

INTERIOR NOMINATION

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HEARING

BEFORE THE

COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS

UNITED STATES SENATE

NINETY-SECOND CONGRESS

FIRST SESSION

ON

THE NOMINATION OF DR. VINCENT E. McKELVEY AS DIRECTOR,
U.S. GEOLOGICAL SURVEY

NOVEMBER 23, 1971



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NOMINATION OF DR. VINCENT E. McKELVEY

TUESDAY, NOVEMBER, 23, 1971

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The committee met, pursuant to notice, at 3 p.m., in room 3110, New Senate Office Building, the Honorable Alan Bible presiding.

Present: Senators Bible, Jordan, Fannin, Hansen, and Anderson. Senator BIBLE. The hour of 3 o'clock has arrived and Senator Schweiker is understandably detained on the Senate floor. We are about to get to a vote there in about the next 10 or 15 minutes, and I am going to take the liberty of reading Senator Schweiker's statement into the record as if he were here personally to give it.

It reads as follows:

(The statement referred to follows:)

STATEMENT OF HON. RICHARD S. SCHWEIKER, A U.S. SENATOR FROM THE STATE OF PENNSYLVANIA

Mr. Chairman and members of the committee, I appreciate the opportunity to appear before you on behalf of Dr. Vincent McKelvey, who has been nominated for the position of Director of the U.S. Geological Survey.

I am pleased to say that Dr. McKelvey was born in Huntingdon, Pa. He attended primary and secondary schools in Bellefonte, Hazleton, and Everett, Pa., and the Dickinson Seminary in Williamsport, Pa.

After obtaining his B.A. from Syracuse University, and his M.A. and Ph. D. from the University of Wisconsin, Dr. McKelvey began a long career in geology. He has had 20 years experience as a geologist with the U.S. Geological Survey, and has a vast background in study in geological problems in many parts of the United States as well as overseas. Recently, he served as the U.S. representative to the United Nations Committee on Peaceful Uses of the Seabed and Ocean Floor Beyond the Limits of National Jurisdiction.

Dr. McKelvey is the recipient of many honors in his professional field and certainly brings impressive credentials to his new position.

I am pleased to have this opportunity to offer my personal support for a fellow Pennsylvanian. I know that he will do a topnotch job in the vitally important position of Director of the U.S. Geological Survey.

Senator BIBLE. I have a very fine letter from your predecessor in this particular post, Dr. Pecora, speaking of you in the highest and most knowing terms and saying you are extremely well qualified.

For the record, Mr. McKelvey's biography and Dr. Pecora's letter, will be included at this point.
(The documents referred to follow:)

BIOGRAPHY OF VINCENT ELLIS MCKELVEY

Born.—Huntingdon, Pa., April 6, 1916.

Education.—Primary and secondary schools, Bellefonte, Hazelton, and Everett, Pa. Dickinson Seminary, Williamsport, Pa. Syracuse University, B.A. with honors in geology, 1937. University of Wisconsin, M.A. 1939, Ph. D. in geology 1947.

Family.—Parents deceased. Married June 5, 1937, Genevieve Patricia Bowman of Bloomsburg, Pa. Two children, Robert B., deceased; Gregory E., 27, Bear Creek Mining Co., 7729 S. Fenton, Littleton, Colorado, Residence, 6601 Broxburn Drive, Bethesda, Md.

Professional employment.—Junior Geologist, Soil Conservation Service, part-time, 1938–1940. Ass't Geologist, Wisconsin Geological and Natural History Survey, summers 1938–1940. Visiting lecturer, Stanford University, spring 1956. Geologist, U.S. Geological Survey, 1941–present.

Professional experience.—Geology of manganese deposits, Nevada and Arizona, 1941–1942. Geology of vanadiferous shales, Idaho, Wyoming, and Utah, 1942–1943. Military geology, 1944–1945. Consultant, Chief of Engineers, Manila, 1945. Geology of phosphate and uranium deposits, Idaho, Wyoming, Montana, Utah, 1946–1949. U.S. Civil Service Board of Examiners for the U.S. Geological Survey, 1946–1947 (Chairman). Chief, Radioactive Minerals Office, 1950–1953. Geology of western phosphate deposits, 1954–1959. Minerals Specialist, U.S.I.C.A.—Government of Jordan, fall 1958. Ass't Chief Geologist for Interagency Programs, 1960–1962. Ass't Chief Geologist for Economic and Foreign Geology, 1962–1965. Minerals and Fuels Subcommittees, Federal Council for Science and Technology, 1961–1963. Department of the Interior Energy Policy Staff, 1961–1969. U.S. advisor to Energy Committee, Organization for Economic Cooperation and Development, 1965–1967. U.S. representative to Government Advisory Committees on Energy and Minerals, United Nations Resource and Transport Division, 1967. Advisor on phosphate exploration, Government of Saudi Arabia, 1967. Leader, Department of the Interior Study Group, Outer Continental Shelf oil, gas, and sulfur leasing policy, 1968. U.S. representative to United Nations Committee on Peaceful Uses of the Seabed and Ocean Floor Beyond the Limits of National Jurisdiction, 1968–1971. Senior Research Geologist, 1969–1971. Chief Geologist, 1971.

Scientific and professional societies.—Sigma Xi. Geological Society of Washington. American Association for the Advancement of Science (Fellow). American Geological Institute (Member of Board of Directors, 1968–1971). Geological Society of America (Fellow, Member of Council, 1968–1972). Society of Economic Geologists (Member of Council, 1967–1970). American Geophysical Union (Fellow). Washington Academy of Science. Economic Geology Publishing Co. (Member of Board of Directors). Geochemical Society. Cosmos Club. American Institute of Mining Engineers.

Honors.—Department of the Interior Distinguished Service Award, 1963. AIME Henry Krumb Lecturer, 1968. Seventh Hugh Exton McKinstry Memorial Lecturer, Harvard University 1971.

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U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., November 23, 1971.

Hon. HENRY M. JACKSON,
Chairman, Senate Committee on Interior and Insular Affairs, Washington, D.C.

DEAR MR. CHAIRMAN: Permit me by this letter to recommend favorable action by your Committee in review of the qualifications of Dr. Vincent E. McKelvey for the position of Director of the United States Geological Survey.

I have known Dr. McKelvey as a good friend and professional colleague for more than thirty years. He is an outstanding scientist and a recognized leader in the geological profession. As a career professional in the Geological Survey for many years, he has won the strong support of his colleagues by reason of his individual research accomplishments and his proved management capability in scientist-administration.

In his writings he has shown the rare ability to inform the public and non-scientists in words that are understandable and, at the same time, in keeping with the integrity of the subject. He has developed a good image in the utilization of his science in matters of resource understanding and environmental protection.

If accepted by your Committee, Dr. McKelvey will become the ninth Director of the Geological Survey in its 92 years. In the tradition of the Survey, the National Academy of Sciences, in responding to a request from the Secretary of the Interior, formed a search committee and provided a slate of the most qualified candidates for this post for the consideration by the Secretary. Dr. McKelvey's name was on that recommended slate. This admirable tradition is largely responsible for the outstanding record of the Geological Survey in its service to the Congress and to the people of the United States.

Sincerely yours,

W. T. PECORA,
Under Secretary.

Senator BIBLE. I have had the privilege, I think, for the first time yesterday of meeting Dr. McKelvey. I was quite impressed with his background and his expertise in this field and his 30 years of service to USGS.

I was happy to see he spent some of his earlier years in the battle over manganese deposits in Clark County, with a good western background.

Senator Anderson, do you have any questions of the doctor at this time?

Senator ANDERSON. No questions.

Senator BIBLE. Senator Jordan?

Senator JORDAN. No questions.

Senator BIBLE. Senator Fannin?

Senator FANNIN. No questions, Mr. Chairman.

Senator BIBLE. Doctor, I turn the witness chair over to you. It looks as if it is a rather easy witness chair the way it seems right now, but you never know what you might say in the statement that might open it up, so you just go right ahead and go.

STATEMENT OF DR. VINCENT E. McKELVEY, NOMINEE FOR THE POSITION OF DIRECTOR OF THE UNITED STATES GEOLOGICAL SURVEY

Dr. McKELVEY. Thank you, Mr. Chairman, for your generous remarks. I wish to thank also Senator Schweiker and Under Secretary Pecora for their statements.

It is indeed a high honor, the greatest of my life, to come before this distinguished committee as the President's nominee to be the ninth Director of the Geological Survey. Naturally, I am proud of this honor and appreciative of the confidence placed in me. But I am also humble, for I cannot imagine that my own capabilities can begin to match those of the previous directors.

Intuition comforts me a little, however, in suggesting that the committee members may not expect me to match the talents of my immediate predecessor, at least, for I am sure you recognize that Under Secretary Pecora is one of a kind.

Uncomfortable as I feel over the prospects of filling shoes such as theirs, I do feel on common ground with my predecessors in my dedication to the mission of the Geological Survey and in my belief in the importance of its work to the Nation.

Although the survey was created in 1879 to continue the earlier exploratory surveys of a truly undeveloped country, the need for a sound understanding of the land and its resources is far greater now that the United States has reached an advanced state of development. Not only has the demand for knowledge about our resources expanded tremendously, but the need for thorough understanding of the land itself and of the environment as a whole has grown even more rapidly.

As the Nation's principal earth science research and fact finding organization, the Survey is responsible for providing much of the knowledge base for the critical decisions ahead concerning both the development and conservation of the land and its resources.

To carry out this responsibility, it will not suffice for us just to maintain our present capability, excellent though I believe it to be. We will have to continue to improve our abilities, and I take this objective as a challenge that I will do my best to meet.

As you know, the Geological Survey also bears heavy responsibility for the management of the mineral resources of the public domain. The demands on us in this area have also been increasing, both to ensure the practice of sound conservation methods and to assure that extractive operations are conducted with maximum safety and minimum impact on the environment and other resource values.

Here, too, I recognize that we must continue to improve our abilities, and if my appointment is confirmed I will do my best to see that we do so.

Fortunately, I will have good help both from the department and from my colleagues in the Survey in these efforts to continue to improve our service to the Nation.

On the departmental side, Secretary Morton, Under Secretary Pecora, and Assistant Secretary Dole are giving us excellent leadership and support. On the Survey side, most of our members are career employees whose efforts in the public service have always drawn high praise.

In this connection, I want especially to draw the committee's attention to the outstanding work of our Associate Director, William A. Radlinski, who has given us splendid leadership as Acting Director during the last 8 months.

I believe the committee members have a copy of my biographical statement and bibliography. I will be glad to supply any further information you may require and will be happy to respond to your questions.

Senator BIBLE. Thank you very much, Doctor.

You have, I am advised by our staff director, Jerry Verkler, furnished him with your financial statement and these are available for use of the committee. We will not examine on that during open hearing, but when we finish the public hearing we will go into the executive room and the fellow members of the committee who are here today who have not read it can read the statement and query you on any questions they have with respect to that.

What are your chief responsibilities as Chief Geologist?

Dr. McKELVEY. As Chief Geologist I am responsible for the planning and direction and review of the work of the geologic division, which is concerned primarily with field geologic investigations, investigations of potential mineral resources, environmental geology, the development of scientific knowledge about earth processes and a wide range of scientific investigations of earth and its resources.

Senator BIBLE. I note here from your biography which has been made a part of the record, that you have had a wide experience in the field in many of our states. I also note considerable interest here in the Western States where we have much in the way of mineral resources.

You mention the manganese deposits in my own State, those in Arizona, the vanadium ferrous shales in Idaho, Wyoming, and Utah, and the phosphates and uranium deposits in those States, plus many other areas of expertise in the field of USGS.

You certainly appear to be an extremely well qualified individual in the field of geology.

Now, how extensive does the Chief Geologist get into the field of oceanography? Is that somewhat related, such as oceanography and taking the gold out of the ocean, and all of that business?

Dr. McKELVEY. Marine geology is one of the areas of investigation within the work of the geologic division. It began in a formal way, I guess, about 10 years ago. We have done over the years a considerable amount of work on marine sediments and marine investigations of a more limited character were undertaken before that. But since then, we have undertaken an expanding program of investigations in marine geology, primarily in connection with problems of the U.S. continental margins.

I might say that I have not participated in those field investigations myself, but I have been concerned in recent years with problems related to marine resources, primarily related to the assessment of potential marine mineral resources in connection with the United States participation in the work of the United Nations' seabeds committee.

Senator BIBLE. Very fine.

You indicated to me when you paid me a visit yesterday in my office that you had some knowledge of the field of geothermal steam. I expressed to you my interest in that particular field as a possible source of future energy. This resource has been developed in a few western States and I expressed to you the hope that you might convey your beliefs to Dr. Pecora and Secretary Morton. In this connection, I hope they will quit knocking off these add-ons I put in the budget and that they will permit the geothermal steam allotment to be unfrozen. This will permit more research in this vital field.

I know as you get your feet on the ground—and they have been there for 30 years—that you will also express your views to your immediate superior, which is Secretary Dole.

Dr. McKELVEY. Yes; I will.

Senator BIBLE. Express it to him, he is an Oregonian out from our neck of the woods, and ask him if he can put some of that geosteam forward.

I have no further questions.

Senator Anderson?

Senator ANDERSON. I think you made a very good statement, and I welcome you to the department. Thank you.

Senator BIBLE. Senator Hansen?

Senator HANSEN. Mr. Chairman, do you mean to imply you are kind of lukewarm about steam under freeze?

Senator BIBLE. The way it is going now I am really lukewarm on it. [Laughter.]

Senator BIBLE. Senator Jordan?

Senator JORDAN. Thank you, Mr. Chairman.

Dr. McKelvey, I enjoyed our brief visit in my office and I appreciate your coming around. You indeed have a very fine background, not only in academics, but in the fieldwork as well.

How many people are presently employed in the Geological Survey?

Dr. McKELVEY. About 8,000, Senator.

Senator JORDAN. About 8,000. How nearly are you current with your backlog of work? Does the work build up faster than you are able to discharge it, or are you reasonably current?

Dr. McKELVEY. That is a difficult question to answer. I think with respect to our goals, geologic and topographic mapping of the United States, for example, we have to say that we are considerably behind over what we would like our state of progress to be. I think the same could be said in many other areas.

I think with respect to immediately assigned tasks and targets, that yes, we are more or less current. But we have a big job and it is one that is increasing in importance. The demand for the kinds of information that the Geological Survey produces are much accelerating, and it is difficult to keep up with these, I have to say, sir.

Senator JORDAN. Are you having any difficulty in recruiting skilled personnel for your operation?

Dr. McKELVEY. No, sir, we are not.

Senator JORDAN. You would say, then, in the short range you are reasonably current, but you have a tremendous backlog of long range projects that are always building up ahead of you as you go down the road?

Dr. McKELVEY. That is correct.

Senator JORDAN. I think you are imminently qualified for this job. I am pleased we are getting a professional, because I think it does call for a man with professional qualifications, which you have, and you have the experience, too, to go with it, and I am pleased to see you come aboard here as the chief.

Dr. McKELVEY. Thank you very much, Senator.

Senator BIBLE. Senator Fannin?

Senator FANNIN. Dr. McKelvey, I join my colleagues in welcoming you here, and I am certainly impressed, too, with your splendid background, not only in this country, but I notice in some of the other countries of the world.

We have a great problem, as you know, to protect our environment and still develop our natural resources. So many people consider this can't be done without destroying some of the beauty of all of our lands, but still we see in some of the other countries in the world perhaps greater developments. I am referring to Germany, with the great development of their coal resource reserves, and they have benefited the coal areas where they have been developing these resources and have come out with new recreational areas, lakes and cities and farms and all.

Do you feel we are abreast of these programs to the extent the other countries of the world are, some of the other countries of the World?

Dr. McKELVEY. I believe we are, in a qualitative sense, but perhaps not in a quantitative sense. I would not be able to make a comparison of the extent to which we are using such methods percentagewise in comparison with certain other countries.

I have the feeling, however, that we are certainly abreast of most countries in this regard. We are finding, and we certainly need to search further and more diligently for methods that allow us to develop mineral reserves without, at the same time, damaging the environment.

I personally am optimistic that this approach will be successful and be found to not only be successful in preventing serious damage to the environment, but successful in an economic sense also.

Waste of any kind, I think, is costly, and many of the land reclamation projects that you referred to, it is my understanding that they were accomplished with an overall profit as far as the reclamation end of the problem was concerned. In other words, they actually improved the land such that it was worth more as a piece of real estate with the mineral gone than it was before the land was opened up.

I think that kind of approach certainly promises to be a very fruitful one.

Senator FANNIN. Well, that is my knowledge of what has happened, as you have stated in your presentation here today. We have to move ahead concerning both development and conservation of the land and its resources.

I was especially impressed with the size of equipment, the type of equipment that has been developed in some of the other countries. I haven't seen it utilized here in this Nation. I am just wondering if you do have studies or if you plan to go forward with programs that might be similar to those that have been carried forward in other countries? Do you have any program to that effect?

Dr. McKELVEY. Senator Fannin, work related to the actual development and reclamation of the land is beyond the scope of the Geological Survey. But we can, are, and will continue to make an important contribution to a project of that type by way of providing information on the character of the land surface and the rocks that are going to be removed that might be restored or used as fill materials. This kind of information is really basic to the success of projects of this kind.

Senator FANNIN. Well, I was just thinking of some of the progress we have had in this country, flood control, conservation and all, where the Geological Survey is involved and looking at the magnitude of what some of these other countries are doing. I am just afraid we are falling behind.

Well, thank you very much.

Senator BIBLE. Senator Hansen, the Senator from Wyoming?

Senator HANSEN. Let me join with others of my colleagues, Dr. McKelvey, in welcoming you here this afternoon.

I think most of the interest areas have already been discussed. I do have one question, however, I would invite your response to.

Until we can get on with the development of a technology that will transfer the major share of the burden of the production of energy from the fossil fuels, as we have known them in the past to nuclear energy, in your opinion, would an aggressive campaign or search undertaken by the geologists, under the leadership of the U.S.G.S. in this country, assure us of an adequate amount of energy from the traditional conventional forms of energy to supplement the amount of energy which we import?

I am thinking at the moment about the mandatory oil import program which I think at the present time reflects about one-fourth, roughly, of the oil and gas that we use for energy, which is imported.

Can we, through an aggressive campaign, maintain that balance as you contemplate our untapped reserves in this country so as not to subject it further to increased dependency upon foreign sources until other exotic forms of energy can be used?

Dr. McKELVEY. I have to give an unqualified yes to that, sir.

Senator HANSEN. A very long yes and a very short answer, and I appreciate it. Thank you.

Senator BIBLE. Further questions?

(No response.)

Thank you very much, Doctor. I appreciate your appearance here today.

We will now take a short recess.

Senator JORDAN. Before we recess, I would like to say the Senator from Colorado is unavoidably detained on the floor. He would like to be here, Senator Allott, and he expresses his approval of the nomination.

Senator BIBLE. Fine.

If you will join us, Doctor, we will go to the executive room here and ask the reporter to come along.

(Whereupon, the hearing was recessed, to reconvene in executive session.)





