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### Initiated Measure No. 2: Uranium Development in South Dakota

Cooperative Extension South Dakota State University

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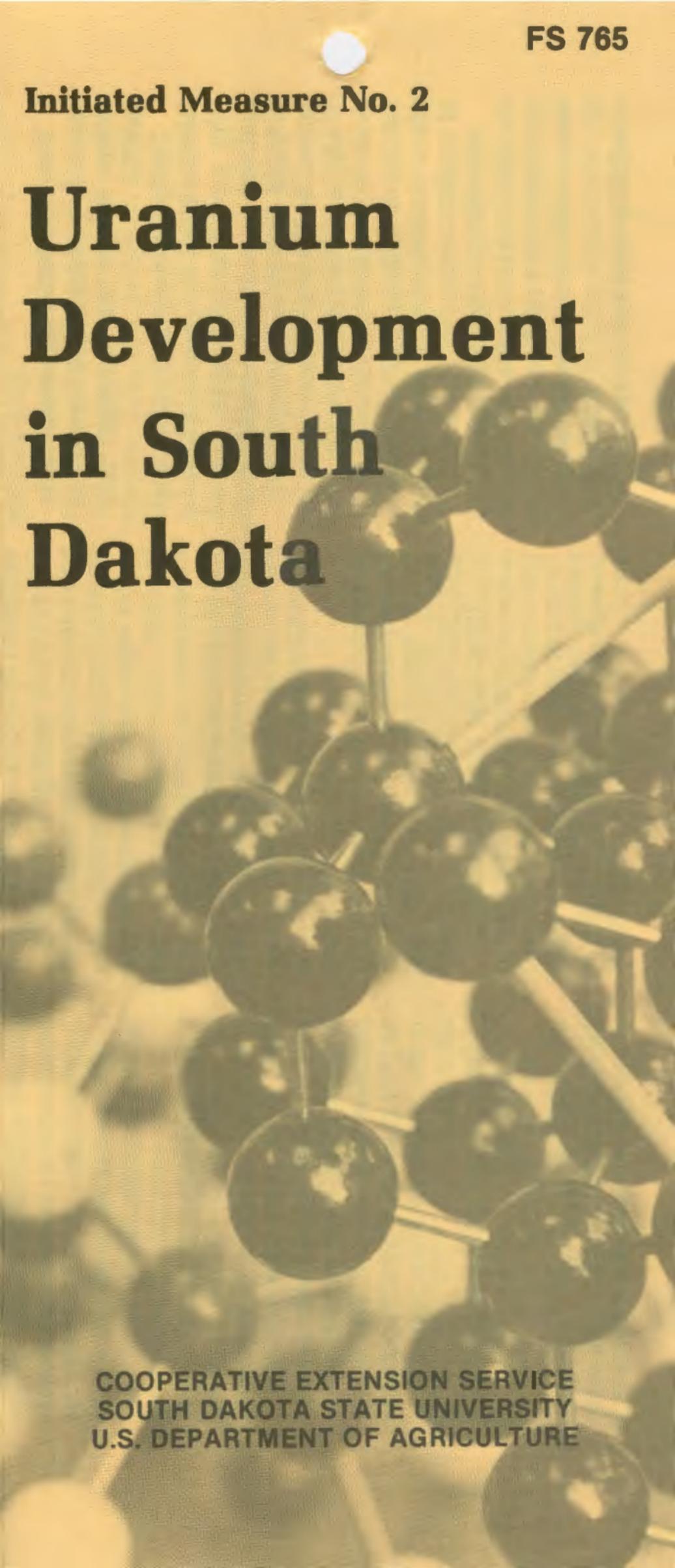
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Initiated Measure No. 2

# Uranium Development in South Dakota



COOPERATIVE EXTENSION SERVICE  
SOUTH DAKOTA STATE UNIVERSITY  
U.S. DEPARTMENT OF AGRICULTURE

# Uranium Development in South Dakota

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New controls on nuclear energy development in South Dakota are proposed in Initiated Measure No. 2 on the November 4 ballot. The proposed law requires popular votes prior to starting uranium mining and other nuclear development projects.

Most of the following discussion appears to deal largely with nuclear (and uranium) development in general and only minimally with the ballot question. This is because the ballot question may be the nuclear question. There is widespread belief that the voters in November will decide the fate of nuclear development and uranium mining and milling in South Dakota for some time into the future.

A number of national and even global issues are related to the proposal. Such issues involve, for example, the appropriate level of public investment in and promotion of nuclear power, and economic growth resulting from nuclear energy development as a desirable national goal.

The focus of this publication is on South Dakota, however, and on issues of particular concern to South Dakota voters.

It should be noted also that the proposed law refers to nuclear developments in general, while the issue of greatest present concern in South Dakota is that of uranium mining.

### Some background

#### Why is there concern about nuclear power?

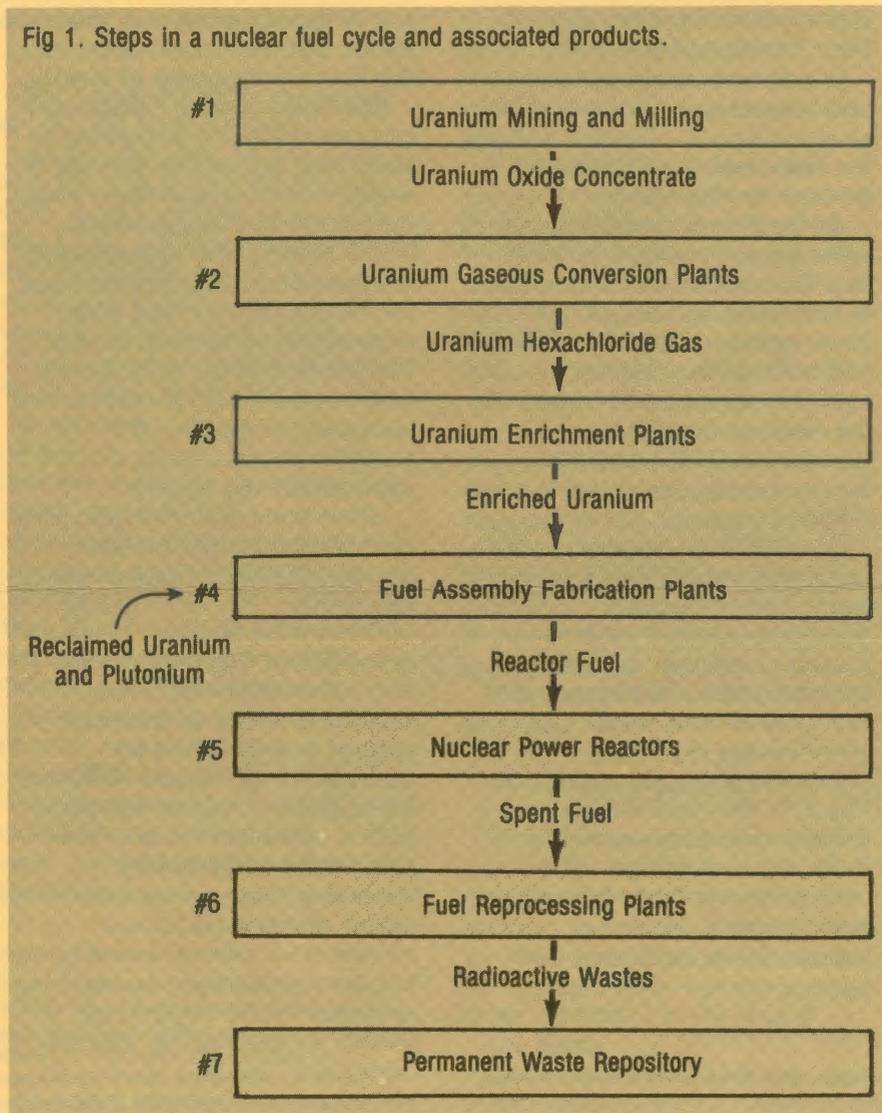
Reputable physical scientists agree that the nuclear fuel cycle

involves some measurable risks and some nonmeasurable uncertainties. Disagreement among scientists exists over the nature and degree of the risks and uncertainties.

Figure 1 illustrates major stages in a conventional nuclear fuel cycle

from the initial stage of uranium mining and milling, through power production, to the last stage of nuclear waste repository.

Steps 1, 2, 3, 4, and 6 create possible health hazards for workers and others exposed to



radiation in mining, milling, processing, reprocessing, and disposition of tailings.

Step 5, nuclear power generation, involves possible health hazards from exposure to both routine and possible accidental emissions of radioactive materials.

Finally, at step 7, there exist possible health threats from exposure to spent fuels, contaminated cooling water, and radioactive debris. Again, however, the nature and degree of risks and uncertainties attached to these health hazards are not settled areas of agreement among physical scientists.

#### **Do public controls to minimize hazards in the nuclear fuel cycle already exist?**

Individuals and property owners with holdings near to nuclear developments have legal rights protecting the value of their health and property.<sup>1</sup>

In addition, numerous state and federal laws and regulations have evolved in efforts to reduce the risks and uncertainties of nuclear development.

At the federal level, several agencies are engaged in controlling the nuclear fuel cycle. There is, for example, federal involvement in uranium mining and milling. Two federal agencies are primarily involved: the Nuclear Regulatory Commission (NRC) and the Environmental Protection Agency (EPA).

The NRC was created, in part, to protect the public's health and safety by licensing and regulating nuclear power industry facilities, including uranium mills. This agency also coordinates with state governments regarding regulation of nuclear materials. The EPA was established to control and reduce pollution, including radioactive contaminants. Other federal agencies with regulatory responsibility for mining and

milling are the Department of Labor under the Mining Safety and Health Act and the Department of Interior's Bureau of Mines.

Some other federal agencies which could become involved in controlling certain aspects of mining or milling activities in certain portions of South Dakota are the Bureau of Land Management, the U.S. Forest Service, the Water and Power Resources Service (formerly the Bureau of Reclamation), and the Bureau of Indian Affairs.

#### **Does South Dakota also control nuclear power development?**

Agencies with primary responsibilities include the State Conservation Commission (within the Division of Conservation of the Department of Agriculture), the Water Management Board (within the Department of Water and Natural Resources), the Public Utilities Commission, and the State Department of Health.

The Conservation Commission has responsibility, according to state law, for issuing permits to explore for and to surface mine the minerals of South Dakota (SDCL 45-6A). The Conservation Commission can formulate rules for reclamation of land after exploration or surface mining. The Surface Mine Reclamation Law requires both a reclamation plan and the posting of a reclamation bond before exploration and mining.

Other state agencies also have control responsibilities over certain phases of the nuclear fuel cycle.

Permits for nuclear development activities which may affect domestic wells, municipal wells, or natural springs are reviewed for approval by the Board of Water Management. Any power plant with a capacity of 100 or more megawatts of electricity (including that size nuclear power plant) must have a construction permit issued by the Public Utilities Commission. Prior approval by the Department of Health is required for disposal of "low level" nuclear waste and other radioactive materials. Approval of the governor, or upon his request the legislature, is required before disposal of "high level" nuclear waste.

#### **Are the state and federal controls adequate?**

This is a point of controversy, of course. Some defend the evolving set of rules and public agencies as an entirely adequate approach. Critics of present state and federal controls argue from two directions.

Those who emphasize the health threats argue that controls are insufficient, stating that knowledge about negative environmental consequences of the nuclear fuel cycle tends to lag behind development of nuclear technology. Controls, they say, tend to be too little and too late.

Critics from another direction see present controls as excessive. They cite the delays and costs imposed by governmental controls on private developers and argue that such restrictions inhibit the production of needed nuclear energy.

#### **How does nuclear development affect South Dakota?**

There are several consequences related to economic growth.

In its initial phases, nuclear development, like other mineral developments, implies an influx of people, higher local incomes (and perhaps prices), and increased local property values in the communities and regions where the development takes place.

Both revenues and expenses of state and local governments tend to increase with mineral development.

Additional state and local tax revenues would come from the following tax sources: sales and service, fuel, ore, property, and others. Revenue would also be generated from the lease of state mineral rights for uranium development.

Public expenses for new or upgraded roads, bridges, schools, and other public facilities are also likely.

Assistance for local governments to meet these expenses may come from state or federal programs specifically designed to ease local burdens and from new laws requiring financial help from private developers.

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<sup>1</sup>Such rights are not, however, unlimited. For example, the Price-Anderson Act of 1957 established a "no fault" insurance policy for nuclear reactor accidents which limited total liability at \$500 million and provided for federal payment of part of the coverage.

became economically impractical to continue development, communities and regions could lose mining and milling operations. The economy could decline.

Fixed public and private investments with excess capacity, such as large buildings, become burdensome in such cases. Moreover, some individuals are less able than others to relocate to avoid economic hardship.

### **Is there a property rights issue involved in nuclear development?**

Property ownership involves an exclusive but not an absolute right. Subsurface mineral owners, for example, have the exclusive right to lease their holdings for surface mining but only after a permit has been issued by the Conservation Commission.

Rights may come into conflict, and when such conflict arises, government is necessarily involved.

Some critics of nuclear development, for example, view such development as a threat to their right to personal safety. Protection of the right of bodily safety by limiting nuclear development may conflict, however, with the subsurface mineral owner's right to sell uranium.

Government sanction of one party's right may expose the other party to injury. Government involvement to preserve or amend conflicting rights becomes inevitable.

### **Now, the ballot question: What controls besides those already in effect would the initiated law add?**

The key change is contained in Section III of the proposed law. This section would require, in addition to present controls already described, a certificate issued by the Department of Water and Natural Resources prior to the initiation of uranium mining or milling, nuclear power plant construction, or deposition of nuclear waste.

Moreover, if the Department decided to issue such a certificate, the applicant would also need to obtain, by initiative or referendum prior to issuance, a majority approval by the

voters of the state.<sup>2</sup> This requires a case-by-case vote by the people.

### **What does a case-by-case popular vote mean?**

Most obviously, the proposed process would involve all the state's voters and thus would allow direct citizen participation.

Less obviously, the process would add costs for nuclear developers attempting to obtain initiated or referred popular votes.

It would also inject a dampening effect on uranium exploration in South Dakota. Potential investors in uranium exploration could be expected to consider that subsequent mining and milling activities would require a popular majority vote which could only be held at the time of a general election, and the outcome of which would be uncertain.

### **How was it decided who should vote on this initiated law?**

Like all initiated and referred laws, the vote is by **all** qualified voters throughout the state. Thus those South Dakotans who live many miles from potential nuclear development sites have the same right to vote on the initiated law as South Dakotans who live near development sites.

Questions of "whose preferences should count" and "how far should local control extend" are difficult.

Some uranium development issues such as exposure to radiation in tailings are local. Other issues, such as increased sales tax revenues from nuclear development, are statewide.

Yet other issues are national in scope, since uranium development in South Dakota would have an impact on the availability of nuclear fuel, power plant sites, and waste disposal sites.

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<sup>2</sup>The initiative does not explicitly state whether the majority required would be a majority of the ballots cast in a particular election or a majority of the qualified voters of the state. A majority of ballots cast would obviously be easier to obtain than a majority of the qualified voters. The lack of an explicit statement on the majority requirement suggests the possibility of a court test of this requirement.

Excluding some citizens from voting on this ballot issue or including others inevitably raises the issue of some citizens imposing their will upon others.

The "rules of the game" for initiated laws are presently set, however. All the qualified voters of South Dakota will have an equal opportunity to participate in this vote.

## *Summary*

The issues which surround control of nuclear development in South Dakota are complex.

A majority vote in favor of this initiated measure would give citizens a continuing direct role in shaping new nuclear energy development projects in the state. Direct citizen participation would reduce the authority of state agencies which currently have the responsibility of controlling the nuclear fuel cycle, and it would inhibit uranium and nuclear development investments in South Dakota.

Passage of this initiated measure may strengthen the interests of those fearful of the health and environmental consequences of the nuclear fuel cycle and those who think there would be possible negative economic consequences.

Defeat of this initiated measure would maintain the present interests of mineral rights owners, companies engaged in the development of nuclear energy, and those who desire to promote mineral related economic growth because of its perceived positive consequences.

The text of the initiative petition follows.

## **Initiative Petition**

We, the undersigned, duly qualified voters of the State of South Dakota, hereby petition that the following proposed law shall be submitted to the electorate of the State of South Dakota for their approval or rejection pursuant to the Constitution of the State of South Dakota.

The substance of the proposed law is as follows:

### **Section 1**

The People of South Dakota find that:  
(1) Uranium mining and milling, nuclear power plants and their

waste products are all inter-related aspects of the nuclear fuel cycle;

- (2) Uranium mining can adversely affect water supply and quality, may result in irreparable surface damage, and is an enterprise which creates severe upswings and downswings in the economy;
- (3) Uranium mills (or tailings) present significant long-term radiation problems;
- (4) There are questions about nuclear power plant safety and radioactive waste disposal which remain unsolved;

therefore the people of South Dakota reserve to themselves the exclusive right to approve or reject any aspect of commercial nuclear energy development in the state.

#### Section II

Definitions. Terms in this Act mean:

- (1) "Uranium mining" means the severance of uranium, not to include exploration, by any method for commercial use;
- (2) "Uranium milling" means the grinding, crushing, or leaching of uranium ore;
- (3) "Nuclear power plant" means any device, machine or assembly thereof that converts nuclear energy into some useful form of power, and generates 50 megawatts or more of electricity;
- (4) "Nuclear waste" means any by-product resulting from any aspect of the nuclear fuel cycle which has a radio-active nature;
- (5) "Department" shall mean the Department of Water and Natural Resources.

#### Section III

A person may not commence to construct a nuclear power plant, provide for nuclear waste or begin uranium mining or milling in the State of South Dakota without applying for and obtaining a certificate of environmental compatibility and public need issued with respect to that facility by the Department of Water and Natural Resources.

- (1) A facility, with respect to which a certificate is issued, may not thereafter be constructed, operated or maintained except in conformity with the certificate and any terms, conditions and modifications contained therein. A certificate may be issued only pursuant to this Chapter;
- (2) A certificate may be transferred, subsequent to the approval of the department, to a person who agrees to comply with the terms, conditions and modifications contained therein;
- (3) This Chapter does not apply to those aspects of uranium mining, milling, nuclear power plants, or disposal or nuclear waste operations that are already constructed, though those aspects may be reviewed and conditions relative to continued operation may be imposed by the department;
- (4) The department may adopt reasonable rules and regulations as necessary to carry out this Act, including establishing exemptions from this Chapter for the relocation, reconstruction, or upgrading of the facility that would otherwise be covered by this Chapter and that is likely to

have a significant environmental impact by reason of length, size, location, available space or right of way or construction methods;

- (5) The department may not waive compliance with any of the provisions of this Act relating to certification;
- (6) If the department decides to issue a certificate, it shall report such recommendation to the applicant and may not issue the certificate until such recommendation is approved by a majority of the voters of South Dakota in a statewide election called by initiative or referendum according to the laws of this State.

#### Section IV

If any part of this Act is invalid, all valid parts that are severable from the invalid part remain in effect. If a part of this Act is invalid in one or more of its applications, the part remains in effect in all valid applications wherever severable from the invalid applications.

The question is Initiated Measure No. 2 on the ballot. A "no" vote means that you want mineral and nuclear development to continue under the present controls. A "yes" vote means that you want a public referendum before each mineral and nuclear development project could go forward.

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