2017 SENATE ENERGY AND NATURAL RESOURCES

SCR 4004

2017 SENATE STANDING COMMITTEE MINUTES

Energy and Natural Resources Committee

Fort Lincoln Room, State Capitol

SCR 4004 1/13/2017 Job # 26872

☐ Subcommittee☐ Conference Committee

Committee Clerk Signature	Ham	Deve	
---------------------------	-----	------	--

Explanation or reason for introduction of bill/resolution: To urge Congress to allow and support the use of thorium reactors in this state for the creation of energy and medical isotopes.

Minutes:

Chairwoman Unruh called the committee to order. Clerk took attendance. All committee members present.

Chairwoman Unruh: Good morning Sen. Larsen.

(.34) Sen Oley Larson, Dist 3, Minot, ND: This SCR is a continued baby step. It has been in the legislature for 3 or 4 sessions. We are trying to move it forward. When I was teaching, I had a class project with my students. One year we decided to do a hydrogen generator. We built one and had a motor and injected hydrogen from water into the system and let it run. I figured if high school students could do a hydrogen generator project, maybe our research universities could look at this issue. Right now I was at an energy meeting and they showed on their graph, that they were using coal as a large percentage to generate electricity. They do have a nuclear power plant in MN that had about 28% of the energy from nuclear. They used wind and hydro as a percentage as well. With the green energy push, there are interested in doing that more. 2020 and into future, they want to reduce coal down to 15% by this graph and continue with the nuclear at 28%. This seems to be consistent through the lifetime of that nuclear generation plant. Then they wanted to increase the wind and hydro stays about the same at 2% because we are not building dams anymore. What I found was very interesting in that they wanted to implement solar energy in ND and MN where their footprint lands. I asked if they had solar panels and wind farms here now in ND. She said, no, but they did have solar farms in MN. I found it strange. She had a

Senate Energy and Natural Resources Committee SCR 4004 1-13-2017 Page 2

nuclear background and I asked about the thorium process. She was interested in it but it was like an idea that people saw it takes 20 years before we can get anything moving forward. There is not the interest there. I was in a discussion with someone from EERC, one of our research facilities. He said we have people on staff that know about this and have an interest in this and would not be opposed to pursuing it. The technology goes back to the 50's and 60's when we first started atomic era. One of the positive things about this is that the material is readily available in ND, already. So the potash mining that we allowed for a taxing structure is here and the byproduct is salt. A gateway there, too, of the materials. We have a coal plant that just shut down, and with a thorium reactor, that could be linked right to that coal plant and continue to keep jobs in ND. Last session there was issue with shelf life of nuclear waste. Thorium is 1/2 the life of nuclear waste. It can also burn nuclear waste. (7.11) Sen Larsen gave example. There are universities across the state that are already researching and looking at thorium. The last session we had some engineers from Florida on teleconference. It did not work with the communication with the engineers. They were too technical. (10.30) (a 3 minute video was played for committee).

Sen Larsen: I have no support for solar energy. It is so expensive for what you get out of it. This technology is not new.

Chairwoman Unruh: Any questions?

Sen. Schaible (13.17): This idea has been out there a long time. I was at the research facility a year ago and went through it. The technology they want to expand and do things with, but the Federal government is resisting it. This is such a good idea but we already have private industry doing it and universities doing it. How is this SCR going to help speed that process up? Sen Larsen: As North Dakotans, we need to use out research labs and the people associated with it, we need to be a part of that conversation. Hope we can push it ahead more. That is where I am at with it. The language is, let's start the dialogue. For ND. When we have a coal plant that is shut down, it would be visionary to jumping forward and starting this process to link it up to that. Using the coal to get our other aspects that we are already doing out of coal. I believe it is good for ND. We need to be in the conversation with it. The Iranians can built a nuclear power plant in a weekend and we are still not discussing it in ND to have it as an option. We would rather have solar farms and more wind farms.

Sen. Schaible: I think it is a viable project to move forward but the process of a resolution is has little to no effect, in what you are trying to do. You would be better served to put a bill in that says EERC does this study. If it goes up or

Senate Energy and Natural Resources Committee SCR 4004 1-13-2017 Page 3

down regardless, at least that would be a proactive approach. I do not see this as promoting your cause.

Sen Larsen: (16.00) I would be more than happy to have a hog house bill and have that done. No problem with that at all.

Sen. Schaible: So why did you not do it as a bill?

Sen Larsen: My lack of experience. I guess it should have been an bill with \$5000 hooked to it instead of resolution.

Sen. Cook (17.07) Have a comment. These resolutions do not even get to Congress they just go to the giant paper shredder in the sky. Is there any organization out there, thorium folks, that meet and promote this? That video was produced by someone.

Sen Larsen: That was the biggest problem when I introduced it last session. The president and his associate did a teleconference, and they were so excited about it but it was too much. Trying to communicate with North Dakotans and Floridians together did not work last session.

Sen. Cook: They need a public relations to carry the message and they stay in the background. But numbers get things done.

Sen Larsen: Correct.

Chairwoman Unruh: Further questions? Any more testimony on SCR 4004? Any testimony opposed? No agency people here. Hearing SCR 4004 is closed.(19.22)

2017 SENATE STANDING COMMITTEE MINUTES

Energy and Natural Resources Committee

Fort Lincoln Room, State Capitol

SCR 4004 1/19/2017 Job # 27116

☐ Subcommittee☐ Conference Committee

Committee Clerk Signature

tam wever

Explanation or reason for introduction of bill/resolution: To urge Congress to allow & support the use of thorium reactors in ND for creation of energy & medical isotopes.

Minutes:

COMMITTEE WORK

Chairwoman Unruh: (.13) We took this up last Friday. Any further discussion?

Sen. Schaible: (.41) We have other state that are already doing this. Having a resolution

does not help this issue and has no purpose.

Chairwoman Unruh: What are committee wishes:

Sen. Schaible: MOVED A DO NOT PASS.

Vice Chair Kreun: SECOND

Vice Chair Kreun: Shouldn't the ERC look at this? If Senate Larsson wants to continue, it

should be through ERC, are my thoughts.

Sen. Cook: (3.15) I have gotten lots of e mails on much more important issues. No question.

Chairwoman Unruh: Clerk take roll: Roll call was taken: YES 6 NO -0- -1- ABSENT

Bill Passed Vice Chair Kreun is carrier.

Date: | | 19 | 17
Roll Call Vote #: |

2017 SENATE STANDING COMMITTEE ROLL CALL VOTES BILL/RESOLUTION NO. SCR 4004

Senate Energy a	and Natural Resour	ces			Com	mittee
		□ Sub	ocommi	ttee		
Amendment LC# or	Description:					
Recommendation: Other Actions:	☐ Adopt Amendn☐ Do Pass ☐ As Amended☐ Place on Cons☐ Reconsider	Do Not		☐ Without Committee Re☐ Rerefer to Appropriation☐		lation
			,	conded By Sen. K		
	ators	Yes	No	Senators	Yes	No
Chair Jessica Un		/		Sen. Erin Oban	V	
Vice Chair Curt K						
Sen. Kelly Armsti		AB				
Sen. Dwight Coo	k					
Sen. Jim Roers		/				
Sen. Don Schaib	le					
Total (Yes) _	6		No	-0-		
Absent		1-				
Floor Assignment	Sen.	Kr	run	J		
If the vote is on an a	amendment, briefly	indicate	e intent			

Com Standing Committee Report January 19, 2017 10:58AM

REPORT OF STANDING COMMITTEE

Module ID: s_stcomrep_11_009

Carrier: Kreun

SCR 4004: Energy and Natural Resources Committee (Sen. Unruh, Chairman) recommends DO NOT PASS (6 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). SCR 4004 was placed on the Eleventh order on the calendar.

2017 HOUSE ENERGY AND NATURAL RESOURCES

SCR 4004

2017 HOUSE STANDING COMMITTEE MINUTES

Energy and Natural Resources Committee

Coteau - A Room, State Capitol

SCR 4004 3/9/2017 29006

☐ Subcommittee☐ Conference Committee

Committee Clerk Signature	Kathleen Jairs

Explanation or reason for introduction of bill/resolution:

To urge Congress to allow and support the use of thorium reactors in this state for the creation of energy and medical isotopes

Minutes:	

Chairman Porter:

Sen. Oley Larsen, District 3: This bill is an old friend. As we originally put the bill in, my intention was to get some funding and have a study. I've heard quite a bit of must, shall and may going on. It was my intention that would have been fixed in the Senate and that wasn't fix. We were able to move the idea forward and I had talked to the lignite council and the EERC, and guite a few people gathering information on this. It turned out to be a subject they were quite interested in. Since then, 2 days ago, we learned there is a group working with rare earth metal, and they have funding at the state level. They're going to do some work with the coal. My intention was to fix it so we would do some research with the state level. But I want to keep the resolution the way it is so now we will go to the federal government and talk about this other form of energy. I was at a meeting with Xcell Energy. They were talking about how they want to reduce the coal amount for energy production and wanted to increase the wind and continue to keep the nuclear energy the way they were. What disturbed me is that in that green energy, hydro and wind power and solar, they want to increase the solar part of it. I don't think that's the way we should be going. I want to put some energy into this other type of energy. If you go on the internet and look up thorium. There's a prototype of a reactor that the college, Utah or Arkansas, they are doing it. One reason I want us as ND to be at the table with this technology. I don't think ND, because we have thorium here, we have rare earth metals here. I believe if we could get this reactor going we could link that up with the coal industry and use that together. We now have some players at the table researching rare earth metals which thorium is a part of, can be extracted from coal which I understand. We want the state involved doing their thing but want to move it forward and tell the feds this is something we should be looking at.

Rep. Anderson: On line 13, is it possible to use uranium in a mobile salt reactor because they work differently?

Energy and Natural Resources Committee SCR 4004 03/09/2017 Page 2

Sen. Larsen: That might be so. This is language continuing from I believe the House last time. The language hasn't been changed much. A lot of times these resolutions don't get eyes on them. An amendment that could be a certified mail so someone can look at it if we're going to send it out. I do know that in my time in the legislature, I do get correspondence about this resolutions, so somebody is looking at some of them.

Rep. Keiser Did I hear you say one state is doing this and if they are, did they get a waiver. How are they able to do it that we can't and all we're doing is resolutions?

Sen. Larsen: I think some college got seed money, not state money, research grant dollars in energy. There's a couple. There's a huge thorium conference in FL. I had a phone conference linked up with the committee and you get 2 scientists that are rabid about this issue and, it was way up here. It's very technical. I really think that ND needs to be at the table with this type of energy.

Chairman Porter: further support? Opposition?

Closed the hearing.

2017 HOUSE STANDING COMMITTEE MINUTES

Energy and Natural Resources Committee

Coteau - A Room, State Capitol

SCR 4004 3/16/2017 29332

☐ Subcommittee☐ Conference Committee

Explanation or reason for introduction of bill/resolution:

To urge Congress to allow and support the use of thorium reactors in this state for the creation of energy and medical isotopes

Minutes:	

Chairman Porter: called the session to order on SCR 4004.

Rep. Anderson: I move a Do Pass on SR 4004.

Chairman Porter: before you do that. You and I have done a little homework and background, if you would explain to the committee what we found out about thorium, thorium reactors and the creation of energy and medical isotopes so that everyone is informed.

Rep. Anderson: After doing some research I found out that thorium reactors are more than likely built in our county in the mid 2020's, 2025 let say. The federal government has already allowed grants to two firms, one in MD, one in GA to go ahead and developing a pathway basically and technology for thorium reactors in our country. I think this is a good idea. We're a little too late to get involved with grant funding. They're moving towards thorium reactors, not only here but in the world.

Chairman Porter: So my question comes up that this resolution is asking them for support of the use of thorium reactors and it looks like they've really already done that. It kind of comes full circle to the point of is the resolution necessary when they're already doing everything we're saying in the resolution, we just kind of missed the board.

Rep. Anderson: I did talk to Sen. Larsen about this. Told him it was already proceeding without his resolution basically. That we were 2-4 years too late to the party.

Chairman Porter: he was just glad they're moving forward on it. Further discussion?

Rep. Anderson: I move we Do Not Pass on SCR 4004 and placed on the consent calendar.

Energy and Natural Resources Committee SCR 4004 03/16/2017 Page 2

Rep. Keiser: second

Rep. Keiser: Just a technical thing for the record. He has to either withdraw his motion or it dies due to a lack of a second, whichever you wish.

Chairman Porter: then Rep. Anderson's first motion has died for a lack of a second. Now were on Do Not Pass to SCR 4004 to be placed on the Consent Calendar. Discussion? Seeing none, all those in favor say Aye. Opposed. Motion carries. Rep. Anderson is carrier.

2017 HOUSE STANDING COMMITTEE MINUTES

Energy and Natural Resources Committee

Coteau - A Room, State Capitol

SCR 4004 3/23/2017 29593

☐ Subcommittee☐ Conference Committee

Committee Clerk Signature	K	athleen	Davis	

Explanation or reason for introduction of bill/resolution:

To urge Congress to allow and support the use of thorium reactors in this state for the creation of energy and medical isotopes

Minutes:	

Chairman Porter: Called the committee to order. At this time I would ask for a motion to reconsider our actions whereby we had a motion for a Do Not Pass on SCR 4004.

Rep. Keiser: So moved

Rep. Seibel: second

Chairman Porter: Committee, council said when we do that we need to do a recorded roll call vote. So we just needed to bring it back and do it properly. All those in favor say aye, opposed. Motion carried.

Committee we have SCR 4004 which previously had a unanimous Do Not Pass.

Rep. Devlin: Move a Do Not Pass and Place on the Consent Calendar

Rep. Lefor: second

Chairman Porter: We have a motion for a Do Not Pass and Place on the Consent Calendar SCR 4004. Discussion? Roll call vote 14 yes, 0 no, 0 absent. Rep. Anderson is carrier.

Date: _	3 -	16-	17	
Roll Cal	I Vote #	# :	1	_

2017 HOUSE STANDING COMMITTEE ROLL CALL VOTES BILL/RESOLUTION NO.

House	Energy	y & Nat	ural Re	esources	Committee
		□ Sul	ocomm	ittee	
Amendment LC# of Description:	r 				
Recommendation Other Actions	☐ Adopt Amendr☐ Do Pass ☐☐ As Amended☐☐ Place on Cons☐☐ Reconsider	Do No		□ Without Committee R□ Rerefer to Appropriati□	ons
Other Actions	- Reconsider				
Motion Made By _	Rep Ander	5011	Se	conded By Rep	Keiser
Represe	entatives	Yes	No	Representatives	Yes No
Chairman Porte				Rep. Lefor	
Vice Chairman	Damschen			Rep. Marschall	
Rep. Anderson			-	Rep. Roers Jones	
Rep. Bosch	100			Rep. Ruby	
Rep. Devlin	Voise			Rep. Seibel	
Rep. Heinert	10,	(A)			
Rep. Keiser		()		Rep. Mitskog	
	Car			Rep. Mock	
Total (Yes) _			No		
Absent					
Floor Assignment	Rep	And	lers	o^	

If the vote is on an amendment, briefly indicate intent:

Date: _	3-23	3-17	_
Roll Cal	I Vote #: _	١	

2017 HOUSE STANDING COMMITTEE ROLL CALL VOTES BILL/RESOLUTION NO. SCR 4004

House	Energ	y & Na	tural R	esources	Com	mittee
		□ Sul	bcomm	nittee		
Amendment LC# of Description:	r 					
Recommendation	☐ Adopt Amendr☐ Do Pass ☐☐ As Amended☐ Place on Cons	Do No		☐ Without Committee Re☐ Rerefer to Appropriatio		dation
Other Actions	Reconsider					
Motion Made By _	Rep Keise	X	Se	econded By Rep Se	ibel	
	entatives	Yes	No	Representatives	Yes	No
Chairman Porte				Rep. Lefor		
Vice Chairman	Damschen			Rep. Marschall		
Rep. Anderson				Rep. Roers Jones		
Rep. Bosch	111	9		Rep. Ruby		
Rep. Devlin	1019	A >		Rep. Seibel	-	
Rep. Heinert	V			D. Mital	-	
Rep. Keiser	70			Rep. Mitskog	-	
	12.09	A	0.1	Rep. Mock	-	
	MOTION	111	2			
		N.				
Total (Yes) _			No		100	
Absent						
Floor Assignment						

If the vote is on an amendment, briefly indicate intent:

Date:	3-	2	3_	17
Roll Call	Vote	#:	2)

2017 HOUSE STANDING COMMITTEE ROLL CALL VOTES BILL/RESOLUTION NO. 5 CR 4004

House	Energ	Com	mittee							
☐ Subcommittee										
Amendment LC# o Description:	r 									
Recommendation	 □ Adopt Amendment □ Do Pass □ Do Not Pass □ Without Committee Recommendation □ Rerefer to Appropriations □ Place on Consent Calendar 									
Other Actions	□ Reconsider □									
Motion Made By Rep Devlin Seconded By Rep Lefor										
Representatives		Yes	No	Representatives	Yes	No				
Chairman Porter		V		Rep. Lefor	V					
Vice Chairman Damschen		V		Rep. Marschall	V					
Rep. Anderson		V		Rep. Roers Jones	1					
Rep. Bosch		V		Rep. Ruby	V					
Rep. Devlin		-		Rep. Seibel						
Rep. Heinert		V		Day Mitalage						
Rep. Keiser		V		Rep. Mitskog	V /					
				Rep. Mock	- V					
					-					
Total (Yes) _	14		No	D						
Absent										
Floor Assignment Rep Anderson										

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

Module ID: h_stcomrep_53_003

Carrier: D. Anderson

SCR 4004: Energy and Natural Resources Committee (Rep. Porter, Chairman) recommends DO NOT PASS and BE PLACED ON THE CONSENT CALENDAR (14 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SCR 4004 was placed on the Tenth order on the calendar.