine were cited as saying that the rate  
5 is 4 percent. What I found was that there was dis-  
6 agreement over what the specific real rate was. But,  
7 in general, they were unanimous in their -- the eco-  
8 nomists were unanimous in their feeling that it was  
9 in the range of about 2 to 4 percent. Some of them  
10 said around 3, some of them said it was lower, around  
11 2. But in the research that I did of their studies,  
12 it was all shown -- all of them showed that the  
13 rate was in the range of 2 to 4 percent. I used 4  
14 percent and not a lower rate because at 4 percent  
15 I was at the high range, high portion of that range,  
16 and the projects are demonstrably feasible at 4  
17 percent and then even more feasible if you want to  
18 fine tune and find that perhaps the real rate is  
19 lower.

20  
21  
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23 \* \* \* \* \*

1 Q (By Mr. Rogers) That would be more feasible at  
2 two percent?

3 A That would be more feasible at two percent according  
4 to the same logic that I showed you earlier, that  
5 guideline.

6 Q And you're also testifying that even the Water Re-  
7 source's Council originally came up with seven and  
8 eight percent, has criticized that figure?

9 A That's right.

10 Q As an interest rate and discount rate; is that  
11 correct?

12 A That's correct.

13 Q You testified that concerning the report by Doug  
14 Agee here in Wyoming, the Agee Report, is that  
15 the kind of report that a professional economist  
16 such as yourself seeking to develop crop budgets  
17 would rely on?

18 A Yes, it is.

19 Q Did I understand that you had -- you had made  
20 checks by interviews or perhaps other processes  
21 to confirm the accuracy of Agee's crop budget?

22 A Yes, I did, that's right. I compared it to other  
23 crop budgets, and I also reviewed it in comparison  
24 to interviews of farmers that I made and my staff

25 dornbusch-cross-rogers

1 made in the area.

2 Q Did those, did that additional checking confirm  
3 the accuracy --

4 A Yes, it did.

5 Q -- of his crop budgets?

6 A It did.

7 Q Is the term practicably irrigable acreage a term  
8 that is used in the pure field of professional  
9 economics?

10 A No, I don't believe it is.

11 Q Is it used by economists in planning water resource  
12 projects?

13 A No, it is not.

14 Q Where did you learn of the term, do you know of  
15 the term?

16 A Yes, I know of the term.

17 Q Where did you learn of the term?

18 A I can't remember exactly when it was, I think it  
19 was prior to this case. I heard of it in connection  
20 with the Arizona versus California case, I think  
21 in the early 60s an middle 60s.

22 Q So, as far as you know, it's not an economic term  
23 used in your field, it's perhaps a legal term?

24 A Yes.

25 dornbusch-cross-rogers

1 MR. ROGERS: I have no further questions,  
2 Your Honor.

3 THE SPECIAL MASTER: All right, who's next  
4 on cross-examination, State of Wyoming?

5 MR. MERRILL: I believe that we are, Your  
6 Honor.

7 THE SPECIAL MASTER: Fine.

8 MR. MERRILL: At this time I will defer my  
9 cross examination of Mr. Dornbusch until a later  
10 time in these proceedings for several reasons.  
11 First, Mr. Dornbusch, as you are probably aware,  
12 will return to testify concerning the economic  
13 feasibility of the historic irrigation projects  
14 on the Indian Reservation. I do not know, but  
15 I suspect that his methodology for evaluating  
16 those projects is quite similar to that which he  
17 employed with respect to the future projects.  
18 I say I do not know because of the time we last  
19 deposed Mr. Dornbusch in January, he had not be-  
20 gun his analysis with respect to the historic  
21 projects.

22 I believe that by deferring my cross examina-  
23 tion I can avoid repetition of many of the con-  
24 ceptual disagreements that the State has with  
25 Mr. Dornbusch's analysis which would apply to both



1 areas, and save the Court probably three or four  
2 days of cross examination.

3 THE SPECIAL MASTER: Very well. I appreciate  
4 that, and we'll notice and let the record show  
5 that your scope of cross at that time will in-  
6 clude that of the -- of the proposed as future as  
7 well as the historic.

8 MR. MERRILL: Thank you, Your Honor.

9 MR. ECHOHAWK: Your Honor, may I speak to  
10 that? It appears if we are going to discuss Mr.  
11 Dornbusch's testimony of future lands, which is  
12 certainly the largest part of the United State's  
13 case, Mr. Merrill should do it now. If he's not  
14 prepared to cross examine now, then I think he  
15 should admit it, but I think that he essentially --  
16 he's had all weekend to prepare, he's heard the  
17 testimony, he's deposed Mr. Dornbusch. I think  
18 the cross examination should be now, and then  
19 when Mr. Dornbusch comes up the second time, he  
20 should cross examine on only those points that  
21 change. I don't think that he should be able  
22 to have an extra two weeks to prepare, read the  
23 testimony and work on it from there. I think  
24 that this is patently unfair.

25 THE SPECIAL MASTER: Once again, Mr. Echohawk,

1 if this was an ordinary lawsuit you are correct.  
2 It is the most extraordinary lawsuit in the history  
3 of this State, therefore, I'm making some exceptions  
4 that are inevitable and necessary.

5 MR. ROGERS: Mr. Master --

6 THE SPECIAL MASTER: He has given an explanation  
7 of why he has chosen to wait until he can discuss  
8 methodology for both future and historic, and it  
9 sounds plausible to me and I have permitted him to  
10 do that.

11 Yes, Mr. Rogers.

12 MR. ECHOHAWK: Your Honor, my point is that I  
13 think Mr. Merrill is just buying time to prepare  
14 his cross examination.

15 THE SPECIAL MASTER: In that case we can all  
16 buy a little time once in awhile, and even that is  
17 not objectionable.

18 MR. ECHOHAWK: I think in the normal course  
19 of business if this is going to be the rule of  
20 the game, I think as Mr. White always says, estab-  
21 lishes the law of the case and allow us an extra  
22 week for cross.

23 THE SPECIAL MASTER: It's not going to be  
24 necessarily the precedent maker. I see nothing  
25 wrong, if you have an identical set of circumstances,

1 I'll grant the same consideration to you as  
2 I have to him, if there are similar facts re-  
3 garding establishing benefit-cost ratios on  
4 facilities.

5 MR. ECHOHAWK: I think the same situation  
6 should have applied --

7 THE SPECIAL MASTER: Mr. Echohawk, I've al-  
8 ready ruled for him and you've given your ob-  
9 jection. I don't what point there is to gain  
10 in --

11 MR. ECHOHAWK: My other point is Dr. Mesghinna  
12 is also going to return to the stand to talk about  
13 the same sort of thing. Mr. White was certainly  
14 able to carry on and I think Mr. Merrill should  
15 carry on.

16 THE SPECIAL MASTER: Well, the very fact  
17 that they were able to do it your way once ought  
18 to bring you around to at least considering that  
19 they can do it their way once. If Mr. White  
20 was kind enough to complete his cross-examination  
21 of Dr. Mesghinna, Mr. Merrill should have an oppor-  
22 tunity to do his cross-examination of Mr. Dornbusch  
23 the way he'd like to do it, by doing it down the  
24 road a ways.

25 I see nothing unfair, prejudicial to anybody's

1 case in letting him do that. And I've already  
2 ruled that he can do that.

3 Now, Mr. Rogers.

4 MR. ROGERS: Mr. Master, I find myself in  
5 this position again where I've been accused before  
6 of making argument on a point already ruled on,  
7 but I really didn't have an opportunity to speak  
8 to it first, so if I might, with the Court's  
9 indulgence, I think when the agreement was made,  
10 which was at the initiative of the United States,  
11 in order to present a more orderly case to divide  
12 up even the same witness's testimony when they  
13 were talking about, in this instance, future  
14 undeveloped lands compared to historic lands that  
15 had been irrigated, it was clearly understood by  
16 the counsel making the agreement, including those  
17 for the State, that we would clear up the --  
18 we do the future lands first, we'd do that, clear  
19 that up and get that done, move on to another sub-  
20 ject matter and we would not have the opportunity  
21 then, when Mr. Dornbusch in this instance were to  
22 come back on the stand to testify about historic  
23 lands, we would not have the opportunity at that  
24 time to try to cover some ground again that we  
25 may have missed back in his discussions of future.



1           It was -- The idea was to make a more sensi-  
2           ble presentation to the court. Now, I can see  
3           some logic in what Mr. Merrill says about dis-  
4           cussions of methodology, even though it's not  
5           in conformance with the original understanding  
6           that we had. But I do have a concern that when  
7           he does come back to the point of giving Mr.  
8           Dornbusch's full cross-examination, in whenever  
9           it is, it was, that it will go beyond merely method-  
10          ology and he will go into specific issues of findings  
11          and conclusions that Mr. Dornbusch made using that  
12          methodology on the future lands when that should  
13          be an issue that has been cleared up previously  
14          and we've moved on to historic.

15           It's a confusing enough case as it is, and I  
16           think it would be even clearer -- I think we've  
17           all had trouble from time to time keeping track  
18           of whether we were talking about North Crowheart  
19           when certain things are being talked about or when  
20           we are talking about a certain irrigation project,  
21           two very different concepts. And mixing of those  
22           at a later point in time somewhat out of order,  
23           I think will not benefit the case. So I would  
24           ask for, I would ask for a modification of the  
25           Master's ruling, at least to the point to require

1 that Mr. Merrill now, even if he reserves cross-  
2 examination on methodology generally that would  
3 apply to both future and historic, that he at  
4 least, at this point, clear up all of his  
5 questions specifically addressed to future lands.

6 THE SPECIAL MASTER: Well, I've ruled, and  
7 I think my ruling, the more I hear of arguments  
8 opposing it, the more I think it is proper.

9 There is one limitation, however, Mr. Merrill,  
10 that I think comes out of your own observations  
11 last Friday when you thought you'd have about  
12 a half a day to complete cross-examination of  
13 Dr. -- of Mr. David Dornbusch this morning. And  
14 if you felt that way, then you would probably  
15 feel that way, and I don't think you'd have any  
16 objections if I were to say that when you make  
17 your cross-examination on the future, the evidence  
18 would justify -- When you get to talking about  
19 the future -- You may cross examine on historic  
20 however long the facts on historic warrant but  
21 when we get to your examination on the future  
22 just completed, I would imagine you would have  
23 no objection to limitation of a half a day.

24 MR. MERRILL: With respect to the specific  
25 facts and analysis that he used in the future

1 lands, that is correct, Your Honor, I'd have no  
2 trouble at all.

3 THE SPECIAL MASTER: I think that helps a  
4 little bit. I have some questions I want to ask  
5 Mr. Dornbusch.

6 MR. MERRILL: Your Honor, may I make a couple  
7 other remarks before you question the witness?

8 THE SPECIAL MASTER: All right.

9 MR. MERRILL: First, I cannot let stand the  
10 accusation on the record that I have somehow not  
11 prepared my cross-examination. I will state to  
12 the Court that I have a notebook full of it and  
13 boxes full of exhibits prepared to proceed at this  
14 time in case you were to not let me defer or not  
15 permit me to defer my cross-examination.

16 Secondly, I'll state to the Court that during  
17 my cross-examination of Mr. Dornbusch, I'll make  
18 every effort to distinguish that part which is  
19 addressed to the historic lands analysis and that  
20 which is addressed to the future to avoid any  
21 problems that Mr. Rogers correctly perceives  
22 could occur.

23 EXAMINATION

24 BY THE SPECIAL MASTER:

25 dornbusch-examination-special master

- 1 Q Mr. Dornbusch, I'd like you to look at page 13  
2 of your Exhibit 268.
- 3 A 13?
- 4 Q Page 13.
- 5 A Yes.
- 6 Q The table 5 carries the four percent constant  
7 discount figure that you used on your work in  
8 this testimony.
- 9 A That's right.
- 10 Q And your conclusions are noted in this last  
11 column. If you were to have used a higher dis-  
12 count rate, you just testified, that the bene-  
13 fit-cost ratios would be less attractive.
- 14 A That's correct.
- 15 Q Could you prepare for me a table and submit it  
16 to me at some time in the next week or so, ten  
17 days or two weeks, at your convenience, which  
18 would give for each of the five study areas,  
19 project areas, the benefit-cost ratio of the  
20 discount figure or to have five percent instead  
21 of four, six percent instead of four or five,  
22 seven percent instead of a lesser one, and  
23 eight percent, because your testimony included  
24 experts who would have indeed said the discount  
25 dornbusch-examination-special master



1 figures, real discount figures could be as high  
2 as seven or eight and still not be inflationary.

3 In that case it would appear to me that two  
4 or three of the five would no longer take the  
5 test, and I'm anxious, I would like to see what  
6 those figures would produce.

7 A All right.

8 Q Couldn't you do that?

9 A Yes, I would do that.

10 THE SPECIAL MASTER: All right. I appreciate  
11 that. When you submit it to me, I'll make copies  
12 of that and distribute it to all, I'll submit  
13 it to the State of Wyoming, Mr. Merrill, and to  
14 Mr. Echohawk and to Mr. Rogers.

15 THE WITNESS: May I ask, actually anticipating  
16 that that might be of interest --

17 THE SPECIAL MASTER: You have already got it?

18 THE WITNESS: I have prepared somewhere, I  
19 don't know if I have it with me, the benefit cost  
20 ratios for four percent, five percent, six percent  
21 and seven and one eighth. I did not prepare anything  
22 higher. And if I could limit what I give you to  
23 those rates, it would make my job a lot simpler.

24 THE SPECIAL MASTER: I'd consider that an  
25 dornbusch-examination-special master

1 answer to my question. You say you have them  
2 with you?

3 THE WITNESS: I might. If you'd like me to  
4 look for them, I could do that.

5 THE SPECIAL MASTER: All right. What, we've  
6 been at it about an hour, and let's take a ten  
7 minute break. If you find it, fine.

8 MR. ECHOHAWK: Your Honor, before we break,  
9 just to make one point. I know you've already  
10 ruled on deferring the cross examination, but it  
11 has caused a great inconvenience to the United  
12 States because we have brought Mr. Merchant in  
13 all the way from San Francisco to assist in the  
14 cross-examination of Mr. Dornbusch, and had we  
15 known that, we wouldn't have expended the money  
16 to bring him here and we could have found that  
17 out Friday.

18 THE SPECIAL MASTER: Well, Mr. Merrill,  
19 it's --

20 MR. ROGERS: I might add, the Tribes have  
21 their expert economist here for the same reason.

22 MR. MERRILL: Your Honor, we'll pay their  
23 air fare if that's acceptable and solves the  
24 problems of the United States and the Tribes.

25 THE SPECIAL MASTER: Are there some other

1 reasons besides the lawsuit that make this  
2 necessary?

3 MR. MERRILL: No, Your Honor, I believe it's  
4 the most expeditious way to proceed with the  
5 cross-examination. I was looking through the  
6 exhibits now that we have prepared in aid of cross-  
7 examination to find for you, Mr. Dornbusch's  
8 analysis of discount rates of five, six and  
9 seven and an eighth percent to give to the Court  
10 today.

11 THE SPECIAL MASTER: It maybe that I've  
12 done your cross examination for you, I don't know.

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1 MR. MERRILL: No, you haven't, Your Honor, not  
2 at all. And I simply want to point out that I be-  
3 lieve it will be a savings of the Court of a great  
4 deal of time to combine the cross-examination as to  
5 both the conceptual analysis and the specific analysis  
6 applied to the historic and future lands. If I can  
7 do it altogether and perhaps do some comparisons  
8 between the historic and the future analysis, and I  
9 do that for the purposes of saving what I believe  
10 will be three or four days of cross-examination. It  
11 would simplify it to put it altogether. Mr. Dorn-  
12 busch already testified that the concept of PIA was  
13 not an economic concept, it is a legal concept. We  
14 are concerned with practicably irrigable acres, and  
15 I think it will be a more meaningful cross-examination  
16 to have it all combined on the historic and future --

17 MR. ECHOHAWK: Your Honor, may I also make one  
18 additional point? This has happened on two separate  
19 occasions to where Wyoming says if you don't let us  
20 do something, we're going to have four days of  
21 cross-examination. I think Mr. White threatened  
22 four weeks of cross-examination just --

23 THE SPECIAL MASTER: He did, indeed.

24 MR. ECHOHAWK: -- just to get into Dr. Mes-  
25 ghinna's notebook.



1 THE SPECIAL MASTER: He did, indeed.

2 MR. ECHOHAWK: Each time these matters come  
3 up they say we are going to keep you here forever.  
4 I think that has happened time and time again.

5 THE SPECIAL MASTER: Well, it won't happen  
6 again; and if it does, you remind me, Mr. Echohawk,  
7 real firmly.

8 I'm going to go ahead and grant this. It may  
9 be improper, but it certainly isn't a vital crunch.  
10 We'll take the -- we'll order that you do take care  
11 of the transportation cost.

12 MR. MERRILL: We will do so.

13 THE SPECIAL MASTER: And the per diem and so  
14 forth. But they have had a couple of days in court  
15 and they have had occasion to observe the proceed-  
16 ings, and I'm not sure but what they may have been  
17 better off by doing that.

18 MR. ECHOHAWK: Mr. Merchant just got here last  
19 night.

20 MR. MERRILL: He's been here before, Your  
21 Honor.

22 THE SPECIAL MASTER: In that case I'll say  
23 what he hasn't heard hasn't hurt him.

24 Let's take ten minutes.

25 MR. ECHOHAWK: Your Honor, my next point is

1 the United States is not ready to proceed today.

2 THE SPECIAL MASTER: Oh, my God.

3 MR. MERRILL: Well, now, the cat is out of  
4 the bag, Your Honor.

5 THE SPECIAL MASTER: Now, we've got the  
6 reason -- my God.

7 MR. ECHOHAWK: We were anticipating at least  
8 a half a day of cross-examination.

9 THE SPECIAL MASTER: Well, let's come back in  
10 ten or fifteen minutes.

11 (Recess, 10:07 a.m. to 10:18 a.m.)

12 THE SPECIAL MASTER: Okay, we will please come  
13 to order.

14 Mr. Merrill, we thank you for your cooperating  
15 to enable us to move ahead a little today.

16 MR. MERRILL: Thank you, Your Honor.

17 MR. ECHOHAWK: Your Honor, before the break  
18 you asked whether Mr. Dornbusch had prepared -- or  
19 whether he would prepare an analysis of the benefit-  
20 cost ratio at the varying discount rates, and over  
21 the break he found that he had done so. He pre-  
22 pared a graph showing the benefit-cost ratio versus  
23 the discount rate for each of the projects for, I  
24 think, 4, 5, 6, 7 1/8 percent. Right now I would  
25 like to present to you what we have marked as

1 United States Exhibit WRIR C-274, which is that  
2 graph that shows the varying discount rates and  
3 the B/C ratios.

4 THE SPECIAL MASTER: Thank you very much. I  
5 appreciate that.

6 I'm not admitting this into evidence, I'm  
7 keeping it as a working paper, or would you like  
8 it introduced into evidence at this time?

9 MR. ECHOHAWK: We would move it into -- I  
10 guess we have to ask Mr. Dornbusch what it is,  
11 whether it is his.

12 THE SPECIAL MASTER: Well, was this document  
13 called U.S. Exhibit WRIR C-274 prepared by you?

14 THE WITNESS: It was prepared under my direc-  
15 tion. I prepared the calculations for the numbers  
16 that are graphed there.

17 THE SPECIAL MASTER: And is this what you had  
18 in mind, Mr. Dornbusch, when you said you would find  
19 something for me?

20 THE WITNESS: Exactly.

21 THE SPECIAL MASTER: Okay, in that case, I  
22 will receive it into evidence now, and it is a  
23 B/C ratio versus discount rate on irrigated  
24 agricultural project areas, and it refers to the  
25 five areas of the Reservation.



1 (The instrument identified as  
2 (U.S. Exhibit WRIR C-274 was  
(received in evidence.

3 MR. ECHOHAWK: Your Honor, I might also note  
4 that Mr. Dornbusch has prepared similar tables as  
5 are contained in Exhibit C-268 for the varying dis-  
6 count rates. Also, he's got 5 percent, 6 percent  
7 and 7 1/8, if you would like those also. It is a  
8 simple format that shows the same results.

9 THE SPECIAL MASTER: Is it your intention to  
10 bring this in later?

11 MR. ECHOHAWK: It is not my intention.

12 MR. MERRILL: It is my intention, Your Honor,  
13 and I might also give them to you now so the Court  
14 has the full story.

15 THE SPECIAL MASTER: I thought this was as good  
16 a place for them as --

17 MR. MERRILL: I thought I might as well go  
18 ahead, and I'm handing the Court and counsel, Wyo-  
19 ming's WRIR ED-12, ED-13 and ED-14; and upon doing  
20 that, I want to ask Mr. Dornbusch a couple of  
21 questions about those, and I would move their ad-  
22 mission as well.

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CROSS-EXAMINATION1  
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BY MR. MERRILL:

Q Mr. Dornbusch, I hand you copies of what have been marked as Exhibits ED-12, 13 and 14; would you please identify ED-12 for the record?

A ED-12 is a set of crop budgets for the crops that were selected by me for the five project areas. It also includes Tables 2, 3, 4 and 5, similar to Tables 2, 3, 4 and 5 in my Exhibit 268. However, this sets forth a discount rate of 5 percent --

Q Okay.

A -- instead of 4 percent, which is my Exhibit 268.

Q Would you please identify Exhibit ED-13?

A ED-13 contains the same thing for discount rate of 6 percent.

Q ED-14?

A ED-14 contains the same thing for a discount rate of 7 1/8 percent.

Q Were these exhibits prepared -- or, excuse me, these materials prepared by you or under your direction?

A They were.

Q Do these three exhibits, ED-12, 13 and 14, accurately represent the results of your analysis of the economic

dornbusch - cross - merrill

1 feasibility of the five future project areas at  
2 discount rates of 5, 6, 7 1/8 percent, respectively?

3 A. Would you repeat that question, please?

4 MR. MERRILL: Would you please read it back to  
5 him?

6 (The above question was read  
7 (back by the reporter: "Q: Do  
8 (these exhibits, ED-12, 13 and 14,  
9 (accurately represent the results  
10 (of your analysis of the economic  
11 (feasibility of the five future  
12 (project areas at discount rates  
13 (of 5, 6, 7 1/8 percent, respec-  
14 (tively?"

15 A. Yes, they do.

16 MR. MERRILL: Your Honor, I move the admission  
17 of Exhibits ED-12, ED-13 and ED-14 into evidence.

18 MR. ECHOHAWK: Your Honor, may I have some  
19 voir dire?

20 THE COURT: Yes, you may voir dire the exhibits.

21 VOIR DIRE EXAMINATION

22 BY MR. ECHOHAWK:

23 Q. Mr. Dornbusch, for the exhibits that Mr. Merrill  
24 has identified, ED-12, 13 and 14 --

25 A. Yes.

Q. -- with reference to those, your analysis, take,  
for instance, the 7 1/8 percent, depicted in ED-14,  
is the 7 1/8 percent your professional opinion as

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1 to what the discount rate should be in your analysis?

2 A. No.

3 MR. MERRILL: Objection, Your Honor. This is  
4 not voir dire of the exhibits. The voir dire of  
5 the exhibits goes to whether they were prepared by  
6 Mr. Dornbusch, and they have been --

7 THE SPECIAL MASTER: The observation is well  
8 taken, but go ahead with your questions as to these  
9 specific exhibits. In other words, did he use  
10 7 1/8 as his figure, or is he still standing by  
11 4 or something over that? I'm inclined to permit  
12 this.

13 MR. ECHOHAWK: I think it is the same thing,  
14 but my point is, Your Honor, that these exhibits  
15 were prepared by Mr. Dornbusch, there is no question  
16 about that. The question is whether or not they re-  
17 flect his professional opinion as to what the dis-  
18 count rate should be.

19 THE SPECIAL MASTER: They reflect his profes-  
20 sional opinion of what the discount rate should be,  
21 if you use the discount rate of 5, 6, 7 1/8. He  
22 has said that.

23 MR. MERRILL: Your Honor, I didn't offer the  
24 exhibits as reflecting his professional opinion as

25 dornbusch - voir dire - echohawk

1 to the appropriate discount rate. I simply offered  
2 them as accurately reflecting the results of his  
3 economic feasibility at those discount rates.

4 THE SPECIAL MASTER: That's correct.

5 Q (By Mr. Echohawk) Mr. Dornbusch, you said that, I  
6 believe, these tables reflected your opinion as to  
7 the economic feasibility at the various percents,  
8 is that right?

9 A. That's right.

10 Q Didn't you testify earlier that in order to do a  
11 proper economic feasibility analysis where your  
12 costs and returns were net of inflation, your dis-  
13 count rate would have to be net of inflation?

14 MR. MERRILL: Objection. Asked and answered,  
15 Your Honor.

16 MR. ECHOHAWK: I'm just merely laying the  
17 groundwork, Your Honor, for the next question.

18 THE SPECIAL MASTER: Overruled. What is the  
19 next question?

20 A. Yes. Perhaps I need to make myself clear. When --  
21 If I said that this -- these exhibits purport to  
22 show the economic feasibility, I think what I  
23 should have said and what I meant was that these  
24 exhibits show what the benefit-cost ratio would be

25 dornbusch - voir dire - echohawk



1 if the proper discount were these percentages. It  
2 is my conclusion that they are not these percentages,  
3 so if you are to -- if you're trying to infer from my  
4 statement as to economic feasibility, I don't think  
5 you can draw conclusions as to economic feasibility  
6 from these exhibits, only discount rate.

7 Q (By Mr. Echohawk) So these exhibits would not show  
8 what the economic feasibility would be using these  
9 5, 6, 7 1/8 percents?

10 A That's right.

11 MR. MERRILL: Your Honor, I have a lot of pro-  
12 blems with that.

13 THE SPECIAL MASTER: I do, too.

14 The witness has clearly explained that he's not  
15 substituting in his judgment and in his professional  
16 conclusion an increase in the rate; 4 percent is  
17 what he's used, and 4 percent is what he's sticking  
18 by.

19 THE WITNESS: Right.

20 MR. ECHOHAWK: My point is, Your Honor, if the  
21 5 percent rate is to be used or the 7 1/8 percent is  
22 to be used, then the other costs and returns reflected  
23 in the various tables should also be adjusted accord-  
24 ingly.

25 dornbusch - voir dire - echohawk

1 THE SPECIAL MASTER: Well, I presume they were  
2 or they would not have been put in the various pages.

3 Mr. Dornbusch, for example, on 12, certainly  
4 your 5 percent was cranked into your costs of truck  
5 and tractor, implements and materials and the 5 per-  
6 cent was used throughout, was it not?

7 THE WITNESS: Yes, 5 percent was used throughout.  
8 The only -- What I want to emphasize is my -- what  
9 I'm concerned about is the use of the word "economic  
10 feasibility". It seems to me when you use those  
11 terms, you do imply that is the proper discount rate  
12 to use.

13 THE SPECIAL MASTER: And you would state that  
14 if you were to use 5, 6, or 7 1/8, you feel you could  
15 not come up with the economic feasibility, but you  
16 would have used what, in your opinion, was an impro-  
17 per discount rate?

18 THE WITNESS: That's correct.

19 THE SPECIAL MASTER: All right, we have that,  
20 gentlemen.

21 THE WITNESS: That's correct.

22 THE SPECIAL MASTER: And that's the point you  
23 wanted to make, Mr. Echohawk?

24 MR. ECHOHAWK: I think there --

25 THE SPECIAL MASTER: Is there additional --

1 MR. ECHOHAWK: -- is a small point just a  
2 little askew of that one.

3 Q (By Mr. Echohawk) Mr. Dornbusch, if 4 percent is  
4 the proper -- is what you determined the real rate?

5 A. Yes.

6 Q Real discount rate?

7 A. Right.

8 Q And the analysis was prepared at 7 1/8 percent, would  
9 that imply that there were 3 1/8 percent tacked on  
10 somewhere?

11 A. Yes --

12 MR. MERRILL: Your Honor, I sure don't under-  
13 stand the question.

14 THE SPECIAL MASTER: I would be inclined to  
15 rule that that's not a relevant question.

16 MR. ECHOHAWK: My point is, Your Honor, there  
17 is not 3 1/8 percent tacked on anywhere in, say,  
18 the fixed costs or in either the fixed costs, the  
19 custom materials or anything. They are the same as  
20 is used at the 4, but they don't have the 3 1/8  
21 tacked on the end.

22 THE WITNESS: Maybe I can make it clearer,  
23 what he's talking about.

24 The analysis that I used projected costs and  
25 dornbusch - voir dire - echohawk



1 returns into the future at no inflation increase.  
2 Okay, that is inherent in each of these three  
3 exhibits I did not forecast costs and returns to  
4 inflate into the future. Okay. The proper analysis  
5 using the 5, 6, 7 1/8 discount rate would have been  
6 to inflate those costs and returns by inflation and  
7 then use that discount rate that also had an infla-  
8 tion component. What I'm going back to is my  
9 earlier discussion about the proper discount rate  
10 that you use with your cost and your returns. And  
11 if you project costs and returns to be flat, no in-  
12 flationary increase into the future, you should also  
13 use a discount rate that has no increase into the  
14 future. And these exhibits have costs and returns  
15 assumed to be flat into the future with no increase  
16 for inflation, yet the interest rate that is used  
17 does have some inflation component.

18 THE SPECIAL MASTER: It is your evidence that  
19 the discount rate -- that the discount rate of 5  
20 percent has an inflationary component cranked in  
21 it?

22 THE WITNESS: It has one percentage of inflation  
23 in it, yes.

24 THE SPECIAL MASTER: That is in your opinion

25 dornbusch - voir dire - echohawk



1 but not Mr. McCracken's?

2 THE WITNESS: No, that would be -- in fact,  
3 Mr. McCracken would conclude, may even have more --  
4 in other words, Mr. McCracken, as I recall, felt  
5 that the discount rate should be -- well, let me  
6 check to be correct. I think --

7 THE SPECIAL MASTER: Two to 3 or 3 to 4?

8 THE WITNESS: Let me just check to be sure.

9 Okay, Mr. McCracken felt that the true interest  
10 rate is 2 to 3 percent. So in using a 5 percent dis-  
11 count rate, I believe Mr. McCracken would feel that  
12 there's 2 to 3 percent inflation built into the 5  
13 percent rate.

14 THE SPECIAL MASTER: Did you quote someone  
15 who felt that the figure of 5 or 6 percent had no  
16 inflation within it?

17 THE WITNESS: No, the sources that I found  
18 consistently cited rates that were lower than 4  
19 percent and some even lower than 2 percent.

20 MR. MERRILL: Your Honor, I believe the record  
21 should reflect, in answering your questions about Mr.  
22 McCracken's work, the witness was referring to some  
23 notes, and I believe that under the Rules of Evidence  
24 I'm entitled to examine those notes.

25 THE SPECIAL MASTER: I would say beginning your

1 cross-examination and as soon as you are completed  
2 with your voir dire, and I believe I have completed  
3 that for you quite satisfactorily --

4 MR. ECHOHAWK: Exactly, Your Honor. Therefore,  
5 I would object to the entrance of these exhibits in  
6 that they --

7 THE SPECIAL MASTER: Make your objection.

8 MR. ECHOHAWK: They are totally inaccurate.  
9 The costs in here reflected in each of the exhibits  
10 are net of inflation, whereas the discount rate used  
11 has some inflation built into it. Therefore, the  
12 economic feasibility analysis shown in these exhibits  
13 is inaccurate.

14 THE SPECIAL MASTER: The objection is overruled  
15 and these exhibits will be used for whatever their  
16 probative value is based upon the other evidence  
17 that will be admitted and offered having a bearing  
18 on the establishment of this difficult matter.

19 Go ahead, Mr. --

20 MR. ROGERS: Your Honor, I would like to state  
21 for the record that the Tribes do join the United  
22 States in the objection you just ruled on.

23 THE SPECIAL MASTER: Okay. Fine.

24 MR. ECHOHAWK: I believe -- Well, that's all.

25 THE SPECIAL MASTER: The Court feels that this

1 is one of the crucial factors and issues to be deter-  
2 mined in this litigation; that is, what is a benefit-  
3 cost ratio that justifies a project has been one of  
4 the matters that has concerned more people in the  
5 Rocky Mountain West since its establishment than --  
6 and, of course, the source of water, availability of  
7 water. And, therefore, we intend to give it consider-  
8 ably more time, study and attention before arriving at  
9 any conclusions. These are just a portion of many  
10 exhibits I suspect we'll be having before you're  
11 through.

12 Go ahead, Mr. Merrill.

13 (The instruments identified as  
14 (ED-13, ED-13 and ED-14 were  
15 (received in evidence.

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6-1-MR-vlb

1 MR. MERRILL: Like you said before, Your Honor,  
2 we're into the heart of it now.

3 Q. (By Mr. Merrill) Mr. Dornbusch, may I examine the notes  
4 you were referring to when you described Mr. McCracken's  
5 work concerning the real interest.

6 A. Yes, you may. Here is a copy.

7 (Brief pause.

8 Q. Mr. Dornbusch, I'm returning to you your copy since  
9 Mr. Echohawk has handed me a photocopy of the same notes.

10 (Brief pause.

11 MR. ECHOHAWK: Your Honor, Mr. Merrill and I have  
12 agreed that this document, since it's been handed to  
13 you and raised, should be introduced into evidence at  
14 this point.

15 THE SPECIAL MASTER: Whose exhibit will it be?

16 MR. ECHOHAWK: The United States' exhibit.

17 THE SPECIAL MASTER: WRIR --

18 MR. ECHOHAWK: That would be WRIR C-275.

19 Mr. Dornbusch, in reference to Exhibit C-275,  
20 is this a paper prepared by you representing your  
21 research as to what the real discount rate should be?

22 THE WITNESS: Yes, it is.

23 THE SPECIAL MASTER: A portion of it, I suspect,  
24 a portion of your research?

25 Dornbusch-cross-merrill



6-2-MR-vlb

1 THE WITNESS: Yes.

2 THE SPECIAL MASTER: Do you have extra copies for  
3 the official --

4 MR. ECHOHAWK: Yes. Your Honor, at this time  
5 I'd move Exhibit --

6 THE SPECIAL MASTER: You two have agreed on this,  
7 have you not?

8 MR. MERRILL: Yes, Your Honor. I agreed to the  
9 admissibility as long as it's not for the truth of  
10 its contents but simply representing the results of Mr.  
11 Dornbusch's results of his research.

12 THE SPECIAL MASTER: U.S. Exhibit WRIR C-275  
13 is hereby admitted into evidence and will be captioned  
14 in our exhibit index as Paul McCracken work paper, is  
15 that --

16 THE WITNESS: It was actually an article written  
17 by Paul McCracken that I cited as well as some other  
18 citations of work by and about other economists.

19 THE SPECIAL MASTER: Shall be McCracken work  
20 paper.

21 THE WITNESS: It was an article in the Wall Street  
22 Journal.

23 THE SPECIAL MASTER: Choice of discount.

24 MR. ECHOHAWK: Your Honor, I think it also shows not  
25 Dornbusch-cross-merrill

1 only shows the McCracken information, but some other  
2 information.

3 THE SPECIAL MASTER: Well, our problem now is just  
4 how Leo would caption this in the index of exhibits.

5 MR. ECHOHAWK: How about just Dornbusch paper  
6 entitled "Choice of Discount Rates for Evaluating  
7 Water Resource Projects"?

8 THE SPECIAL MASTER: All right.

9 Q. (By Mr. Merrill) Mr. Dornbusch, I direct your attention  
10 back to Exhibits ED12, 13 and 14, which have been  
11 admitted into evidence, which I believe are your crop  
12 budgets and feasibility tables for five, six and seven  
13 and one-eighth percent discount rates.

14 A. Yes.

15 Q. Let's just take a look at the top of page of ED12, which  
16 is a crop budget for baled alfalfa. Isn't it true that  
17 contained within that crop budget are costs which are  
18 dependent upon the discount rate assumed for a particular  
19 analysis?

20 THE SPECIAL MASTER: Can I --

21 THE WITNESS: Some of them are, yes, not all.

22 THE SPECIAL MASTER: May I hear the question again,  
23 please, Merissa.

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25 Dornbusch-cross-merrill

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(Thereupon, the following question  
(was read back as follows:  
"Q. Let's just take a look at  
(the top of page ED12, which is  
(a crop budget for baled alfalfa.  
(Isn't it true that contained  
(within that crop budget are costs  
(which are dependent upon the  
(discount rate assumed for a  
(particular analysis?"

MR. MERRILL: I believe the answer was yes, Your  
Honor, if I'm not mistaken.

Q. (By Mr. Merrill) Isn't it true, for example, that the  
line item for overhead interest would be computed at  
the discount rate shown at the top of the page?

A. Okay. It's possible that in some very small costs  
rather than computing the interest for each rate,  
because the cost was so small I might have used a  
different rate and feeling that the results would not  
have been significant.

Q. What other rate might you have used?

A. I believe I might -- Well, in that case I think that  
I used the five percent, but there were occasions  
where it was easier to use a higher discount rate  
because as I said, the costs computed would have been  
larger and the results would not have been significant,  
but I think however, in the cost of interest within  
general overhead I used the five percent.

Dornbusch-cross-merrill

6-5-MR\_vlb

1 Q. Okay. Isn't it true that the fixed costs for truck  
2 or tractor shown on the front page of ED-12 would  
3 also vary with the discount rate assumed for particular  
4 analysis?

5 A. Yes, they do.

6 Q. How about the fixed costs for implements?

7 A. Yes, they do.

8 Q. Did you use the interest rate shown on the top of  
9 ED-12, that is five percent, in computing those six  
10 costs for which the interest rate would matter?

11 A. Yes, as I recall I did.

12 Q. Would the same answers hold true with respect to  
13 ED-13, which assumes a six percent discount rate?

14 A. Yes.

15 Q. And how about ED-14 at seven and one-eights percent?

16 A. Yes.

17 Q. Mr. Dornbusch, would you please take out your report  
18 which has been admitted as Exhibit C-268.

19 A. Okay.

20 Q. Turn to Table 1.1 on Page 14 of that report.

21 A. Okay.

22 Q. Beginning with malt barley at the top of the page,  
23 would you please tell the Court on what facts and  
24 data you relied in determining the price for each of

25 Dornbusch-cross-merrill



6-6-MR vlb

- 1 the five crops and your crop mix?
- 2 A. Are we through with crop budgets for now, can I put that
- 3 away?
- 4 Q. Yes.
- 5 A. Okay. The question was in regard to the price of
- 6 malt barley?
- 7 Q. Yes. Would you please tell the Court on what facts and
- 8 data on which you relied that the price per bushell
- 9 for malt barley in your analysis was \$2.71.
- 10 A. Yes. I described the process earlier called normalization,
- 11 which seeks to find the most representative price for a
- 12 crop, and it does this by recognizing that a particular
- 13 spot price in time is not necessarily the most
- 14 representative, but the way to get at the most
- 15 representative is to use that most recent price, to use
- 16 a most recent price as well as previous prices,
- 17 weighting them according to some set of weights, which
- 18 decrease as you go backwards in time.

19 This is, by the way, recommended by the Water  
20 Resources Council, and is the procedure that I followed.

21 I used the specific weights recommended for grains  
22 by the Water Resources Council Reference Handbook,  
23 January, 1980, for years 1974 through 1978. And for each  
24 of those years I obtained a cost -- price, excuse me,

25 Dornbusch-cross-merrill

1 for malt barley. I obtained that price from Bob  
2 Carver who is an agricultural economist and head of the  
3 Wyoming Crop and Livestock Reporting Service in Laramie,  
4 and he performed a service of malsters, the buyers of  
5 malt barley, and wholesalers on May 30, 1980, and  
6 reported to me those prices for -- their prices for  
7 those years.

8 I weighted the prices in each of those years by the  
9 WRC rates to determine the normalized price, and on that  
10 basis I computed the \$2.71 price per bushell.

11 THE SPECIAL MASTER: Mr. Merrill, it's 11:05,  
12 do you want to go on to 11:30 and break for lunch or  
13 do you want to take a break now?

14 MR. MERRILL: Why don't we go on to 11:30, Your  
15 Honor, and maybe I can close out this one segment  
16 of cross-examination.

17 THE SPECIAL MASTER: Very well.

18 Q. (BY Mr. Merrill) Did you say that Mr. Bob Carver is  
19 an agriculture economist with the Wyoming Livestock  
20 and Reporting Service?

21 A. Yes, that's right.

22 Q. Where is the Wyoming Crop and Livestock Reporting  
23 Service located?

24 A. I'm not sure where the main office is. I believe Bob  
25 Dornbusch-cross-Merrill

1 Carver is in Laramie, however.

2 Q. Do you know whether the Wyoming Crop and Livestock  
3 Service -- Reporting Service, excuse me, publishes  
4 malt barley prices?

5 A. To my knowledge they don't, and that was the problem,  
6 that if they do publish them they were not applicable  
7 for our region. I actually had this part of the project  
8 performed by one of my staff and he was the one who  
9 discussed it with Bob Carver.

10 Q. Mr. Dornbusch, how did you determine that Mr. Carver  
11 worked for the Wyoming Crop and Livestock Reporting  
12 Service?

13 A. I did not determine it. As I said, one of my staff --

14 Q. Who would that be?

15 A. -- worked with him. Dave May.

16 Q. Are you aware that Mr. Carver does not work for the  
17 Wyoming Crop and Livestock Reporting Service but in  
18 fact works for the University of Wyoming?

19 A. I admit I'm not aware of that, but it wouldn't surprise  
20 me.

21 Q. How did you determine -- excuse me -- did you use  
22 the same methodology you described for malt barley  
23 in determining the price per ton of alfalfa?

24 A. The price per ton of alfalfa was determined differently.

25 Dornbusch-cross-merrill

6-9-MR-v1b

1 In this case the WRC reports directly prices for hay,  
2 all baled hay, and I used their reported price for  
3 Wyoming for all baled hay of \$52.99, and that is a  
4 current normalized price for that commodity for Wyoming.  
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1 It's been published in Agricultural Price Standards  
2 January, 1980 by the Water Resources Council.

3 THE SPECIAL MASTER: For what year?

4 THE WITNESS: For 1979.

5 Q (By Mr. Merrill) So I take it that the base year  
6 of your analysis was 1979?

7 A That's right.

8 Q So that your prices and costs and so forth were all  
9 based on 1979?

10 A Normalized 1979 prices.

11 Q How did you determine the price per unit for corn  
12 silage if it's different from the WRC method that  
13 you have already described?

14 A Okay. Corn silage price was computed based upon the  
15 alfalfa price and this is based upon its nutrient  
16 value of 30 percent of the alfalfa price and this  
17 information is obtained from the Doug Agee report  
18 that I referred to earlier, page 13 footnoted,  
19 I believe it is.

20 THE SPECIAL MASTER: I want to interrupt,  
21 Mr. Merrill, with a question to help me with the  
22 troubled problems in this matter.

23 If you establish in your profession, Mr.  
24 Dornbusch, that one must take a flat approach to  
25

1 both benefits and costs in order to arrive at  
2 figures which justify a project --

3 THE WITNESS: Yes.

4 THE SPECIAL MASTER: -- so that there will  
5 be no inflation, you have a flat figure, how can  
6 one accept the figure of \$60 a ton for alfalfa  
7 and how does one deinflate that figure?

8 THE WITNESS: The \$52.99 a ton for alfalfa?

9 THE SPECIAL MASTER: (Nodding head affirmatively).

10 THE WITNESS: Okay. Prices and costs will in-  
11 flate through time up to any point you want to  
12 examine them. If you took prices and costs at  
13 different points in time, they would have different  
14 amounts of inflation within them. When they had  
15 attained that point in time, okay, if you use  
16 them at the same point in time, presumably they have  
17 the same amount of inflation within them because  
18 they are being bought with the same dollar at that  
19 same day. That's why you hear the term constant  
20 dollar. Constant dollar only refers to the dollars  
21 at a particular point in time.

22 THE SPECIAL MASTER: So you feel you did not  
23 adjust the cost of inflation for a given year, then  
24 you don't have to adjust the price of the hay for  
25

1 that given year, you have therefore rendered both  
2 flat?

3 THE WITNESS: You have.

4 THE SPECIAL MASTER: In your work?

5 THE WITNESS: Well, you have not yet rendered  
6 them flat, you have reached a point where they  
7 are both being purchased by the same dollars.  
8 Therefore, whatever it is the inflation and the  
9 dollar is the same --

10 THE SPECIAL MASTER: Canceled it out as the  
11 the so called wash-out?

12 THE WITNESS: That's right. And it is only  
13 from that point on that you have to worry about the  
14 inflation. It is the point that you begin with  
15 that must be the same point in time. You must  
16 compare costs and returns at the same point in time.

17 THE SPECIAL MASTER: Thank you.

18 THE WITNESS: Your welcome.

19 CROSS EXAMINATION (RESUMED)

20 BY MR. MERRILL:

21 Q Mr. Dornbusch, did you use the WRC prices and nor-  
22 malizing coefficients to determine your corn  
23 grain price?

24 A Yes. Corn grain price of \$2.55 a bushel was  
25 dornbusch-cross-merrill

1 determined the same way as I did for alfalfa.  
2 I obtained it from the published Normalized Prices  
3 for Principal Commodities by the Water Resources  
4 Council, the same publication as I cited before,  
5 corn for corn grain in Wyoming.

6 Q Okay. How did you determine the corn grain after-  
7 math price of \$5.48?

8 A Okay. The price for corn grain aftermath is  
9 first based upon the prices paid per animal unit  
10 month in 1978 as reported in the Wyoming Crop and  
11 Livestock Reporting Service Publication, special  
12 survey of Wyoming grazing arrangement in 1978.  
13 Their price for all types of arrangements com-  
14 bined was \$5.39 per animal unit month and I con-  
15 verted that to the normalized 1975 price using  
16 the appropriate factors to obtain \$2.55 per  
17 bushel --

18 Q In your analysis did you assume that the \$5.39  
19 per AUM price, you obtained from --

20 A Oh, excuse me. Excuse me, I was talking about  
21 corn for grain and I was confused. I began my  
22 discussion with the corn grain aftermath. I for-  
23 got what you asked before, was it the aftermath?

24 Q I was asking you about the aftermath the second  
25 dornbusch-cross-merrill



1 time around.

2 A Yes. The aftermath I took the \$5.39 for the AUM  
3 and converted that price to normalize 1979 prices  
4 for corn grain aftermath of \$5.48.

5 Q Okay. How did you determine that the \$5.39, the  
6 unnormalized price for corn grain aftermath should  
7 apply to the Wind River Indian Reservation?

8 A As I said, this is the figure published in Wyoming  
9 Crop and Livestock Reporting Service, it's based  
10 on a survey which I sought to determine the prices  
11 that are obtained for aftermath and the prices are  
12 quoted according to animal unit months, that is the  
13 unit that we used to express the aftermath. It is  
14 reported for the State of Wyoming and as I said it  
15 is based upon the survey for the State.

16 Q Mr. Dornbusch, do you know what region was covered  
17 by the Wyoming Crop and Livestock Reporting Service  
18 to indicate \$5.39?

19 A Offhand, I don't recall the specific region.

20 Q Is there an annual report which you relied upon?

21 A I'm not sure of that either; I believe it was a  
22 special survey performed in 1978 and I don't know  
23 if there's anything more current than that. I  
24 believe that's the most current information we were

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1 able to obtain.

2 Q If you do not know the region covered by the report,  
3 how did you determine that it was applicable to  
4 the grazing land on the Wind River Indian Reservation?

5 A Well, I specifically sought information that was  
6 applicable to the Wind River Indian Reservation  
7 and I believe this was as close as we could come to  
8 the price for AUM's for the Wind River Reservation.

9 Q What other sources did you consider in determining  
10 the price for corn grain aftermath?

11 A That was the source we used.

12 Q Mr. Dornbusch, I hand you what has been marked for  
13 identification as Exhibit WRIR ED-7.

14 A Yes.

15 Q Do you recognize that document?

16 A Yes, I do.

17 Q Would you please describe it for the record?

18 A It is the reference handbook to which I referred  
19 for January, 1980 published by the U.S. Water  
20 Resources Council.

21 THE SPECIAL MASTER: What's the ED number on  
22 this exhibit, is that a 7?

23 MR. MERRILL: That's a 7, Your Honor.

24 THE SPECIAL MASTER: Very good.

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1 MR. MERRILL: My 7's are a little strange.

2 Q (By Mr. Merrill) Mr. Dornbusch, I direct your  
3 attention to page Roman Numeral II-IV which also  
4 has an Arabic number at the top of the page of  
5 Exhibit ED-7 --

6 A II-IV, yes.

7 Q Have you got it?

8 A I've got it.

9 Q Would you please look at the paragraph immediately  
10 below "Computational Procedures"?

11 A Yes.

12 Q Now, was your testimony that the analysis you did  
13 was for 1979 and that your prices and costs are  
14 1979 prices and costs, is that correct?

15 A Yes.

16 Would you repeat the question, please?

17 Q Did you not testify a few moments ago that your  
18 analysis was for a 1979 year and that therefore  
19 your prices and costs were in 1979?

20 A Yes, that's right.

21 Q Would you please read the first paragraph under  
22 computational procedures on page Roman Numeral  
23 II-IV?

24 A Okay. "The estimate of current 1978 normalized  
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1 shown in the following tables are weighted  
2 averages of actual season average prices over  
3 the five year period, 1974 through 1978."

4 Q Did you use the 1980 WRC Handbook in arriving  
5 at your prices?

6 A Yes, I did.

7 Q Are your prices in your analysis then 1978 or  
8 1979 prices?

9 A Well, I believe they are current normalized price  
10 as of September, 1979.

11 Q Do you still believe that in light of the state-  
12 ment that you just read from Exhibit ED-7?

13 MR. ECHOHAWK: Objection, Your Honor. The  
14 question has already been answered.

15 THE SPECIAL MASTER: The objection is over-  
16 ruled. You may answer.

17 A Well, it would appear that that might be in doubt  
18 but I think I would have to study this somewhat  
19 more to be sure that that paragraph applies to  
20 exactly what we are talking about.

21 THE SPECIAL MASTER: May I ask you to look  
22 at page Roman Numberal II-VIII and is there any-  
23 thing on that page that has a bearing on our current  
24 cross examination material, Mr. Dornbusch?

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1 THE WITNESS: Yes. As I said, I believed  
2 when we used this that we were referring to the  
3 current normalized prices and I believe that the  
4 information we had at that time was that they  
5 were as of September, 1979. That's why that  
6 paragraph does confuse me but as I said I would  
7 want to --

8 THE SPECIAL MASTER: Study it?

9 THE WITNESS: -- study it more to be sure.

10 Q (By Mr. Merrill) Okay. Why don't you keep that  
11 copy of Exhibit ED-7 with you --

12 A Okay.

13 Q -- and we'll get back to it later in the cross  
14 examination after you have had a chance to check  
15 it.

16 THE SPECIAL MASTER: Can someone tell me  
17 what the NRED-ESCS is?

18 MR. JACOBS: Natural Resources Economic Division,  
19 Your Honor.

20 THE SPECIAL MASTER: Just a minute. Natural --

21 MR. JACOBS: Natural Resources Economic Division.

22 THE SPECIAL MASTER: ESCS, Soil Conservation --

23 MR. JACOBS: Economic Statistics and Cooperative  
24 Services. It is now ESS.

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1 THE SPECIAL MASTER: I don't know how that  
2 publisher would reconcile the statement that the  
3 witness read that the computational procedures  
4 are normalized in '78 figures which is the result  
5 of an average season of the five year period just  
6 before then, and that September, 1979 figure  
7 written on page II-VIII maybe we can get to that  
8 a little bit later after we take a break for  
9 lunch.

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1 MR. MERRILL: Your Honor, if you'd like, we can  
2 get to it right now and make that the last point before  
3 we break for lunch.

4 THE SPECIAL MASTER: Go ahead, if you will.

5 Q. (By Mr. Merrill) Mr. Dornbusch, will you please turn  
6 to page No. Roman numeral II-9 on D-7.

7 A. Yes.

8 Q. I direct your attention on that chart or table to the  
9 farthest right-hand column that says current normalized  
10 price, and you'll note right before it a date,  
11 September 14th, 1979.

12 A. Yes.

13 Q. Isn't it true that to the left of the current normalized  
14 price are US season average prices for the years 1974  
15 through 1978?

16 A. Yes.

17 Q. Isn't it true that the current normalized price in the  
18 right-hand column is based on those five years?

19 A. Yes, I believe it is. I think, to answer your previous  
20 question, the estimates of current '78 normalized prices  
21 which is shown on the column under 1978, those prices  
22 are the ones which are the ones that are derived from the  
23 five-year period, '74 to '78 and not the September, 1979  
24 normalized prices.

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1 I think that's perhaps where your confusion is  
2 coming from, that the prices listed for '78 are  
3 derived as described on Roman numeral II-4, but as I  
4 said, I'd like to look at that to be sure.

5 Q. Mr. Dornbusch, isn't the September 14th, 1979, date  
6 in the upper right-hand column of page II-9 the date  
7 that computer printout was issued?

8 MR. ECHOHAWK: Objection, Your Honor. The witness  
9 has no idea --

10 THE SPECIAL MASTER: Well, if he knows what that  
11 figure refers to, he may answer, if he doesn't, he  
12 may say so.

13 THE WITNESS: No, I don't know anything about a  
14 computer printout.

15 Q. (By Mr. Merrill) Are you suggesting then that the  
16 current normalized price shown in the right-hand most  
17 column is the normalized price of those crops on  
18 September 14th, 1979?

19 A. No, that's the normalized price to be used, I believe,  
20 for 1979.

21 Q. Isn't it true that that normalized price is based  
22 on the averages of the years 1974 through '78?

23 A. Yes, I believe it.

24 THE SPECIAL MASTER: Let me ask a question while  
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1 we're there too. Did the page dealing with commodities  
2 and current normalized prices to which we were  
3 referring, list about items down, corn for grain --

4 THE WITNESS: Um-hum.

5 THE SPECIAL MASTER: -- and gives a bushell figure  
6 anywhere from \$3.02 in '74 down to \$2.11 in '78 with  
7 an average of 2 -- \$2.14?

8 THE WITNESS: Normalized, yes.

9 THE SPECIAL MASTER: Normalized. But you used  
10 the figure of \$2.55 in your report and exhibit. Can  
11 you explain that difference?

12 THE WITNESS: Yes. The WRC publishes normalized  
13 prices for every state in the nation, and the particular  
14 price that I used was for the State of Wyoming, \$2.55.

15 MR. ECHOHAWK: I think for the record, Your  
16 Honor, you could look at page II-11.

17 THE WITNESS: Yes, there it is, the bottom of the  
18 column on 2-11.

19 THE SPECIAL MASTER: I see it indeed and it's  
20 exactly what you used for \$2.55. Thank you again.

21 Q. (By Mr. Merrill) Mr. Dornbusch, in light of your  
22 testimony concerning the current normalized price in  
23 the right-hand column of page II-9, and the comment that  
24 you read earlier from page II-4, do you believe that your

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1 prices are 1978 or 1979 prices?

2 A. 1979.

3 MR. MERRILL: Your Honor, this concludes one  
4 phase of my cross-examination. It might be a convenient  
5 time to break.

6 THE SPECIAL MASTER: All right, let's go to lunch  
7 and let's take until 1:30 and prepare, do an effective  
8 job with the remaining hours.

9 MR. MERRILL: For the Court's information, Your  
10 Honor, I believe after lunch Mr. Echohawk intends to  
11 raise a matter that came up before you earlier, which  
12 was a motion to take judicial notice of lands served  
13 by certificates that were issued by the Wyoming State  
14 Engineer, and just so that we don't catch the Court  
15 off balance, I thought I'd give you forewarning that I  
16 believe he intends to raise that this afternoon, and we'll  
17 make a response.

18 THE SPECIAL MASTER: We're ready to hear arguments  
19 on that.

20 MR. ECHOHAWK: Okay. So long as we can set it  
21 in the proper context so we know what we're going to  
22 face, you recall in March, I think it might have been  
23 March 16th, I think, the United States made the motion  
24 for the Court to take judicial notice of the Wyoming

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1 adjudicated certificates.

2 THE SPECIAL MASTER: Beginning with 1905 through  
3 1908 or nine?

4 MR. ECHOHAWK: I think, whatever it was, we  
5 presented a list, we wanted you to take judicial notice  
6 of that, as proof of irrigability and admission against  
7 interest of Wyoming and so forth.

8 THE SPECIAL MASTER: All right.

9 MR. ECHOHAWK: We had testimony from Mr. Christopoulos  
10 and so forth.

11 THE SPECIAL MASTER: Right.

12 MR. ECHOHAWK: And my understanding is that Your  
13 Honor granted that motion and established a prima facie  
14 case for irrigability.

15 THE SPECIAL MASTER: Whether it establishes a prima  
16 facie case, I granted the motion.

17 MR. ECHOHAWK: That's what we asked for in our motion.

18 MR. MERRILL: Well, Your Honor, I believe we should  
19 refer to page 2470 of the transcript.

20 THE SPECIAL MASTER: I think it grants additional  
21 evidence for me to consider as to the irrigability.

22 MR. MERRILL: That's correct, Your Honor, but you  
23 didn't rule that it establishes a prima facie case of  
24 irrigability, and I can quote your ruling out of the

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transcript if that will be helpful.

THE SPECIAL MASTER: Why don't we leave it till  
after we have some lunch?

(Thereupon a lunch recess was  
(taken at 11:30 a.m.

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