

DEIS MEETINGS - 14-916 15-137

BEMIDJI - JUNE 22, 2017 - 6:00 P.M.

(PRIVATE COMMENTS WITH COURT REPORTERS)

MINNESOTA DEPARTMENT OF COMMERCE

In the Matter of the Application of Enbridge Energy,
Limited Partnership for a Certificate of Need for the
Line 3 Pipeline Replacement Project in Minnesota from the
North Dakota Border to the Wisconsin Border.

PUC DOCKET NO: CN-14-916
OAH DOCKET NO: 65-2500-32764

In the Matter of the Application of Enbridge Energy,
Limited Partnership for a Route Permit for the Line 3
Pipeline Replacement Project in Minnesota from the North
Dakota Border to the Wisconsin Border

PUC DOCKET NO: PPL-15-137
OAH DOCKET NO: 65-2500-33377

Sanford Center and
George W. Nielson Convention Center
111 Event Center Drive NE
Bemidji, Minnesota

I N D E X

SPEAKER	PAGE
David Butcher	3
David Jerome Manuel	8
Matthew Watkins	10
Erika Bailey-Johnson	10
Brandy Larson	15
John Pechin	15
Lorna Hanes	15

1 MR. DAVID BUTCHER: My name is David
2 Butcher, D-A-V-I-D, B-U-T-C-H-E-R.

3 Okay. Well, you know, it's hard to know
4 what particular aspect of this particular project to
5 pick on because there's so many things wrong with
6 it. I mean, you know, an 800-pound relic in the
7 living room is climate change. I mean, we've added
8 10 more parts per million of carbon in just the last
9 four years. We're now 410 and the goal is 350 so
10 we're already 60 over the goals. We're adding, you
11 know, 10 parts per carbon, you know, 10 parts per
12 million of carbon every four years. It's not going
13 to take as long before we're going to make this
14 planet totally uninhabitable. I don't know what we
15 can even consider expanding oil lines, you know.

16 I understand Enbridge seems to think
17 there's a need to replace this particular oil line
18 because it's, you know, carrying oil, which is
19 apparently refined and then used, but they also want
20 to expand the capacity, which is my understanding,
21 which just adds more.

22 So I think we need really a further study
23 on how much, you know, more expansion we can take.
24 And I don't think we can take any, to be honest with
25 you. We should be shutting down oil as much as

1 possible because there are alternatives. I mean,
2 we're in the middle of a transition in energy, an
3 energy transition, if we're smart, to renewables.
4 Which I think, you know, if we get serious about it
5 can be used to replace a lot of what we use our
6 fossil fuels or oil for.

7 And, you know, the oil that comes out of
8 Alberta, the tar sands oil is some of the most
9 carbon dense oil that there is. I mean, I read that
10 it produces 17 to 30 percent more carbon just in the
11 process of getting it out of the ground and refining
12 it and whatnot, than normal. So, I mean, it's a
13 dirty oil, you know.

14 And then, you know, plus you've got, you
15 know, speaking of dirty oil, I mean, you know, you
16 look at how it affects the people in Alberta, the
17 Indigenous people there. I mean, we're so cautious
18 about wanting to placate our Indigenous people here,
19 which I think makes sense, I mean, they have a long
20 cultural history here and things that they rely
21 culturally and even economically on, like wild rice.
22 But, you know, if we were really serious about this,
23 we wouldn't even let that oil get across the border
24 because the people, the Indigenous people in Canada
25 are treated so harshly. I mean, they've had their

1 land essentially raped. People, you know, the
2 people that have to live in the vicinity of this tar
3 sands oil are getting higher rates of cancer, you
4 know, they're dying. There are more still births.
5 I mean, just everything under the sun where, you
6 know, people are exposed to this, and they very
7 often don't have the alternative of moving, you
8 know. So if we were really serious about, you know,
9 climate justice or environmental justice, we
10 wouldn't even let this oil into the country the way,
11 you know, the way the Indigenous people are treated
12 in Canada with the extraction of tar sands oil.

13 You know, the big oil companies are
14 saying, you know, it's wasted assets. They have
15 assets they can't use now because there's such a
16 glut of oil on the market. And, you know, and for
17 the foreseeable future, because we have other
18 countries coming on line with their oil like Libya
19 and Iraq, you know, they're expanding their oil.
20 And with the fracking in this country in places
21 where we thought we couldn't, you know, get at the
22 oil before, now we can, the lighter oil. You know,
23 that glut is going to continue on for the
24 foreseeable future and if we're smart we'll be
25 replacing fossil fuels with renewable energy.

1 And, you know, I just read today that
2 renewable energy has increased something like
3 139,000 percent in the last 20 years, or something
4 like that. Which compared to like the Internet or
5 to the Smart phones, which have increased about
6 30,000 percent, so you can see that solar, you know,
7 renewable energy is really taking off. And they'll
8 get better, as technologies evolve and as
9 technologies to address particular problems, like
10 storing current or whatever.

11 But, you know, I think that's kind of a
12 queue to -- you know, my fear is that, you know,
13 there's going to be a pipeline to nowhere. They're
14 going to build this pipeline and they want, what,
15 two and a half football fields, 750 yards corridor?
16 Which is just a humongous scar on the earth. Right
17 through the most iconic waters in Minnesota, which
18 is the Mississippi headwaters, you know. And not
19 only that scar, but the service roads have to be
20 built.

21 I mean, it sounds to me like they're
22 planning for more than one pipeline, you know. Why,
23 I don't know, because you certainly don't need 750
24 yards for one pipeline to go through, to build a
25 corridor, unless you're planning on putting in more

1 than one pipeline in eventually. You know, there
2 was the whole Sandpiper thing.

3 But, you know, and it's not only, you
4 know, the scar on the land, but it's if that
5 pipeline goes through there's going to be leaks. I
6 mean, there is not an oil pipeline in the world that
7 does not leak eventually. The Dakota Access
8 pipeline, which is new in, has already had two
9 leaks. It's a brand new pipeline, for God's sake,
10 you know.

11 So, I mean, when you add it all up, you
12 know, really the only alternative is no pipeline.
13 You know, I think if it's absolutely necessary then
14 it should be put in a corridor that already exists,
15 not a whole brand new one, which is going to disrupt
16 more, you know, the environment of the country, the
17 people who live, you know, in that particular area
18 where they're suggesting the corridor should go, the
19 Line 3 corridor. But any way you look at it, in the
20 big picture it doesn't make sense.

21 Like I say, how long can we keep fiddling
22 around? I mean, 410 parts of carbon per million,
23 that's an increase of 10 parts in just the last four
24 years. And, you know, Climate 350 is an
25 environmental group, which it said, you know, we

1 need to get to 350 if we're going to keep this
2 planet decently habitable. I mean, at the way we're
3 going we're going to hit 500. And a large part of
4 this planet is going to be uninhabitable, I mean,
5 people just aren't going to be able to live.

6 In the long run it's going to cause a lot
7 of problems because people are going to be
8 migrating, there are going to be droughts, you know,
9 they're going to be looking for other places to
10 live. In fact, I think there was a study put out,
11 some department within the Pentagon, that said that
12 climate change is our number one national security
13 problem for the foreseeable future because it's
14 going to result in, you know, people migrating,
15 being in conflict, or water, land, and, you know,
16 all the things that can lead to war. And which, you
17 know, I'm sure we'll find a way to try and get
18 involved in.

19 So, I mean, it just doesn't make sense.
20 I mean, at some point in time we got to say no.
21 We've got to be looking at the future, we can't stop
22 fiddling around. We've got to get serious about it.

23 Thank you very much.

24 MR. DAVID JEROME MANUEL: Okay. My name
25 is David Jerome Manuel, D-A-V-I-D, J-E-R-O-M-E,

1 M-A-N-U-E-L. I'm a citizen and resident of the
2 state of Minnesota. I live up in the Red Lake
3 Indian Reservation.

4 And I am opposed to the new pipeline
5 because I hunt and fish and harvest the wild rice
6 along the new proposed pipeline. My favorite ricing
7 river is the Moose Horn River near Cromwell,
8 Minnesota, where the pipe, the proposed pipeline is
9 going to go through if it's approved.

10 I believe that the new proposed pipeline
11 route is -- it goes through too many wetlands and
12 wild rice rivers, and lakes, too close to our
13 natural resources that are enjoyed by all
14 Minnesotans. Regardless of race or class, you know,
15 sex. I think that our natural resources here in the
16 state of Minnesota need to be protected at all
17 costs.

18 And while I am not against consumption of
19 energy for commerce or recreation, I believe that
20 our emphasis should be put on clean energy and solar
21 and wind and other forms of energy. And we need to
22 start thinking about the finite resource that oil
23 is. It's not infinite, there's just a limited
24 amount, and the environmental cost of extracting
25 that and the risks that we take going through a

1 pipeline I think are too great to allow and that's
2 why I am not in favor of the new pipeline route.

3 MR. MATTHEW WATKINS: Matthew Watkins.
4 M-A-T-T-H-E-W, W-A-T-K-I-N-S. And I'm here as a
5 business agent for Local 49 who was involved in the
6 pipeline before becoming an agent with Local 49.
7 And I fully feel that these projects are beneficial
8 to the economic status of Minnesota and society
9 overall. We have to look at the entire picture, not
10 just what affects Minnesota and our local economy.
11 The global market and demand for oil has not
12 decreased and there's no reason for the state of
13 Minnesota to lose out on their share of the economic
14 benefits of the oil industry.

15 I also believe it can be done safely and
16 effectively and believe the timeline should be
17 followed as far as the letter of the law in regards
18 to the process.

19 And that's really all I got to say today.
20 I'll keep it short and sweet.

21 MS. ERIKA BAILEY-JOHNSON: My name is
22 Erika, E-R-I-K-A, and my last name is hyphenated,
23 it's Bailey-Johnson, B as in boy, A-I-L-E-Y, hyphen,
24 Johnson, O-N.

25 So I am going to read this part, but then

1 I have just little pieces I'm going to augment with.

2 Okay. We do not need any more pipelines
3 running through Mother Earth risking soil and water
4 quality and climate stability for future
5 generations. It is not a question of whether there
6 will be a spill but when. Minnesota and the tribal
7 nations residing within its borders pride itself on
8 our lakes and rivers, our sacred waters.

9 Small pipeline leaks are difficult to
10 detect and clean soil and water are infinitely more
11 valuable than oil. Broader arguments exist about
12 the impacts pipelines have on treaty territory, the
13 degradation of habitat, and what to do with
14 pipelines when they are decommissioned.

15 One of the questions that I asked the
16 people inside the room was what the options were for
17 the pipeline. And one of the options I feel should
18 be that there is no new pipeline and that the old
19 Line 3 is removed. Our energy, transportation and
20 agricultural infrastructures are based upon a finite
21 resource. We need to figure out how to transition,
22 and the sooner the better, as fossil fuels have
23 resulted in negative impacts and tremendous risk on
24 our quality of life and the interconnected web upon
25 which we depend.

1 There is no perfect solution to
2 facilitate the transition, but we can certainly do
3 better. We can certainly increase conservation
4 efficiency and renewable energy projects. We can
5 certainly work to change our default settings and
6 not allow more fossil fuel infrastructure to become
7 established.

8 One of the examples of this is the amount
9 of food wasted in the United States each year. The
10 U.S. Department of Agriculture estimates that about
11 27 percent of food is wasted in the U.S. each year,
12 which equates to approximately 350 million barrels
13 of oil.

14 It's important to notice the emphasis on
15 the relationship of food and energy. Agricultural
16 productivity has increased dramatically thanks in
17 large part to the adoption of new technologies and
18 inputs, chemical fertilizers, which are all based on
19 fossil fuels. This has led to substantially higher
20 yields through much less human labor. This
21 agricultural transformation from human and animal
22 power to chemical power has left the food industry
23 entirely dependent on fossil fuels.

24 From my perspective, wasting 30 percent
25 of our food and agriculture industry is something

1 that we can do, something that we can -- it's
2 something that we can have an impact on in a much
3 broader way than building a new pipeline. And a
4 much better way than building a new pipeline.
5 Instead of building more or bigger pipelines, we
6 should be working to create less demand for this
7 limited resource and in fact removing pipelines.
8 Conservation and efficiency measures, more
9 fuel-efficient vehicles, as well as sensible
10 renewable energy installations can go a long way to
11 slow the demand for oil. Currently there are no
12 substitutes for many products made from oil. In
13 fact, it takes oil to make non-oil technologies,
14 like solar panels and wind turbines. We know we
15 must transition to a new fossil fuel-free era, while
16 using oil responsibly to produce systems that
17 eliminate the need for oil makes good sense.

18 It is typical the pipeline and fossil
19 fuel companies to assume that their projects will be
20 approved. They purchase pipes before final
21 approval. They build sections of the pipeline
22 before the entire line is approved. This is
23 arrogant and deceitful. This line risks clean air
24 and water, healthy soil, and a stable climate for
25 several generations, which are all worth more than

1 any drop of oil. Reducing the oil is far more
2 important than creating more oil infrastructure.

3 All of the jobs that have been touted by
4 the creation of this pipeline are short term. So
5 the big question is is this project needed for
6 Minnesota and my answer is a simple no. It's time
7 to transition away from a fossil fuel era and that's
8 good.

9 I'm trying to think if there is anything
10 else. I talked to her about three questions that I
11 had inside.

12 So one other point I want to make is
13 about the Canadian pipeline abatement procedure that
14 they already have on the books. And it's a very,
15 like, highly complex system that they have for
16 pipeline abandonment. So instead of there being an
17 option A, which is leave it in the ground, and an
18 option B, which is remove it from the ground, they
19 encourage like multiple techniques. So it would be,
20 depending on where the pipeline is, if it's under a
21 lake, it's really difficult to remove it without
22 some substantial risk, and so I think there should
23 be a combination of removal and abandonment
24 procedures that take place similar to what Canada
25 has already established.

1 Yeah. So I guess, finally, just the
2 certificate of need, I feel that this is not
3 necessary for Minnesota and poses risks and
4 short-term jobs.

5 And then as far as the environmental
6 impact for Minnesota, it is more than I am willing
7 to risk for my kids.

8 The end.

9 MS. BRANDY LARSON: Brandy, B-R-A-N-D-Y,
10 Larson, L-A-R-S-O-N.

11 I'm just a concerned citizen. And I
12 would like to see the EIS address more of pipeline
13 abandonment issues and address the economic impact
14 of employing local people to remove the pipeline.

15 MR. JOHN PECHIN: John Pechin, J-O-H-N,
16 P-E-C-H-I-N.

17 I just want to make a statement that I
18 feel -- I've read the draft environmental impact
19 statement, I feel it's a well done, comprehensive
20 document, that should help inform the Commission on
21 the decision-making.

22 MS. LORNA HANES: Okay. Lorna,
23 L-O-R-N-A, Hanes, H-A-N-E-S. G-I-I
24 W-E-D-I-N-O-O-K-W-E, Gii Wedinookwe, Anishinabe.

25 My biggest concern, I guess, would be

1 what is standing out at Standing Rock, also what's
2 going on in the Alberta tar sands area. My biggest
3 concern are the missing, murdered women and children
4 that go along with this pipeline and the extreme
5 extraction.

6 I kind of called out on the -- the
7 brotherhood, or whatever you want to call that, you
8 know, union guys. And I was told that I had fake
9 numbers. My numbers are not fake. There are over
10 close to 4,000 missing murdered women to this date
11 and the numbers are still growing.

12 I would like to know, there is only just
13 a few sentences of what they're going to do about
14 the problem with the sex trafficking and the sexual
15 abuse of women and children and also men too. So I
16 would like to have that be more of what is their
17 plan.

18 I can name numerous women's groups that
19 would be more than happy to help them out with that,
20 see what they want to do with all that. We've got
21 the Minnesota Women's Sexual Coalition, we have the
22 Missing Murdered Women's Coalition. I mean, there's
23 so many, many groups out there that have all the
24 facts and, you know, and I have had numerous friends
25 of mine missing and murdered too. Those are my

1 concerns.

2 I also was sexually attacked through
3 Morton County police and that wasn't good, but
4 that's what I am. I'm a water protector, if you
5 want to call me that. I'm a -- I'm just not going
6 to stand back and let that happen. I have little
7 ones at home, nieces and nephews and stuff that I'm
8 worried about. Things like that.

9 I don't know, like I told them before,
10 that I will be out on the line. I have been out on
11 the line. I have been riding my horse out on the
12 line and I will continue to do so. And I see you
13 out there, we're going to have a little talk about
14 what you're doing out there and stuff like that.

15 I would personally like to see myself how
16 they build and construct pipelines. I would also
17 like to see Enbridge, if they're going to do these
18 drastic things, if they can come out of the fossil
19 fuel industries and go into the, you know, the
20 alternative energies, that would be great. But for
21 the most part I would like to see Enbridge hire me
22 and some of my crew for, like, you know, just
23 walking the line and just being overseers of our
24 lands and our territory. And I'm for them to clean
25 up their mess. And I'm not for another pipeline

1 whatsoever.

2 We have the most pristine waters here, we
3 have the most pristine lands here, and I've watched
4 Enbridge ruin everybody around the world and I'm not
5 going to do that here. So I will be out there and I
6 will bring all 10,000, 15,000 of my friends, and
7 I'll times that by 10 and we'll see you all on the
8 front line. This isn't Standing Rock, this isn't
9 Morton County, this is Anishinabe territory and
10 they're not going to get away with it.

11 You tried to take away our hunting and
12 gathering rights and we took you to federal court
13 and it cost them \$11 million. We will do the same
14 with Enbridge. We will hold them up as long as we
15 can. And you bring this bull crap to my door, of
16 course I'm going to go into a warrior mentality and
17 that's what you're going to get.

18 But I'm a very peaceful women and I would
19 rather everybody would live in peace and just be a
20 community together and honor the gift that the
21 creator has given us, is this land, this precious
22 planet. This is all we have. There's not going to
23 be moving on this marsh shit and all this other
24 crap. It's really sad that they want to ruin the
25 earth. It's really so pathetic.

1 I'm tired of hearing all these old
2 people, all these elder white people talking about
3 how they want this and that. Their whole generation
4 has ruined this land and the water and the people
5 and it's time to stop. They're already on their way
6 out the door. They could give a shit what happens
7 to us here. They could give a fuck of what happens
8 to us here. And that's really pathetic. And I do
9 not look at them as my elders, I will have nothing
10 to learn from them. And they have a lot to learn
11 from us and I hope that the future generation can
12 understand that and live with us and be the
13 stewardship that we need them to be. Or else.

14 (Comments concluded.)
15
16
17
18
19
20
21
22
23
24
25

\$	15:24;18:9	borders (1)	certificate (1)	6:15,25;7:14,18,19
	apparently (1)	11:7	15:2	cost (2)
\$11 (1)	3:19	boy (1)	change (3)	9:24;18:13
18:13	approval (1)	10:23	3:7;8:12;12:5	costs (1)
	13:21	brand (2)	chemical (2)	9:17
A	approved (3)	7:9,15	12:18,22	countries (1)
	9:9;13:20,22	Brandy (2)	children (2)	5:18
	approximately (1)	15:9,9	16:3,15	country (3)
abandonment (3)	12:12	B-R-A-N-D-Y (1)	citizen (2)	5:10,20;7:16
14:16,23;15:13	area (2)	15:9	9:1;15:11	County (2)
abatement (1)	7:17;16:2	bring (2)	class (1)	17:3;18:9
14:13	arguments (1)	18:6,15	9:14	course (1)
able (1)	11:11	Broader (2)	clean (4)	18:16
8:5	around (3)	11:11;13:3	9:20;11:10;13:23;	court (1)
absolutely (1)	7:22;8:22;18:4	brotherhood (1)	17:24	18:12
7:13	arrogant (1)	16:7	climate (6)	crap (2)
abuse (1)	13:23	build (4)	3:7;5:9;7:24;8:12;	18:15,24
16:15	aspect (1)	6:14,24;13:21;	11:4;13:24	create (1)
Access (1)	3:4	17:16	close (2)	13:6
7:7	assets (2)	building (3)	9:12;16:10	creating (1)
across (1)	5:14,15	13:3,4,5	Coalition (2)	14:2
4:23	assume (1)	built (1)	16:21,22	creation (1)
add (1)	13:19	6:20	combination (1)	14:4
7:11	attacked (1)	bull (1)	14:23	creator (1)
added (1)	17:2	18:15	coming (1)	18:21
3:7	augment (1)	business (1)	5:18	crew (1)
adding (1)	11:1	10:5	Comments (1)	17:22
3:10	away (3)	BUTCHER (2)	19:14	Cromwell (1)
address (3)	14:7;18:10,11	3:1,2	commerce (1)	9:7
6:9;15:12,13		B-U-T-C-H-E-R (1)	9:19	cultural (1)
adds (1)	B	3:2	Commission (1)	4:20
3:21			15:20	culturally (1)
adoption (1)	back (1)	C	community (1)	4:21
12:17	17:6		18:20	current (1)
affects (2)	BAILEY-JOHNSON (2)	call (2)	companies (2)	6:10
4:16;10:10	10:21,23	16:7;17:5	5:13;13:19	Currently (1)
against (1)	barrels (1)	called (1)	compared (1)	13:11
9:18	12:12	16:6	6:4	
agent (2)	based (2)	can (20)	complex (1)	D
10:5,6	11:20;12:18	3:15,23,24;4:5;	14:15	
agricultural (3)	become (1)	5:22;6:6;7:21;8:16;	comprehensive (1)	Dakota (1)
11:20;12:15,21	12:6	10:15;12:2,3,4;13:1,1,	15:19	7:7
Agriculture (2)	becoming (1)	2,10;16:18;17:18;	concern (2)	date (1)
12:10,25	10:6	18:15;19:11	15:25;16:3	16:10
A-I-L-E-Y (1)	beneficial (1)	Canada (3)	concerned (1)	David (4)
10:23	10:7	4:24;5:12;14:24	15:11	3:1,1;8:24,25
air (1)	benefits (1)	Canadian (1)	concerns (1)	D-A-V-I-D (2)
13:23	10:14	14:13	17:1	3:2;8:25
Alberta (3)	better (4)	cancer (1)	concluded (1)	deceitful (1)
4:8,16;16:2	6:8;11:22;12:3;	5:3	19:14	13:23
allow (2)	13:4	capacity (1)	conflict (1)	decently (1)
10:1;12:6	big (3)	3:20	8:15	8:2
along (2)	5:13;7:20;14:5	carbon (6)	conservation (2)	decision-making (1)
9:6;16:4	bigger (1)	3:8,11,12;4:9,10;	12:3;13:8	15:21
alternative (3)	13:5	7:22	consider (1)	decommissioned (1)
5:7;7:12;17:20	biggest (2)	carrying (1)	3:15	11:14
alternatives (1)	15:25;16:2	3:18	construct (1)	decreased (1)
4:1	births (1)	cause (1)	17:16	10:12
amount (2)	5:4	8:6	consumption (1)	default (1)
9:24;12:8	books (1)	cautious (1)	9:18	12:5
animal (1)	14:14	4:17	continue (2)	degradation (1)
12:21	border (1)	certainly (4)	5:23;17:12	11:13
Anishinabe (2)	4:23	6:23;12:2,3,5	corridor (5)	demand (3)

10:11;13:6,11 dense (1) 4:9 department (2) 8:11;12:10 depend (1) 11:25 dependent (1) 12:23 depending (1) 14:20 detect (1) 11:10 difficult (2) 11:9;14:21 dirty (2) 4:13,15 disrupt (1) 7:15 document (1) 15:20 done (2) 10:15;15:19 door (2) 18:15;19:6 down (1) 3:25 draft (1) 15:18 dramatically (1) 12:16 drastic (1) 17:18 drop (1) 14:1 droughts (1) 8:8 dying (1) 5:4	14:10;19:13 emphasis (2) 9:20;12:14 employing (1) 15:14 Enbridge (5) 3:16;17:17,21;18:4,14 encourage (1) 14:19 end (1) 15:8 energies (1) 17:20 energy (12) 4:2,3;5:25;6:2,7;9:19,20,21;11:19;12:4,15;13:10 enjoyed (1) 9:13 entire (2) 10:9;13:22 entirely (1) 12:23 environment (1) 7:16 environmental (5) 5:9;7:25;9:24;15:5,18 equates (1) 12:12 era (2) 13:15;14:7 ERIKA (2) 10:21,22 E-R-I-K-A (1) 10:22 essentially (1) 5:1 established (2) 12:7;14:25 estimates (1) 12:10 even (4) 3:15;4:21,23;5:10 eventually (2) 7:1,7 everybody (2) 18:4,19 evolve (1) 6:8 examples (1) 12:8 exist (1) 11:11 exists (1) 7:14 expand (1) 3:20 expanding (2) 3:15;5:19 expansion (1) 3:23	exposed (1) 5:6 extracting (1) 9:24 extraction (2) 5:12;16:5 extreme (1) 16:4	F	facilitate (1) 12:2 fact (3) 8:10;13:7,13 facts (1) 16:24 fake (2) 16:8,9 far (3) 10:17;14:1;15:5 favor (1) 10:2 favorite (1) 9:6 fear (1) 6:12 federal (1) 18:12 feel (5) 10:7;11:17;15:2,18,19 fertilizers (1) 12:18 few (1) 16:13 fiddling (2) 7:21;8:22 fields (1) 6:15 figure (1) 11:21 final (1) 13:20 finally (1) 15:1 find (1) 8:17 finite (2) 9:22;11:20 fish (1) 9:5 followed (1) 10:17 food (5) 12:9,11,15,22,25 football (1) 6:15 foreseeable (3) 5:17,24;8:13 forms (1) 9:21 fossil (10)	4:6;5:25;11:22;12:6,19,23;13:15,18;14:7;17:18 four (3) 3:9,12;7:23 fracking (1) 5:20 friends (2) 16:24;18:6 front (1) 18:8 fuck (1) 19:7 fuel (4) 12:6;13:19;14:7;17:19 fuel-efficient (1) 13:9 fuel-free (1) 13:15 fuels (5) 4:6;5:25;11:22;12:19,23 fully (1) 10:7 further (1) 3:22 future (6) 5:17,24;8:13,21;11:4;19:11	G	gathering (1) 18:12 generation (2) 19:3,11 generations (2) 11:5;13:25 gift (1) 18:20 Gii (1) 15:24 G-I-I (1) 15:23 given (1) 18:21 global (1) 10:11 glut (2) 5:16,23 goal (1) 3:9 goals (1) 3:10 God's (1) 7:9 goes (2) 7:5;9:11 good (3) 13:17;14:8;17:3 great (2) 10:1;17:20	ground (3) 4:11;14:17,18 group (1) 7:25 groups (2) 16:18,23 growing (1) 16:11 guess (2) 15:1,25 guys (1) 16:8	H	habitable (1) 8:2 habitat (1) 11:13 half (1) 6:15 HANES (2) 15:22,23 H-A-N-E-S (1) 15:23 happen (1) 17:6 happens (2) 19:6,7 happy (1) 16:19 hard (1) 3:3 harshly (1) 4:25 harvest (1) 9:5 headwaters (1) 6:18 healthy (1) 13:24 hearing (1) 19:1 help (2) 15:20;16:19 higher (2) 5:3;12:19 highly (1) 14:15 hire (1) 17:21 history (1) 4:20 hit (1) 8:3 hold (1) 18:14 home (1) 17:7 honest (1) 3:24 honor (1) 18:20
E										
earth (3) 6:16;11:3;18:25 economic (3) 10:8,13;15:13 economically (1) 4:21 economy (1) 10:10 effectively (1) 10:16 efficiency (2) 12:4;13:8 EIS (1) 15:12 elder (1) 19:2 elders (1) 19:9 eliminate (1) 13:17 else (2)										

hope (1) 19:11 Horn (1) 9:7 horse (1) 17:11 human (2) 12:20,21 humongous (1) 6:16 hunt (1) 9:5 hunting (1) 18:11 hyphen (1) 10:23 hyphenated (1) 10:22	into (3) 5:10;17:19;18:16 involved (2) 8:18;10:5 Iraq (1) 5:19 issues (1) 15:13	7:5,9;11:9 learn (2) 19:10,10 leave (1) 14:17 led (1) 12:19 left (1) 12:22 less (2) 12:20;13:6 letter (1) 10:17 Libya (1) 5:18 life (1) 11:24 lighter (1) 5:22 limited (2) 9:23;13:7 line (11) 3:17;5:18;7:19; 11:19;13:22,23; 17:10,11,12,23;18:8 lines (1) 3:15 little (3) 11:1;17:6,13 live (7) 5:2;7:17;8:5,10; 9:2;18:19;19:12 living (1) 3:7 Local (4) 10:5,6,10;15:14 long (6) 3:13;4:19;7:21;8:6; 13:10;18:14 look (4) 4:16;7:19;10:9; 19:9 looking (2) 8:9,21 LORNA (2) 15:22,22 L-O-R-N-A (1) 15:23 lose (1) 10:13 lot (3) 4:5;8:6;19:10	16:23,23 market (2) 5:16;10:11 marsh (1) 18:23 MATTHEW (2) 10:3,3 M-A-T-T-H-E-W (1) 10:4 mean (19) 3:6,7;4:1,9,12,15, 17,19,25;5:5;6:21; 7:6,11,22;8:2,4,19,20; 16:22 measures (1) 13:8 men (1) 16:15 mentality (1) 18:16 mess (1) 17:25 middle (1) 4:2 migrating (2) 8:8,14 million (5) 3:8,12;7:22;12:12; 18:13 mine (1) 16:25 Minnesota (12) 6:17;9:2,8,16;10:8, 10,13;11:6;14:6;15:3, 6;16:21 Minnesotans (1) 9:14 missing (4) 16:3,10,22,25 Mississippi (1) 6:18 Moose (1) 9:7 more (20) 3:8,21,23;4:10;5:4; 6:22,25;7:16;11:2,10; 12:6;13:5,8,25;14:1, 2;15:6,12;16:16,19 Morton (2) 17:3;18:9 most (5) 4:8;6:17;17:21; 18:2,3 Mother (1) 11:3 moving (2) 5:7;18:23 much (6) 3:23,25;8:23;12:20; 13:2,4 multiple (1) 14:19 murdered (4)	16:3,10,22,25 must (1) 13:15 myself (1) 17:15
I	J			N
iconic (1) 6:17 impact (4) 13:2;15:6,13,18 impacts (2) 11:12,23 important (2) 12:14;14:2 increase (2) 7:23;12:3 increased (3) 6:2,5;12:16 Indian (1) 9:3 Indigenous (4) 4:17,18,24;5:11 industries (1) 17:19 industry (3) 10:14;12:22,25 infinite (1) 9:23 infinitely (1) 11:10 inform (1) 15:20 infrastructure (2) 12:6;14:2 infrastructures (1) 11:20 inputs (1) 12:18 inside (2) 11:16;14:11 installations (1) 13:10 Instead (2) 13:5;14:16 interconnected (1) 11:24 Internet (1) 6:4	JEROME (2) 8:24,25 J-E-R-O-M-E (1) 8:25 jobs (2) 14:3;15:4 JOHN (2) 15:15,15 J-O-H-N (1) 15:15 Johnson (1) 10:24 justice (2) 5:9,9			name (5) 3:1;8:24;10:21,22; 16:18 national (1) 8:12 nations (1) 11:7 natural (2) 9:13,15 near (1) 9:7 necessary (2) 7:13;15:3 need (11) 3:17,22;6:23;8:1; 9:16,21;11:2,21; 13:17;15:2;19:13 needed (1) 14:5 negative (1) 11:23 nephews (1) 17:7 new (12) 7:8,9,15;9:4,6,10; 10:2;11:18;12:17; 13:3,4,15 nieces (1) 17:7 non-oil (1) 13:13 normal (1) 4:12 notice (1) 12:14 nowhere (1) 6:13 number (1) 8:12 numbers (3) 16:9,9,11 numerous (2) 16:18,24
	K			
	keep (3) 7:21;8:1;10:20 kids (1) 15:7 kind (2) 6:11;16:6			
	L			
	labor (1) 12:20 Lake (2) 9:2;14:21 lakes (2) 9:12;11:8 land (5) 5:1;7:4;8:15;18:21; 19:4 lands (2) 17:24;18:3 large (2) 8:3;12:17 L-A-R-S-O-N (1) 15:10 LARSON (2) 15:9,10 last (4) 3:8;6:3;7:23;10:22 law (1) 10:17 lead (1) 8:16 leak (1) 7:7 leaks (3)	M makes (2) 4:19;13:17 MANUEL (2) 8:24,25 M-A-N-U-E-L (1) 9:1 many (5) 3:5;9:11;13:12;		O
				off (1) 6:7 often (1) 5:7 oil (34) 3:15,17,18,25;4:6,7, 8,9,13,15,23;5:3,10, 12,13,16,18,19,22,22; 7:6;9:22;10:11,14;

11:11;12:13;13:11, 12:13,16,17;14:1,1,2 old (2) 11:18;19:1 O-N (1) 10:24 one (9) 6:22,24;7:1,15; 8:12;11:15,17;12:8; 14:12 ones (1) 17:7 only (4) 6:19;7:3,12;16:12 opposed (1) 9:4 option (2) 14:17,18 options (2) 11:16,17 out (17) 4:7,11;8:10;10:13; 11:21;16:1,6,19,23; 17:10,10,11,13,14,18; 18:5;19:6 over (2) 3:10;16:9 overall (1) 10:9 overseers (1) 17:23	4:10;6:3,6;12:11,24 perfect (1) 12:1 personally (1) 17:15 perspective (1) 12:24 phones (1) 6:5 pick (1) 3:5 picture (2) 7:20;10:9 pieces (1) 11:1 pipe (1) 9:8 pipeline (32) 6:13,14,22,24;7:1,5, 6,8,9,12;9:4,6,8,10; 10:1,2,6;11:9,17,18; 13:3,4,18,21;14:4,13, 16,20;15:12,14;16:4; 17:25 pipelines (6) 11:2,12,14;13:5,7; 17:16 pipes (1) 13:20 placate (1) 4:18 place (1) 14:24 places (2) 5:20;8:9 plan (1) 16:17 planet (4) 3:14;8:2,4;18:22 planning (2) 6:22,25 plus (1) 4:14 point (2) 8:20;14:12 police (1) 17:3 poses (1) 15:3 possible (1) 4:1 power (2) 12:22,22 precious (1) 18:21 pride (1) 11:7 pristine (2) 18:2,3 problem (2) 8:13;16:14 problems (2) 6:9;8:7	procedure (1) 14:13 procedures (1) 14:24 process (2) 4:11;10:18 produce (1) 13:16 produces (1) 4:10 productivity (1) 12:16 products (1) 13:12 project (2) 3:4;14:5 projects (3) 10:7;12:4;13:19 proposed (3) 9:6,8,10 protected (1) 9:16 protector (1) 17:4 purchase (1) 13:20 put (3) 7:14;8:10;9:20 putting (1) 6:25	refined (1) 3:19 refining (1) 4:11 Regardless (1) 9:14 regards (1) 10:17 relationship (1) 12:15 relic (1) 3:6 rely (1) 4:20 removal (1) 14:23 remove (3) 14:18,21;15:14 removed (1) 11:19 removing (1) 13:7 renewable (5) 5:25;6:2,7;12:4; 13:10 renewables (1) 4:3 replace (2) 3:17;4:5 replacing (1) 5:25 Reservation (1) 9:3 resident (1) 9:1 residing (1) 11:7 resource (3) 9:22;11:21;13:7 resources (2) 9:13,15 responsibly (1) 13:16 result (1) 8:14 resulted (1) 11:23 rice (3) 4:21;9:5,12 ricing (1) 9:6 riding (1) 17:11 Right (1) 6:16 rights (1) 18:12 risk (3) 11:23;14:22;15:7 risking (1) 11:3 risks (3) 9:25;13:23;15:3	river (2) 9:7,7 rivers (2) 9:12;11:8 roads (1) 6:19 Rock (2) 16:1;18:8 room (2) 3:7;11:16 route (2) 9:11;10:2 ruin (2) 18:4,24 ruined (1) 19:4 run (1) 8:6 running (1) 11:3
P		Q		S
panels (1) 13:14 part (4) 8:3;10:25;12:17; 17:21 particular (5) 3:4,4,17;6:9;7:17 parts (5) 3:8,11,11;7:22,23 pathetic (2) 18:25;19:8 peace (1) 18:19 peaceful (1) 18:18 PECHIN (2) 15:15,15 P-E-C-H-I-N (1) 15:16 Pentagon (1) 8:11 people (18) 4:16,17,18,24,24; 5:1,2,6,11;7:17;8:5,7, 14;11:16;15:14;19:2, 2,4 per (4) 3:8,11,11;7:22 percent (5)		quality (2) 11:4,24 queue (1) 6:12	R	sacred (1) 11:8 sad (1) 18:24 safely (1) 10:15 sake (1) 7:9 same (1) 18:13 Sandpiper (1) 7:2 sands (4) 4:8;5:3,12;16:2 saying (1) 5:14 scar (3) 6:16,19;7:4 sections (1) 13:21 security (1) 8:12 seems (1) 3:16 sense (4) 4:19;7:20;8:19; 13:17 sensible (1) 13:9 sentences (1) 16:13 serious (4) 4:4,22;5:8;8:22 service (1) 6:19 settings (1) 12:5 several (1) 13:25 sex (2)

9:15;16:14 sexual (2) 16:14,21 sexually (1) 17:2 share (1) 10:13 shit (2) 18:23;19:6 short (2) 10:20;14:4 short-term (1) 15:4 shutting (1) 3:25 similar (1) 14:24 simple (1) 14:6 slow (1) 13:11 Small (1) 11:9 smart (3) 4:3;5:24;6:5 society (1) 10:8 soil (3) 11:3,10;13:24 solar (3) 6:6;9:20;13:14 solution (1) 12:1 sooner (1) 11:22 sounds (1) 6:21 speaking (1) 4:15 spill (1) 11:6 stability (1) 11:4 stable (1) 13:24 stand (1) 17:6 standing (3) 16:1,1;18:8 start (1) 9:22 state (3) 9:2,16;10:12 statement (2) 15:17,19 States (1) 12:9 status (1) 10:8 stewardship (1) 19:13 still (2) 5:4;16:11	stop (2) 8:21;19:5 storing (1) 6:10 study (2) 3:22;8:10 stuff (2) 17:7,14 substantial (1) 14:22 substantially (1) 12:19 substitutes (1) 13:12 suggesting (1) 7:18 sun (1) 5:5 sure (1) 8:17 sweet (1) 10:20 system (1) 14:15 systems (1) 13:16	told (2) 16:8;17:9 took (1) 18:12 totally (1) 3:14 touted (1) 14:3 trafficking (1) 16:14 transformation (1) 12:21 transition (6) 4:2,3;11:21;12:2; 13:15;14:7 transportation (1) 11:19 treated (2) 4:25;5:11 treaty (1) 11:12 tremendous (1) 11:23 tribal (1) 11:6 tried (1) 18:11 try (1) 8:17 trying (1) 14:9 turbines (1) 13:14 two (2) 6:15;7:8 typical (1) 13:18	V valuable (1) 11:11 vehicles (1) 13:9 vicinity (1) 5:2 W walking (1) 17:23 war (1) 8:16 warrior (1) 18:16 wasted (3) 5:14;12:9,11 wasting (1) 12:24 watched (1) 18:3 water (6) 8:15;11:3,10;13:24; 17:4;19:4 waters (3) 6:17;11:8;18:2 WATKINS (2) 10:3,3 W-A-T-K-I-N-S (1) 10:4 way (9) 5:10,11;7:19;8:2, 17:13;3,4,10;19:5 web (1) 11:24 Wedinookwe (1) 15:24 W-E-D-I-N-O-O-K-W-E (1) 15:24 wetlands (1) 9:11 whatnot (1) 4:12 what's (1) 16:1 whatsoever (1) 18:1 white (1) 19:2 whole (3) 7:2,15;19:3 wild (3) 4:21;9:5,12 willing (1) 15:6 wind (2) 9:21;13:14 within (2) 8:11;11:7 without (1)	14:21 women (4) 16:3,10,15;18:18 women's (3) 16:18,21,22 work (1) 12:5 working (1) 13:6 world (2) 7:6;18:4 worried (1) 17:8 worth (1) 13:25 wrong (1) 3:5 Y yards (2) 6:15,24 year (2) 12:9,11 years (4) 3:9,12;6:3;7:24 yields (1) 12:20 1 10 (5) 3:8,11,11;7:23;18:7 10,000 (1) 18:6 139,000 (1) 6:3 15,000 (1) 18:6 17 (1) 4:10 2 20 (1) 6:3 27 (1) 12:11 3 3 (2) 7:19;11:19 30 (2) 4:10;12:24 30,000 (1) 6:6 350 (4) 3:9;7:24;8:1;12:12 4 4,000 (1)
	T talk (1) 17:13 talked (1) 14:10 talking (1) 19:2 tar (4) 4:8;5:2,12;16:2 techniques (1) 14:19 technologies (4) 6:8,9;12:17;13:13 term (1) 14:4 territory (3) 11:12;17:24;18:9 thanks (1) 12:16 thinking (1) 9:22 thought (1) 5:21 three (1) 14:10 timeline (1) 10:16 times (1) 18:7 tired (1) 19:1 today (2) 6:1;10:19 together (1) 18:20	U under (2) 5:5;14:20 uninhabitable (2) 3:14;8:4 union (1) 16:8 United (1) 12:9 unless (1) 6:25 up (4) 7:11;9:2;17:25; 18:14 upon (2) 11:20,24 use (2) 4:5;5:15 used (2) 3:19;4:5 using (1) 13:16		

16:10 410 (2) 3:9;7:22 49 (2) 10:5,6				
5				
500 (1) 8:3				
6				
60 (1) 3:10				
7				
750 (2) 6:15,23				
8				
800-pound (1) 3:6				