## PUBLIC HEARING 8/2/2017

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2	HIGH VOLUME HORIZONTAL HYDRAULIC FRACTURING ACT	
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6	PUBLIC HEARING	
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1	TRANSCRIPT OF PROCEEDINGS
2	*****
3	MR. SCHUERING: Good morning, ladies and
4	gentlemen. This is Illinois Department of Natural
5	Resources matter number HVHHF 000001 in the matter of
6	the application of Woolsey Operating Company, LLC who
7	has filed its application for a permit to conduct high
8	volume horizontal fracturing operations at a well to be
9	located in White County, Illinois. This hearing is
10	being held pursuant to part 245 of title 62 of the
11	Illinois Administrative Code and in particular section
12	245.270, which provides for a public hearing upon the
13	request of members of the public.
14	The there have been several requests for
15	a public hearing made. There have been three that were
16	determined to meet the statutory standard. There were
17	several that did not. We're going to take up the
18	matter of one of those denials here in just a minute to
19	potentially hear some additional evidence on this.
20	This is a hearing conducted pursuant to the Open
21	Meetings Act and the Administrative Procedure Act.
22	With respect to the Open Meetings Act, if a witness
23	elects for whatever reason to not have their testimony
24	video recorded, they have that option. I will instruct
25	you to turn off your video recordings for the duration

- 1 of that testimony. Aside from that, you are free to
- 2 conduct video and audio recording in a manner that you
- 3 see fit as long as it does not interfere with the
- 4 conduct of the hearing.
- 5 This hearing is not a popularity contest or
- 6 not one where we're going to take public comments from
- 7 those of you in the audience. It will allow testimony
- 8 from those persons who have requested a hearing.
- 9 would ask for your cooperation with keeping background
- 10 noise and certainly applause demonstrations, cheers,
- 11 and things of that nature from occurring. Please
- 12 silence or shut off your cell phones. If they ring, I
- 13 will ask the fine gentlemen of the White County
- 14 Sheriff's Department to relieve you of your cell phone
- 15 until the end of this hearing.
- 16 We will take periodic breaks. You are free
- 17 to come and go from the hearing room as you see fit.
- 18 Please do so quietly, and with that, I am going to
- 19 start by asking the various parties to enter their
- 20 appearance starting with the Illinois Department of
- 21 Natural Resources.
- 22 MR. SUTHARD: I'm Andrew Suthard with the
- 23 Illinois Department of Natural Resources. Obviously I
- 24 represent the Department in this matter. I would just
- 25 like to note for the record that the Department's sole

- 1 role in this matter is limited to creating a complete
- 2 and accurate record of this public hearing. As a
- 3 preliminary matter, I do have some exhibits to enter
- 4 into evidence. I will -- would you like me to do that
- 5 now or after everybody enters their appearance?
- 6 MR. SCHUERING: Let's get all the
- 7 appearances done, and then we'll do that.
- 8 MR. SUTHARD: All right. Thank you.
- 9 MR. SCHUERING: Mr. Tynes.
- 10 MR. TYNES: My name is Jarred Tynes. I am
- 11 the attorney for Woolsey Operating Company representing
- 12 the applicants today. I'll just introduce the folks at
- 13 the table. John Beckham is an attorney from our office
- 14 helping me with this. We have Mark Sooter and Dean
- 15 Pattison, who are representatives of Woolsey.
- MR. SCHUERING: Okay. Thank you.
- 17 Mr. Mastrangelo.
- 18 MR. MASTRANGELO: Vito Mastrangelo. I am an
- 19 attorney from southern Illinois. I represent the
- 20 requestor of this hearing Ms. McKasson, Mr. Walker, and
- 21 Ms. Fiorino.
- 22 MR. SMALLHORN: Jacob Smallhorn. I am an
- 23 attorney with Tapella and Eberspacher, and I am
- 24 co-counsel with Mr. Mastrangelo for the requestor and
- 25 the participants McKasson, Walker, and Fiorino.

MR. SCHUERING: And also at the counsel 1 2. table is Mrs. Mona Weaver; is that correct? MRS. WEAVER: Yes. 3 4 MR. SCHUERING: And Mrs. Weaver and her 5 husband, who is also present in the room but not at 6 counsel table, made a request for participation in the public hearing that I denied, and they have asked leave 7 to present some additional information and then 8 9 participate in the hearing. And we'll get back to you in just a second, Mrs. Weaver. 10 Mr. Suthard, you have exhibits --11 preliminary exhibits to introduce into the record, sir. 12 13 MR. SUTHARD: Yes, your Honor. I have what 14 has been previously marked for identification as the Department Exhibits Numbers 1 through 7. I will go 15 through them. I think Mr. Heidinger needs to stack 16 these. Your Honor, I will first offer into evidence 17 HVHHF 000001 Woolsey Operating Company's original 18 19 application to conduct high volume horizontal hydraulic fracturing activities. As I indicated, this has been 20 21 previously marked as Department Exhibit Number 1. 2.2 MR. SCHUERING: Any objection, Mr. Tynes? 23 MR. TYNES: No. 24 MR. SCHUERING: Mr. Suthard -- or 25 Mr. Smallhorn?

1	MR. SMALLHORN: No objection.
2	MR. SCHUERING: All right. Without
3	objection it'll be entered into the record.
4	MR. SUTHARD: Thank you, your Honor.
5	Department Exhibit Number 2 is the notice posted on the
6	Illinois Department of Natural Resources website
7	following receipt of the original application.
8	MR. SCHUERING: Mr. Tynes?
9	MR. TYNES: No objection.
10	MR. SCHUERING: Mr. Smallhorn?
11	MR. SMALLHORN: None.
12	MR. SUTHARD: Department Exhibit Number 3 is
13	Woolsey Operating Company's application as
14	supplemented.
15	MR. SCHUERING: Mr. Tynes?
16	MR. TYNES: No objection.
17	MR. SCHUERING: Mr. Smallhorn?
18	MR. SMALLHORN: None.
19	MR. SUTHARD: Department Exhibit Number 4 is
20	the notice of receipt of the supplemental application
21	that was posted on the Department's website.
22	MR. SCHUERING: Mr. Smallhorn?
23	MR. SMALLHORN: No objection.
24	MR. SCHUERING: Mr. Tynes?
25	MR. TYNES: No objection.

MR. SCHUERING: And guess whose cell phone 1 2. went off. 3 MR. SMALLHORN: Sheriff. 4 MR. SCHUERING: That was not intentional by 5 the way. 6 MR. SUTHARD: Department Exhibit Number 5 is the tear sheet from running the posted notice in the 7 8 Carmi Times on Friday July 21, 2017, and Department Exhibit Number 6 is the tear sheet from running the 9 notice of this public hearing in the Carmi Times on 10 Monday July 31, 2017. 11 Your Honor, I do not have the certification 12 from the Carmi Times. I was notified that the woman 13 14 who handled that had a family matter and couldn't e-mail that to us. I can offer Department Exhibit 15 Number 7 into evidence, which is that e-mail, or I can 16 request that the evidence remain open until I can 17 obtain that certification to enter it in at that time. 18 19 MR. SCHUERING: All right. Do you have any objections to the tear sheets? 20 MR. SMALLHORN: Your Honor, on behalf of our 21 clients, we waive any objection regarding any 22 deficiency regarding notice of this hearing. 23 24 MR. SCHUERING: Okay. Mr. Tynes? 25 MR. TYNES: No objections.

MR. SCHUERING: Okay. We will keep the 1 2. evidence open until the publisher's certificate is received by the Department, and it'll be made a part of 3 4 the record. Copies will be supplied to all parties. 5 All right. 6 MR. MASTRANGELO: Your Honor, if I might. 7 MR. SCHUERING: Yeah. MR. MASTRANGELO: If Mr. Suthard's done with 8 9 his exhibits, I wonder if the deficiency letter was part of what was entered there? 10 MR. SCHUERING: Which? 11 12 MR. MASTRANGELO: The deficiency letter that 13 IDNR issued in response to the application. I mean, 14 there was an application and a supplement. didn't hear about that. 15 MR. SUTHARD: Your Honor, I believe the 16 17 supplemental application that was just entered into evidence includes that letter. It includes -- does it 18 includes the letter? I believe it includes Woolsey's 19 response to that letter on top. It does not appear to 20 21 include the actual deficiency letter in and of itself. 2.2 MR. SCHUERING: Do you want to offer it? 23 MR. MASTRANGELO: I probably do have a copy. 24 MR. SCHUERING: Okay. We can take it up now, or we can take it up before we end today. 25

1 MR. MASTRANGELO: That's just a 2. recordkeeping matter. That's fine. 3 MR. SCHUERING: Yeah. Okay. Without 4 objection of any of the parties, Departments Exhibits 1 through 7 are admitted and will be made part of the 5 6 record of this hearing. I understand by agreement of the Department, the applicant, and the requestor we're 7 8 going to permit Mrs. Weaver to speak first and address 9 that matter, and then we'll go forward with the requestor from there. Am I right, gentlemen? Is that 10 what we're doing? 11 MR. SUTHARD: Yes. 12 13 MR. SCHUERING: Okay. Mrs. Weaver, the 14 floor is yours, ma'am. 15 MRS. WEAVER: Pardon? 16 MR. SCHUERING: You -- let's try this this way. Let me ask you a few questions. You and your 17 husband submitted a request for participation to the 18 19 department; is that correct? 20 MRS. WEAVER: Yes. 21 MR. SCHUERING: And you indicated in that 22 request that you and your husband were the owners of 23 603 acres of farmland. 24 MRS. WEAVER: Correct. 25 MR. SCHUERING: Your names and residence

address were included on that submittal to the 1 2. Department; is that correct? 3 MRS. WEAVER: Yes, yes. 4 MR. SCHUERING: Okay. Your request said that you did not want your land contaminated. 5 6 MRS. WEAVER: Correct. 7 MR. SCHUERING: What I indicated in my 8 refusal was that you had not indicated what you meant 9 by contamination, and for those of you who are recording, Mrs. Weaver would prefer not to be recorded. 10 MRS. WEAVER: I own the mineral rights. 11 12 MR. SCHUERING: And you own the mineral 13 rights. Okay. I indicated that you had not alleged a 14 specific injury. Okay. Which I'm going to let you speak to in a minute, and you had not told us in your 15 application where your land was with respect to the 16 proposed well site. So let's start with that. How far 17 18 is it from your land to the proposed well site? 19 MRS. WEAVER: The way the crow flies about six miles. 20 21 MR. SCHUERING: Okay. Are you located in 22 White County? 23 MRS. WEAVER: No. Hamilton County. 24 MR. SCHUERING: Hamilton County. Okay. And what was your concern with respect to contamination of 25

your land? 1 MRS. WEAVER: Well, I don't want nothing 2. disturbed in my property -- the mineral rights and 3 4 things, and I've got large palms and a big lake and a lot of fish and things in it that we enjoy. My 5 6 grandchildren fishes. 7 MR. SCHUERING: Okay. And what -- what 8 concern do you have that you have been told or have 9 read about that would cause what you describe as contamination or you said here damage to your property 10 as a result of the application? 11 MRS. WEAVER: I don't want the water 12 13 contaminated. 14 MR. SCHUERING: Okay. MRS. WEAVER: Spoiled. Whatever you want to 15 call it. 16 17 MR. SCHUERING: Okay. Do you have any specific evidence that you'd like to offer to show that 18 19 somehow the activities of the applicant if the permit is granted will directly impact you? Have you been 20 21 advised by anyone that there is something about what 22 Woolsey will be doing that will directly affect the 23 water on your land or --24 MRS. WEAVER: Yes. 25 MR. SCHUERING: -- your mineral rights?

MRS. WEAVER: I've been told that it could 1 be affected. 2. 3 MR. SCHUERING: Okay. And how would it be 4 affected? MRS. WEAVER: The chemicals and things 5 leaking into the ground. 6 7 MR. SCHUERING: Okay. So your concern is 8 that compounds that Woolsey may use could somehow 9 contaminate either your land or your water? MRS. WEAVER: What I've been told. 10 MR. SCHUERING: Okay. Did you have any --11 beyond what you've been told, do you have any specific 12 13 documents or other materials that you want to submit to 14 the hearing in support of that, and it's okay if you 15 don't. 16 MRS. WEAVER: No. I don't. 17 MR. SCHUERING: Okay. 18 MRS. WEAVER: I filled out a bunch of papers 19 and mailed them in. 20 MR. SCHUERING: Okay. Okay. And we received those. That was --21 22 MRS. WEAVER: Good. 23 MR. SCHUERING: That was the basis. Do you 24 have anything else to add? 25 MRS. WEAVER: Right now probably not, but

later I'll probably think of something. 1 MR. SCHUERING: Mr. Suthard, do you have any 2. questions of this witness? 3 4 MR. SUTHARD: I do not, your Honor. 5 MR. SCHUERING: Mr. Tynes? MR. TYNES: No, sir. 6 7 MR. SCHUERING: Mr. Mastrangelo, 8 Mr. Smallhorn, do you have any questions? 9 MR. MASTRANGELO: I don't think so. I just want -- except to try to get a little more accurate 10 with where she's located. So from where we are right 11 12 now. MRS. WEAVER: About seven miles west and a 13 14 quarter mile south. Have been on our same old farm in the same house this coming December it'll be 70 years. 15 16 MR. SCHUERING: Congratulations. 17 MRS. WEAVER: Thank you. 18 MR. SCHUERING: So are you -- you're saying 19 that your real estate, your home -- and your home is seven miles west and a quarter mile south of the 20 21 proposed well site. Okay. 22 MRS. WEAVER: Well, seven miles west of 23 here. 24 MR. SCHUERING: Got it. Okay. So seven 25 miles --

MRS. WEAVER: I said the way the crow flies. 1 I understand. 2. MR. SCHUERING: No. we're trying to do -- we all had the same difficulty. 3 4 MRS. WEAVER: Yeah. 5 MR. SCHUERING: We -- we were looking your property up on GPS, and at least two of us had a little 6 bit of difficulty locating the specific tract. 7 8 MRS. WEAVER: Well, follow me home today. 9 They can see it. 10 MR. SCHUERING: There you go. I can do that. So can -- does that mean we can all come for 11 lunch? 12 13 MRS. WEAVER: Sure. Why not. 14 MR. SCHUERING: Okay. MRS. WEAVER: Got a lot of deer meat. 15 16 MR. SCHUERING: There you go. 17 MRS. WEAVER: I'm 87 and I still deer hunt. 18 MR. SCHUERING: All right. Do you have 19 anything else that you'd like to add? 20 MRS. WEAVER: I'm glad I was here today. Glad I was able. 21 22 MR. SCHUERING: Well, we're glad to have 23 you. 24 MRS. WEAVER: I got my hands full with my 25 husband. I take care of him at home, and I'm going to

- 1 stay there till they carry me out.
- 2 MR. SCHUERING: Congratulations. Ma'am,
- 3 until 5 p.m. tomorrow --
- 4 MRS. WEAVER: Okay.
- 5 MR. SCHUERING: Okay. If you have any
- 6 written material that you wish to submit, okay, in
- 7 support of what you have said here today, you can just
- 8 stick it in the mail to the Department, and it will be
- 9 made a part of your testimony.
- 10 MRS. WEAVER: Okay. Thank you.
- 11 MR. SCHUERING: Thank you for coming. If no
- 12 one else has any further questions, I'm going to
- dismiss you, and your participation in the hearing has
- 14 been made a part of the record that will be reported to
- 15 the Department.
- 16 MRS. WEAVER: Thank you. Thank you.
- 17 MR. SCHUERING: Anything else, anybody?
- 18 Thank you for coming.
- MRS. WEAVER: Thank you.
- 20 MR. SCHUERING: Okay. Ms. Fiorino.
- MS. FIORINO: I can stand.
- 22 MR. SCHUERING: Mr. Smallhorn, how do you
- 23 want to proceed with the clients that you represent?
- 24 Do you want to speak first and then question them? Do
- 25 you want them to make a statement and then you question

them? How do you want to approach this? 1 Well, my client has a 2. MR. SMALLHORN: statement to make, and then we'll have a few follow-up 3 4 questions. 5 MR. SCHUERING: All right. Ma'am, the floor 6 is yours. 7 MS. FIORINO: Okay. Thank you. A personal 8 concern of mine in regards to permitting Woolsey 9 Operating Company, LLC to drill a high volume hydraulic fracturing well along with the accompanying class two 10 injection wells is the increased risk of induced 11 earthquakes in the southern Illinois region. 12 13 Earthquakes have been sharp -- have risen 14 sharply in the Midwest in the last decade, a rise that corresponds to the rise in fracturing operations in 15 many states. This uptick in seismic events represents 16 a more than 100-fold increase in overall earthquakes. 17 The states reporting unusually elevated levels of 18 19 seismic activity include Arkansas, Colorado, New Mexico, Ohio, Oklahoma, Texas, and Virginia, and this 20 is in Science, Ellsworth 2013. Many seismologists 21 across the country have determined that this uptick in 22 the numbers of earthquakes represents induced 23 24 seismicity from the disposal of oil, liquid natural gas, and natural gas extraction waste in class two 25

- 1 injection wells, and that evidence for triggered
- 2 seismicity in response to injection of these waste
- 3 fluids is becoming incontrovertible, and that's in
- 4 Science, Ellsworth 2013. The disposal of 280 billion
- 5 gallons a year of toxic, chemical laden, mostly
- 6 radioactive fracturing waste water, brine, across the
- 7 county is causing earthquakes.
- 8 Some of the earthquakes are barely
- 9 perceptible, but some of them have been quite large, a
- 10 5.7 in Prague, Oklahoma, in 2011, and have caused real
- 11 property damage, injured residents, and terrorized
- 12 communities.
- In Oklahoma, according to a joint statement
- 14 by both USGS and OGS, residents have experienced more
- 15 than 200 earthquakes measuring at least a magnitude of
- 16 3.0 since the beginning of 2009. Recently 103
- 17 earthquakes rocked the area in a single three-day
- 18 period from February 14, 2014, to February 17, 2014,
- 19 many of them cracking walls and foundations.
- 20 Another example is the Guy-Greenbrier are of
- 21 Arkansas, which experienced only one earthquake of
- 22 magnitude 2.5 or greater in all of 2007, the numbers
- 23 grew to 10 in 2009, and in 2010 there were 54
- 24 earthquakes of magnitude 2.5 or greater -- that's Kerr
- 25 2012 -- and on February 27, 2011, a magnitude 4.7

earthquake. Many of the earthquakes were tied to class 1 two injection disposal wells in the area, which were 2. ordered to shut down, and the earthquakes stopped. 3 4 Youngstown, Ohio, experienced a series of earthquakes in 2011 and 2012, then a magnitude 4.0 5 6 earthquake struck. Governor John Kasich subsequently ordered that four nearby class two injection well 7 8 projects shut down and the earthquakes slowed. 9 And I'm going to guote here from Dr. Ray Beiersdorfer, Professor of Geology at Youngstown State 10 University. "In regards to the geology, the thousand 11 plus eastern Ohio earthquakes occurred on inactive 12 faults that are over one billion years old. 13 faults would not have moved if there had been no 14 injection or fracking. In Illinois you have two known 15 seismic zones -- the New Madrid and Wabash Valley 16 17 seismic zones. Your state already has a known seismic risk. You need to write rules that are more 18 19 restrictive than Ohio, not less. You also need to work with geologists and geophysicists that have no 20 21 conflicts of interest regarding oil and gas to delineate regions of the state that are off-limits to 22 both fracking and injection wells. Given what is 23 24 already known about the historical seismicity in the 25 region, to not do so would be irresponsible and

willfully ignorant." 1 The February 27, 2011, Prague, Oklahoma, 2. earthquake was studied by Columbia geologists 3 4 partnering with the USGS and produced a report. read you a bit from it. This is March 26, 2013. 5 6 "Scientists have linked a rising number of 7 quakes in normally calm parts of Arkansas, Texas, Ohio, 8 and Colorado to below-ground injection. In the last 9 four years, the number of quakes in the middle of the U.S. jumped 11-fold from three decades prior, the 10 authors of the Geology study estimate. Last year a 11 group of the USGS survey also attributed a remarkable 12 rise in small- to mid-sized quakes in the region to 13 14 humans. The risk is seriously -- serious enough that the National Academy of Sciences in a report last year 15 called for further research to understand limit and 16 respond to induced seismic. Despite these studies, 17 wastewater injection continues near the Oklahoma 18 19 earthquake -- earthquakes. 20 "The magnitude 5.7 earthquake near Prague was preceded by a 5.0 shock and followed by thousands 21 22 of aftershocks. What made the swarm unusual is that wastewater had been pumped into abandoned oil wells 23 24 nearby for 17 years without incident. In the study, researchers hypothesized that the wastewater 25

replenished compartments once filled with oil, the 1 pressure to keep the fluid going down had to be 2. ratcheted up. As pressure built up, a known fault 3 4 known to geologists as the Wilzetta fault jumped. 'When you overpressure the fault you reduce the stress 5 6 that's pinning the fault into place, and that's when earthquakes happen,' said study co-author Heather 7 8 Savage, a geophysicist at Columbia University's 9 Lamont-Doherty Earth Observatory. "The amount of wastewater injected into the 10 well was relatively small yet it trigger a cascading 11 series of tremors that led to the main shock said study 12 co-author Geoffrey Abers, also a seismologist at 13 14 Lamont-Doherty. 'There's something important about getting unexpected large earthquakes out of small 15 systems that we have discovered here, ' he said. 16 17 observations mean that 'the risk of humans inducing large earthquakes from even small injection activities 18 19 is probably higher' than previously thought." 20 The results of the Columbia University study showed that the class two injection disposal wells 21 suspected of causing the earthquakes were in operation 22 for at least 18 years, indicating that there can be 23 24 decades-long lags between oil, liquid natural gas, natural gas drilling wastewater injection and seismic 25

- 1 events. It was suspected that over the years pressure
- 2 in the wells increased and may have significantly
- 3 lubricated known seismic faults.
- In another article that I just read the
- 5 Cardston Earthquake Swarm and Hydraulic Fracturing of
- 6 the Exshaw Formation, and this is the Alberta Bakken
- 7 Play.
- 8 In the abstract I'll read this. "More than
- 9 60 small earthquakes magnitude .7 to 3 were detected
- 10 from December 2011 to March 2120 north of Cardston,
- 11 Alberta, an area with little evidence for previous
- 12 seismic activity. The timing of these events closely
- 13 correlates, greater than 99 percent -- hold on. 99
- 14 ratio 7 percent confidence, with hydraulic fracturing
- 15 completions of the Devonian-Mississippian-age Exshaw
- 16 Formation at a nearby horizontal well. Unanimous
- 17 waveform multiplicity within the swarm suggests that
- 18 the events share a similar origin and source mechanism.
- 19 This observation is corroborated by the point-like
- 20 collocation of hypocenters within the crystalline
- 21 basement during robust, double-difference relocations.
- 22 Furthermore, the presence of a pre-existing fault is
- 23 confirmed via formation-top offset mapping and
- 24 interpreted to be a Late Cretaceous extensional fault.
- 25 The confirmation of this fault at depth provides a

- 1 plausible pathway for rapid hydraulic communication
- 2 from the fracturing interval into the crystalline
- 3 basement. Consistent with structure interpretations
- 4 and available stress information, moment tensor
- 5 inversion of the largest magnitude event, magnitude
- 6 3.0, indicates reactivation of a basement fault with
- 7 normal slip. We conclude that the genesis of this
- 8 earthquake swarm was likely caused by increased pore
- 9 pressure, within the basement fault, as a result of
- 10 fracturing stimulation.
- In the testimony of Stanford University
- 12 geophysicist Mark Zoback to the U.S. Senate Committee
- on Energy and Natural Resources in June 19 of 2012
- 14 recommended an empirically derived practical framework
- 15 for reducing the probability of induced seismicity in
- 16 five straightforward steps.
- One, it's important to avoid injection into
- 18 active faults and faults in brittle rock.
- 19 Two, formations should be selected for
- 20 injection and injection rates should be limited to
- 21 minimize pore pressure changes.
- 22 For these two points there's deficiencies in
- 23 the permit application document. Document 5 number 4,
- 24 failure to clearly identify formations to be
- 25 stimulated. Number 7 and 8, missing identification of

confining zone fracture pressure and missing data on 1 confining zone fracture pressure. Number 10, 2. fracturing pressure of the production zone not 3 4 identified, and number 13, missing data on geological formations gives pause on how much the company does not 5 6 know of the region and disregarding simple guidelines. The third quideline is local seismic 7 8 monitoring arrays should be installed when there is 9 potential for injection to trigger seismicity. Four, protocols should be established in 10 advance to define how operations will be modified if 11 seismicity is triggered. 12 13 And five, operators need to be prepared to 14 reduce injection rates or abandon wells if triggered seismicity poses any hazard. 15 The active faults and active earthquake 16 17 zones of the New Madrid and Wabash Valley in southern Illinois are poorly defined and mapped out. Per the 18 19 Illinois GS, they do not have maps of faults in the deep basement rock for the state which are responsible 20 for Illinois earthquakes, and in the Wabash Valley 21 22 seismic zone is ill defined and has no specific published boundaries. 23 24 Southern Illinois is also marked by a number

of other major seismic -- seismic -- major seismic

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active structural features including the east-trending 1 2. Cottage Grove Rough Creek-Shawnee town fault system, the magmatic system of Hicks dome and the fluorspar 3 4 district, and the north northwest-trending La Salle, Du Quoin, and Clay City fold systems. 5 Induced seismicity from class two injection 6 wells in active earthquake zones carries with it real 7 risks to the public health, safety, and welfare of 8 Illinois residents, and risks to property, businesses 9 and the environment. These risks must be studied in a 10 more detail and communicated clearly to the residents 11 and businesses of southern Illinois. The risk 12 management of induced seismicity from class two well 13 14 disposal of fracturing wastewater has been poorly studied across the country and poorly delineated and 15 regulated in the Hydraulic Fracturing Regulatory Act. 16 Emergency management plans, insurance levels, bonding, 17 and even mortgages may be affected by assigning 18 19 probabilities of risk to different areas located within the active zones of Illinois. 20 21 There is one more issue with induced

integral to whether water, air, or soil contamination

Regulatory Act -- the mechanical integrity of class two

earthquakes not covered by Hydraulic Fracturing

wells and horizontal fracturing wells, which is

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will occur close to these wells. The mechanical 1 integrity of class two wells and horizontal fracturing 2. wells can be affected by seismic events near their 3 4 locations. The effects of seismic events on the mechanical integ -- integrity of class two wells and 5 horizontal fracturing wells is not addressed in the 6 Hydraulic Fracturing Regulatory Act at all, and it has 7 not been well studied by the geologic community. 8 9 document 13 casing cement plan number 29, there's missing information in casing and cementing plan. 10 casing and cementing plan does not address the 11 requirement label F in document 13 regarding potential 12 for earthquakes. The application is, therefore, 13 14 incomplete and must be returned to the applicant to address this deficiency. 15 I feel that in light of current research on 16 17 the matter of injection wells being the cause of induced -- being the cause of induced earthquakes if 18 19 injection wells in inactive seismic zones, i.e., the Ohio, can cause earthquakes the risk of destructive 20 earthquakes increases greatly in the active New 21 Madrid/Wabash Valley zones that we/I live in. 22 science is out there. Why risk the increased threat of 23 24 induced earthquakes via drilling and injection wells in an already active, high risk New Madrid and Wabash 25

- 1 Valley seismic zones.
- 2 This permit should not be granted in light
- 3 of the science that earthquakes can be induced via
- 4 drilling/injection wells and the potential of great
- 5 harm from a drilling operation in White County causing
- 6 a destructive earthquake over the whole southern
- 7 Illinois region including Makanda where I live
- 8 approximately 75 miles away.
- 9 And as a note -- an ending note on this, I
- 10 remember the 2008 Mt. Caramel earthquake, and, yes, I
- 11 was woke up out of bed when it happened. And then
- 12 later there was, like, four aftershocks, and I remember
- 13 feeling at least one of the aftershocks at 10 o'clock
- in the morning over at a friend's house in Makanda.
- 15 And it shook everything at that stage, and if it was
- 16 even more destructive, I feel that more damage would
- 17 have happened in our area.
- 18 MR. SCHUERING: Could we have a copy of your
- 19 statement? If you'd just give it to Mr. Heidinger,
- 20 he'll scan it and give it right back to you.
- 21 MR. SMALLHORN: We just have a few follow-up
- 22 questions.
- 23 MR. SCHUERING: Mr. Smallhorn, she's your
- 24 witness. You may proceed.
- MR. SMALLHORN: All righty. Ms. Fiorino,

could you please tell us if you're -- are you 1 2. familiar -- you've talked a lot about earthquakes and your concerns about earthquakes. Are you familiar with 3 4 Woolsey's plan to create the well in White County? MS. FIORINO: As did I know that they plan 5 6 on doing it and they have the permit, yes, or they're 7 applying for the permit. MR. SMALLHORN: Is it your understanding 8 9 that the Woolsey well will use similar well -- will use similar techniques and operations to the wells you 10 discussed during your --11 12 MS. FIORINO: I would imagine so. 13 MR. SMALLHORN: -- summary? 14 MS. FIORINO: I would imagine so. MR. SMALLHORN: Then several times during 15 16 your statement you referenced a document. 17 MS. FIORINO: Yes. MR. SMALLHORN: Could you please identify 18 19 for the record what that document is? MS. FIORINO: There it is. It's this 20 document here. The comments of the Natural Resources 21 22 Defense Counsel on the Woolsey Operating Company, LLC, Woodrow HVHHF permit application as supplemented. 23 MR. SMALLHORN: For the record, we'll be 24 marking it tentatively as Requestor's Exhibit 1. Could 25

you tell us briefly about when did you first become 1 aware of this document? 2. 3 MS. FIORINO: Probably within a month or so. 4 MR. SMALLHORN: Okay. And you reviewed it 5 prior to the hearing prior to today. 6 MS. FIORINO: Yes, yes. I did. 7 MR. SMALLHORN: Did you instruct your 8 counsel to submit this document as part of your hearing 9 request? 10 MS. FIORINO: Can you repeat that question, please? 11 12 MR. SMALLHORN: Yes. Did you instruct your 13 counsel to submit this comment to supplement your 14 initial hearing request? MS. FIORINO: I was informed to do that. 15 16 MR. SMALLHORN: Okay. And you've reviewed the document prior to today. 17 MS. FIORINO: Yes. 18 19 MR. SMALLHORN: And do -- do you share the concerns that are contained in that document? 20 MS. FIORINO: Yes. I do, because I feel 21 that -- I think it was very hastily -- the application 22 was hastily just wrote, and it just makes me concerned 23 24 about if they were that lax in making an application that their work ethics are shotty as well. And then 25

that could be -- yes. I'm concerned about that that's 1 2. just a reflection on how they operate. MR. SMALLHORN: All right. We'll move to 3 4 admit Requestor's Exhibit 1 into evidence -- the document identified as the NRDC comment. 5 6 MR. SCHUERING: Mr. Suthard? 7 MR. SUTHARD: No objection. 8 MR. SCHUERING: Mr. Tynes? 9 MR. TYNES: No objection. MR. SCHUERING: Okay. Yeah. 10 I'm just going to ask you to provide a copy of that. Without 11 12 objection, that will be admitted into the record as 13 Requestor's Exhibit Number 1 as it was identified by the witness. 14 15 MR. SMALLHORN: The requestor rests. 16 MR. SCHUERING: Rests? 17 MR. SMALLHORN: We rest, yes. MR. SCHUERING: Okay. Mr. Suthard any 18 19 questions for the requestor? 20 MR. SUTHARD: No, your Honor. I don't have 21 any questions just to ensure that we have a copy of her statement. Ms. Fiorino packed a lot in in a very short 22 amount of time. 23 24 MR. SCHUERING: Yeah. We've got it. 25 MR. SUTHARD: I want to make sure the notes

are correct with the record. 1 2. MR. SCHUERING: Mr. Tynes, any questions? 3 MR. TYNES: No, your Honor. 4 MR. SCHUERING: Okay. I have a couple. MR. SMALLHORN: Okay. I'm sorry. 5 6 MR. SCHUERING: Don't run off just yet. 7 MS. FIORINO: Okay. 8 MR. SCHUERING: As I look at your document 9 -- and Mr. Suthard's absolutely correct. For people like us, you did a great job because you put a lot of 10 information into a small space. That's always a good 11 12 thing. Your principal problem is with the injection wells. 13 14 MS. FIORINO: That's because that does -that's the --15 MR. SCHUERING: Your belief is that -- that 16 the injection wells are the principal problem here. 17 18 MS. FIORINO: That is mine, yes. 19 MR. SCHUERING: Okay. I understand you have others. 20 21 MS. FIORINO: Right. 22 MR. SCHUERING: But I'm just trying to understand what your principal concern is. Okay. And 23 2.4 are you aware that the regulations provide for on-the-ground seismic monitoring? 25

MS. FIORINO: I did read that, yes. I 1 hopefully each one -- each well site and each place 2. does have the seismic monitoring and that there's funds 3 4 for a nonpartisan person to collect the data from those 5 places. 6 Okay. But -- but you are MR. SCHUERING: 7 aware that the system that's set forth in the 8 regulations now it's called a red light/green light 9 system? 10 MS. FIORINO: Yes. I read that. It was very confusing to me, and it seemed like it was 11 different from other states. That -- and that was one 12 of the quotes of --13 14 MR. SCHUERING: Okay. MS. FIORINO: Here we had in Ohio that there 15 was an inactive area that there was induced earthquakes 16 17 and that the -- in Illinois we needed to be more 18 stringent because we are on an active fault line. 19 MR. SCHUERING: Okay. 20 MS. FIORINO: And I -- yeah. Got it. 21 MR. SCHUERING: Understanding that you 22 oppose the application generally. 23 MS. FIORINO: Generally. MR. SCHUERING: Okay. What -- with respect 24 to your seismic concern, can you tell me what you think 25

- 1 is most important not -- and you don't get to deny the
- 2 permit. Okay. But what would you do to help alleviate
- 3 your concerns?
- 4 MS. FIORINO: To help alleviate my concerns.
- 5 Well, I know there's no way regulating an operation is
- 6 going to prevent earthquakes, period. I feel that in
- 7 light of how our energy sources are changing that this
- 8 is, for lack of a better word, archaic. It's a way --
- 9 it's an old way of doing things. It's a way they're
- 10 trying to get more and more resources out of the ground
- 11 that actually should stay in the ground. We should put
- 12 our money into other ways of getting energy -- of
- 13 renewable energies. On -- I would prefer they didn't
- 14 do it at all.
- MR. SCHUERING: Okay.
- MS. FIORINO: I think that would be --
- 17 would -- because of where we live the risk of
- 18 stimulating the New Madrid -- the New Madrid and the
- 19 New -- and the Wabash Valley active faults is just too
- 20 great.
- MR. SCHUERING: Okay.
- 22 MS. FIORINO: And I know from just little
- 23 incidents like the derecho that came through
- 24 Carbondale. It was a small event, but I was out of
- 25 power. There was no way of helping that I was out of

power for ten days. If there was a major earthquake, 1 2. people of southern Illinois are not going to get the help either --3 4 MR. SCHUERING: Okay. MS. FIORINO: -- to help them out. It could 5 6 be catastrophic. 7 MR. SCHUERING: Okay. Anything else? 8 MS. FIORINO: I quess not. 9 MR. SCHUERING: Mr. Smallhorn, any questions in light of mine? 10 MR. SMALLHORN: Yeah. Just one question. 11 MR. SCHUERING: Go ahead. 12 MR. SMALLHORN: Question for clarification. 13 14 So your particular concern is the location -- you believe that this is too close to the New Madrid --15 MS. FIORINO: Yes. I believe it's --16 17 MR. SMALLHORN: -- fault. MS. FIORINO: I believe that the information 18 19 from what I can understand that they're drilling and putting injection wells in places where there is faults 20 and a place where there could be induced earthquakes. 21 22 I think it shouldn't be done there. 23 MR. SCHUERING: Okay. 24 MR. SMALLHORN: Okay. 25 MS. FIORINO: Is that...

MR. SCHUERING: Mr. Suthard? 1 2. MR. SUTHARD: I have nothing further, your 3 Honor. 4 MR. SCHUERING: Mr. Tynes? 5 MR. TYNES: Nothing. 6 MR. SCHUERING: Just for my own information, 7 are you an engineer? 8 MS. FIORINO: No. I'm not an engineer. MR. SCHUERING: Okay. And that is not said 9 to diminish your comments at all. Okay. I just want 10 to get a sense of how you -- how and where you acquired 11 12 your information. 13 MS. FIORINO: I read a lot. 14 MR. SCHUERING: And that's a very good way to learn things. I have told my kids that for years, 15 16 but you have no particular training or expertise in the petroleum industry. 17 MS. FIORINO: No. 18 19 MR. SCHUERING: Okay. And -- and again, that is not asked to diminish what you're saying. 20 21 Okay. I just I want to understand where people got 22 their information and how they came to understand it. So if there's nothing further, I will dismiss you. 23 24 Mr. Smallhorn, anything else? 25 MR. SMALLHORN: This isn't a question. It's

- 1 just a clarification that her statement does contain
- 2 written citations to scholarly articles that for --
- 3 MR. SCHUERING: I'm not --
- 4 MR. SMALLHORN: I just want to note that for
- 5 the record.
- 6 MR. SCHUERING: And it is my intention to
- 7 make your written statement a part of the record if you
- 8 have no objection.
- 9 MS. FIORINO: I have no objections.
- 10 MR. SCHUERING: Gentlemen, do either of you
- 11 have an objection to this becoming what would be
- 12 Requestor's Exhibit 2?
- MR. SUTHARD: No. No objection.
- 14 MR. SCHUERING: It's the text of her
- 15 statement with some additional citation in it.
- MR. TYNES: No.
- MR. SCHUERING: And you're welcome to
- 18 inspect it. All right. Without objection, this will
- 19 become Requestor's Exhibit Number 2. Thank you very
- 20 much.
- MS. FIORINO: You're welcome.
- MR. SCHUERING: Nice to have you here.
- 23 We've gone for an hour. Shall we charge on, gentlemen?
- MR. SMALLHORN: Just give us one brief
- 25 moment. I believe our client has a brief statement

- 1 that it should be shorter than even the previous one.
- 2 MR. SCHUERING: That's fine. The floor is
- 3 still yours.
- 4 MR. SMALLHORN: And we'll follow the same
- 5 format with Ms. McKasson giving a brief statement.
- 6 Then we'll ask follow-up questions as necessary.
- 7 MR. SCHUERING: Just stay. You're fine.
- 8 Let's get a copy of it. Similar to Ms. Fiorino,
- 9 Ms. McKasson has indicated she would prefer not to have
- 10 video recording made.
- MS. MCKASSON: This --
- MR. SCHUERING: Just a moment. Let me get
- 13 everybody back in their chairs. Thank you for coming
- 14 this morning, but give us just a second. Did you have
- 15 a nice trip?
- 16 MS. MCKASSON: Yes, yes. Very nice.
- 17 MR. SCHUERING: I kind of heard about it
- 18 third-hand. I hope you had a lovely time.
- 19 MS. MCKASSON: I'm still recovering. I have
- 20 major jet lag. So hopefully I won't fall asleep during
- 21 my own presentation.
- MR. SCHUERING: Gentlemen, are you ready to
- 23 proceed?
- MR. SMALLHORN: Yes, your Honor.
- MR. SCHUERING: All right. Ms. McKasson,

the floor is yours. 1 Thank you. This permit 2. MS. MCKASSON: application HVHHF number one is in actuality a test 3 4 case for IDNR and for the HFRA rules, which will show us all whether or not IDNR is truly prepared to enforce 5 6 the rules for the High Volume Horizontal Hydro Fracturing Act. Whether or not IDNR makes Woolsey meet 7 8 the standards of the regulations in its permit 9 application will be a signal to other companies on what will in actuality be required of them. For that 10 reason, I am affected by this proposed well since a 11 HVHHF well could be proposed on property near my home 12 in southern Illinois. 13 14 In addition, I am in the earthquake zone for effects from the Wabash fault and also the New Madrid 15 fault. According to geological studies, the Wabash 16 fault has become increasingly active for the last few 17 decades. I've experienced the affects of several 18 19 earthquakes in southern Illinois and have seen waves

coming from the east and moving through the earth on my

own property during an earthquake. A great increase in

earthquake frequency and value has been linked to both

the HVHHF process and the related waste disposal into

injection wells. This increase in earthquake activity

has been documented in Oklahoma, Arkansas, Ohio, and

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other states. 1 Thus, I challenge the assertion of Woolsey 2. that I am not affective enough -- affected enough to 3 4 testify at this permit hearing. I am especially concerned with the handling 5 of the flowback wastewater. Besides the estimated 7.5 6 million gallons of water Woolsey proposes to use, there 7 will be an unknown amount of produced water from 8 9 underground all laden with many fracking chemicals plus the brine, heavy metals, and radioactive substances 10 from produced water. The Woolsey flowback containment 11 plan is not a coherent plan. The number or capacity of 12 tanks for the flowback water is not specified. 13 14 the size and height of the earthen containment berms is not -- is not specified. The number of trucks 15 available to transport the flowback waste to the 16 injection wells plus the frequency of removal of the 17 flowback is not specified. The estimate for the 18 flowback from the 7.5 million gallons of water is very 19 low compared to the average percentage given in studies 20 21 in other states. Woolsey is estimating that less than three percent of the injection -- injected water will 22 flow back. Well, the state of Ohio estimates that 15 23 24 to 20 percent of the injected fluid will return as 25 flowback. This lack of preparedness by Woolsey is a

recipe for a spill of toxic liquid. This could easily 1 reach the nearby non-perennial streams and the ground 2. water system, which could in turn reach my property in 3 4 southern Illinois. In the supplemental document number ten, 5 Woolsey has still not satisfied the requirement to 6 describe -- to describe testing procedures for the 7 flowback waste. Will Woolsey be testing flowback for 8 9 heavy metals and naturally occurring radioactive materials? If so, how will they conduct the tests? 10 Since Woolsey has not specifically figured out how much 11 flowback they must prepare for and have grossly under 12 estimated the amount of flowback, it becomes even more 13 14 important for Woolsey to test for the content and levels of potentially toxic liquid in the flowback. 15 Information deficiencies found in document 16 17 four, which is underground fresh water information, of the first Woolsey permit application evidently have not 18 19 been corrected since there is no reference to document four in Woolsey's supplemental application information 20 Thus, Woolsey has not submitted data from 21 document. the Illinois geological survey to show the termination 22 of the lowest -- lowest potential fresh water. 23 Therefore, Woolsey has failed to ensure that 24 25 underground fresh water will not be contaminated by

- 1 their proposed operations. The condition of the
- 2 underground water concerns me in that southern Illinois
- 3 is prone to drought conditions that can greatly deplete
- 4 reservoirs that are already stressed by high usage
- 5 leading to conditions that threaten quality and
- 6 quantity of southern Illinois water. I depend on a
- 7 reservoir for my water usage present, but we may have
- 8 to depend on ground water in the future especially in
- 9 the increasing extreme drought conditions that we have
- 10 been experiencing more frequently. For these reasons,
- 11 IDNR should deny this permit. That's all.
- MR. SCHUERING: Thank you. Mr. Smallhorn.
- MR. SMALLHORN: Just very briefly one or two
- 14 questions. Ms. McKasson, could you please tell us what
- 15 town you live in?
- 16 MS. MCKASSON: I live in Carbondale,
- 17 Illinois. We also still have a house in Makanda,
- 18 Illinois.
- 19 MR. SMALLHORN: And about what distance
- 20 would you estimate you are from the proposed Woolsey
- 21 site?
- 22 MS. MCKASSON: I think it's about 50 to 60
- 23 miles.
- MR. SMALLHORN: And did you feel that 2008
- 25 earthquake that was discussed earlier by Ms. Fiorino?

1	MS. MCKASSON: Yes. I did.
2	MR. SMALLHORN: I think we'll rest on that.
3	MR. SCHUERING: All right. Mr. Suthard?
4	MR. SUTHARD: I have nothing, your Honor.
5	MR. SCHUERING: Mr. Tynes?
6	MR. TYNES: No questions.
7	MR. SCHUERING: Okay. I want to ask a
8	couple of the same questions that I asked Ms. Fiorino.
9	First, I presume you're not an engineer of any kind and
10	not involved in the petroleum industry in any way.
11	MS. MCKASSON: No. I'm not.
12	MR. SCHUERING: Okay. Your estimates that
13	you used, for example, with respect to the percentages
14	of flowback just generally can you tell me where you
15	obtained your information?
16	MS. MCKASSON: Well, I have been following
17	this for quite a while and been reading many different
18	articles.
19	MR. SCHUERING: Okay. Okay.
20	MS. MCKASSON: Also I, you know, have been
21	in contact with various groups that have been working
22	on the fracking issue including NRDC.
23	MR. SCHUERING: Okay. So you're not relying
24	on any single source, scholarly treatise, textbook.
25	MS. MCKASSON: No.

MR. SCHUERING: Okay. All right. So your 1 2. statement -- and again, I'm not picking at anyone's statement. I'm just trying to understand how they came 3 4 together. Your statement is kind of the summary of the information that you've learned applied to this permit; 5 is that correct? 6 7 MS. MCKESSON: Yes. MR. SCHUERING: Okay. 8 9 MS. MCKESSON: It's not --MR. SCHUERING: That's fine. 10 MS. MCKESSON: It's not all inclusive. 11 could've said more if I hadn't been in jet lag mode. 12 MR. SCHUERING: I understand and that's 13 14 fine. Mr. Smallhorn, do you have anything to add? MR. SMALLHORN: Yeah. If I could just ask 15 16 one follow-up question, did -- did you -- you said that you've been in contact with various groups regarding --17 regarding this. Could you -- one of those groups you 18 19 said was the NRDC. 20 MS. MCKESSON: That's correct. The NRDC as 21 I understand it has employed some experts in engineering challenging hydrology, and so I, you know, 22 I figured it was to my benefit to read what they had 23 24 found from these experts. 25 MR. SMALLHORN: Did you -- did you review

- 1 the comment that NRDC submitted as part of the public
- 2 comments in this matter?
- 3 MS. MCKESSON: Yes. I did.
- 4 MR. SMALLHORN: All right. And just for
- 5 identification purposes, can I see the Requestor's
- 6 Exhibit 1? Could you please review this document
- 7 that's marked as Requestor's Exhibit 1.
- 8 MS. MCKESSON: Yes.
- 9 MR. SMALLHORN: Are you familiar with this
- 10 document?
- MS. MCKESSON: Yes. In fact, I have a copy
- 12 of it myself.
- MR. SMALLHORN: All right. And what --
- 14 could you identify what that document is.
- 15 MS. MCKESSON: That is comments of the
- 16 Natural Resources Defense Counsel on the Woolsey
- 17 Operating Company, LLC Woodrow HVHHF permit application
- 18 as supplemented.
- MR. SMALLHORN: All right. And did you rely
- 20 on any of the comments that are contained in that
- 21 document for the preparation of your statement in
- 22 anyway?
- MS. MCKESSON: Yes. I did.
- 24 MR. SMALLHORN: All right. I have nothing
- 25 further.

1	MR. SCHUERING: Okay. Mr. Suthard?
2	MR. SUTHARD: Nothing further, your Honor.
3	MR. SCHUERING: Mr. Tynes?
4	MR. TYNES: Nothing further.
5	MR. SCHUERING: Okay. Do you have anything
6	else for Ms. McKasson?
7	MR. SMALLHORN: We don't, your Honor.
8	MR. SCHUERING: All right.
9	MS. MCKESSON: So I have a question.
10	MR. SCHUERING: Sure.
11	MS. MCKESSON: To Mrs. Weaver you said that
12	she had until tomorrow at 5 to submit anymore.
13	MR. SCHUERING: Yes.
14	MS. MCKESSON: Do I have that same?
15	MR. SCHUERING: Absolutely. The evidence
16	the evidence of this hearing generally and I'll go
17	over this at the end again, but I knew she'd be
18	leaving. The the evidence will be open until 5
19	tomorrow for additional submissions. I know you
20	communicate by e-mail.
21	MS. MCKESSON: Right.
22	MR. SCHUERING: I will give you my e-mail
23	well, why don't you do this. If you have something
24	else to submit, get it to Mr. Mastrangelo or
25	Mr. Smallhorn, and they'll make sure that it gets to

all the right places. 1 MS. MCKESSON: Okay. Thank you. 2. 3 MR. SCHUERING: Okay. Thank you for coming, 4 and thank you for testifying. 5 MS. MCKESSON: Okay. 6 MR. SCHUERING: All right. Do you have any additional witnesses, Mr. Smallhorn? 7 MR. SMALLHORN: Your Honor, Mr. Walker is 8 9 unable to attend the hearing today. So we don't have any additional witnesses. 10 Okay. Even though it would 11 MR. SCHUERING: all be hearsay, do you wish to make a statement on his 12 behalf? 13 14 MR. SMALLHORN: I believe we'll rest on the written -- the request for hearing that he submitted. 15 16 MR. SCHUERING: All right. Okay. Do you 17 have any further witnesses to present? MR. SMALLHORN: We do not. 18 19 MR. SCHUERING: All right. We're going to take a recess until 11:30 at which time we're going to 20 21 go around the table and see if anyone has anything else they want to put in the record or if they want to make 22 closing statements or present any other material 23 2.4 particularly the Department, and the applicant can consider whether they want to submit anything. And if 25

not, we'll do closing statements and wrap things up and 1 see where we go from there. So we're in recess until 2. 11:30. 3 (Break was taken.) MR. SCHUERING: All right. We are back on 5 6 the record in the public hearing in the matter of the application of Woolsey Operating Company, LLC in 7 connection with its permit application to conduct 8 9 horizontal hydraulic fracturing in White County. Mr. Mastrangelo, I think you have a motion. 10 MR. MASTRANGELO: About the --11 MR. SCHUERING: McKasson. 12 13 MR. MASTRANGELO: Yes. The attorneys for 14 Ms. McKasson would ask that her statement be admitted into evidence. 15 16 MR. SCHUERING: Okay. Mr. Suthard, any 17 objection? 18 MR. SUTHARD: No objection. 19 MR. SCHUERING: Mr. Tynes? 20 MR. TYNES: This is the statement that we she read? 2.1 2.2 MR. SCHUERING: This is the printed statement that she read. They did not move its 23

MR. TYNES: Yeah. No objections.

admission at the time.

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MR. SMALLHORN: It'll be marked as 1 2. Requestor's Exhibit 3. 3 MR. SCHUERING: Requestor's Exhibit 3. 4 right. Requestor's Exhibit 3 will be admitted into the record without objection. Now, do you have any 5 additional evidence to present, Mr. Smallhorn? 6 MR. SMALLHORN: Well, we also would ask that 7 8 the court take judicial notice of the deficiency 9 letter --MR. SCHUERING: Okay. 10 MR. SMALLHORN: -- that has been issued by 11 12 the Department of Natural Resources and that the court also take judicial notice of the -- of the request for 13 14 hearing, which were submitted by Ms. McKasson and Ms. Fiorino, and that they be made part of the record by 15 16 this -- by your notice. 17 MR. SCHUERING: I think that they are part of the record already. I understand your point, 18 19 though. With respect to evidence, I am going to keep this hearing open for the purpose of submission of 20 21 evidence until 5 p.m. tomorrow for any of the attorneys 22 to submit additional documentation. It can be tendered to me by e-mail as we've done with other items. 23 24 If there are objections to any of the material that is submitted, then we'll schedule a 25

post-hearing conference call to hear those objections 1 2. and determine those, but since you're specifically asking about the deficiency letter, I think I'll just 3 4 take care of it right now. Mr. Tynes, do you have an issue with the deficiency letter issued to Woolsey 5 being a part of the record of this public hearing? 6 7 MR. TYNES: No. 8 MR. SCHUERING: Okay. Mr. Suthard? 9 MR. SUTHARD: No, your Honor. MR. SCHUERING: All right. So you provide 10 the deficiency letter copies to all parties that you 11 believe should be made part of the record, and given 12 13 the fact that there's no objection, I will enter it as 14 part of the record. It will be Requestor's Exhibit Number --15 16 MR. SMALLHORN: Wouldn't it be more 17 appropriate for the Department to provide a copy of its correspondence? 18 19 MR. SCHUERING: Can you do that? 20 MR. SUTHARD: I can do that, your Honor, 21 yes. 22 MR. SCHUERING: All right. The Department 23 will provide a copy to all of the attorneys and to me, 24 and that will become Requestor's Exhibit Number 4. 25 MR. SMALLHORN: And if we also could in that

- 1 vein ask the file stamped received copies of the
- 2 request be submitted as well. I know you said you
- 3 think they're a part of the record but...
- 4 MR. SCHUERING: They are attached to my two
- 5 determinations.
- 6 MR. MASTRANGELO: Are those in your -- in
- 7 what you've presented today as exhibit?
- 8 MR. SCHUERING: The hearing request.
- 9 MR. SUTHARD: No, no. They're not as they
- 10 were a precursor to actually having this hearing, and
- 11 his honor included them in his determination.
- 12 MR. MASTRANGELO: Are the determination
- 13 letters in what you've --
- MR. SCHUERING: They are part of -- my
- 15 determinations with respect to the hearing request
- 16 granted or denied, okay, will be a part of the record
- 17 of the hearing.
- 18 MR. SMALLHORN: Yeah. I think that's the
- 19 issue.
- 20 MR. SCHUERING: Okay. And I think I have
- 21 file stamped copies of all of them so. Anything else,
- 22 gentlemen?
- MR. SMALLHORN: Nothing.
- MR. SCHUERING: From the requestors, slash,
- 25 participants any further witnesses? Testimony? All

I will give each party an opportunity to make 1 2. closing remarks. Representing the requestor, slash, petitioner, would you like to go first or last? 3 4 MR. MASTRANGELO: Last. 5 MR. SCHUERING: Last. All right. 6 we'll start with Mr. Suthard if you have any closing 7 remarks, sir. MR. SUTHARD: Thank you. Just briefly, I 8 9 would just like -- the Department would like to thank everybody for showing up today. Really. I mean, this 10 is -- as one of the requestor's pointed out, this is 11 the first time in the state of Illinois that this has 12 13 happened. All right. So we'd like to thank you 14 everybody for showing up and participating and becoming a part of this. Your input is very important to the 15 Department, and we take it very seriously. And I'd 16 like to thank you, everybody, for, you know, really 17 complying with the hearing officer and, you know, 18 19 making this very easy and making it a productive matter. And so going forward hopefully that not only 20 is this a test case but this will be a model for how we 21 proceed in Illinois. 22 23 And on that -- on that point that we do take

everybody's input very seriously, we are opening up an

additional comment period beginning at 8:30 a.m. on

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- 1 Friday morning, and we are allowed by statute to do
- 2 this. But this comment period is solely for the
- 3 benefit of responding to anything that was presented
- 4 here today. So in other words, it's, you know, it's
- 5 not an opportunity to open up additional evidence.
- 6 It's an opportunity for people who have been here and
- 7 listened to respond to anything that was testified at
- 8 today, and that additional comment period will go on
- 9 for 15 days and will be shut down at 15 days after
- 10 that. But that is by statute, and so starting at 8:30
- on Friday morning, we will open up that comment period.
- 12 And it will be -- we'll post it on the Department's
- 13 website, but it'll be the same public comment e-mail
- 14 address. And all comments have to be in writing.
- 15 There will be no additional public hearings on this
- 16 matter. So thank you again.
- 17 MR. SCHUERING: Anything else, Mr. Suthard?
- 18 MR. SUTHARD: No. That's it, your Honor.
- MR. SCHUERING: Mr. Tynes.
- 20 MR. TYNES: I'm going to try not to use that
- 21 microphone. Just briefly, we would -- Woolsey would
- 22 echo the Department's sentiments about thanking
- 23 everybody for their participation. We recognize this
- 24 as an important and necessary part of the permitting
- 25 process, and we appreciate the participation and

concerns raised today by Ms. McKasson, Mrs. Weaver, and 1 Ms. Fiorino. You know, after years of debate and 2. negotiations amongst legislators, regulators, 3 4 representatives of the industry, and also environmental groups, we have what is considered to be by all of 5 6 those -- by all of those folks as one of the most comprehensive, if not the most comprehensive, statutory 7 8 and regulatory scheme for this particular process. 9 Woolsey has invested an immense amount of time and effort to ensure that the application they 10 have filed as now supplemented fits within the 11 parameters of that statutory and regulatory scheme, and 12 13 we believe that we're within those parameters as we 14 speak. However, that being said, the purpose of this hearing was to allow folks who had demonstrated that 15 they have an interest that may or may -- may be 16 17 adversely affected by the proposed project and who properly requested to participate in the hearing either 18 19 through a hearing request or through a petition to participate to have this forum to voice their concerns 20 and have a record of those concerns made and made a 21 part of the Department's ultimate determination on this 22 23 application. 24 With that being said, anything that the 25 Department now wants to hear from Woolsey on we will be

- 1 happy to address. This is not the time or place for us
- 2 to directly respond to any specific concern. Again,
- 3 we're happy to be here. We recognize this as being an
- 4 important and necessary part of the process, and we
- 5 thank you again.
- 6 MR. SCHUERING: Mr. Mastrangelo.
- 7 MR. MASTRANGELO: Thank you, your Honor. My
- 8 voice isn't so saturant. So I'm going to stand up by
- 9 the microphone, and hopefully everyone can hear me.
- 10 But, yes, I would like to thank everyone as well. I
- 11 know several people drove quite a distance to get
- 12 here -- Department employees from Springfield, and
- 13 thanks to the court reporter and Department employees.
- 14 Thanks to everyone in the audience who's come and
- 15 showed an interest. I want to thank the Department for
- 16 organizing the process. As we've heard, this is the
- 17 first time a fracking permit has been applied for. So
- 18 there was new ground to break, and, you know, they've
- 19 had to manage a lot of documents correspondence. So
- 20 thanks to the Department.
- Thanks to the owner of the building. I
- 22 don't know how they arranged this, but I think this
- 23 worked out pretty well.
- 24 You know, to the merits of the fracking
- 25 application, you know, I do -- I will not agree with

- 1 Mr. Tynes' characterization that it was -- these are
- 2 the strictest regulations in the country. I understand
- 3 some people believe that, but, you know, I've looked at
- 4 them often enough now and tried to educate myself from
- 5 other sources. And I do believe there are flaws in it,
- 6 but even more importantly I believe that the
- 7 Department's regulations have not been satisfied by the
- 8 application. And the Department's deficiency letter
- 9 actually mentioned several deficiencies, and I don't
- 10 believe those have been satisfied yet. There have been
- 11 many public comments that the Department is -- is
- 12 required to consider, and so I'm hoping that the
- 13 Department will make a thorough evaluation of the
- 14 process. And I consider -- considering those public
- 15 comments and evidence at this will hearing, the
- 16 evidence that will be presented in the next 24 hours or
- 17 so, and then the public comments that are submitted in
- 18 response, and I do urge the hearing officer to
- 19 recommend that the application be denied in its present
- 20 form. And that's it.
- 21 MR. SCHUERING: All right. Well, I would
- 22 like to echo the comments of all of the attorneys here.
- 23 The folks of White County have been incredibly
- 24 welcoming. Mr. Heidinger and I made our first trip
- 25 down here about two months ago to take a look at this

venue for this public hearing. Everyone here has been 1 wonderful in assisting us to do what is a difficult 2. task. I recognize that there are many different points 3 4 of view with respect to this issue that take a lot of different forms. I commend the people who testified 5 6 today because they were able to explain their concerns from their point of view without being an engineer or a 7 8 lawyer or involved in the petroleum industry. Your 9 testimony is exactly what this public hearing process was designed to do. There are lots of lawyers who look 10 at this application. There are lots of engineers who 11 look at it. There are lots of people who look at it 12 13 from a regulatory, geologic, engineering, legal policy 14 point of view. They try to apply pages and pages of regulations to a permit that is the first in Illinois, 15 is the first test of the regulations, is the first test 16 17 of the act. 18 I will have no trouble reporting to the 19 director that this process does exactly what it is intended to do. It invites citizens who have 20 21 particular concerns to express those concerns in a way 22 that makes sure that those concerns get straight to the decision-maker's desk. I am confident from my dealings 23 24 with the Department on this that this transcript and my report will not be something that somebody throws in a 25

file drawer that it gathers dust. They will look at 1 your concerns, but as all of you recognize, there are a 2. lot of competing interests here. There are a lot of 3 4 unknown facts with respect to the geology and the -and from the point of view of the requestors the safety 5 6 and efficacy of the system. From the point of the applicant they have a different view, and fortunately 7 8 I'm not the person that has to sort all that out and 9 make that decision. I'm not sure anybody sitting up here wants to do that frankly, but somebody does have 10 to decide at the end of the day. 11 So thank you all for your participation. 12 You have made this unbelievably easy for all of us, and 13 14 again, I want to thank the White County Sheriff, the conservation police, the staff at DNR, all of you, and 15 I'm going to go around the table once more. This is 16 your very last word, Mr. Mastrangelo. Anything else? 17 18 MR. MASTRANGELO: No. 19 MR. SCHUERING: All right. Mr. Suthard? 20 MR. SUTHARD: No. 21 MR. SCHUERING: Mr. Tynes? 2.2 MR. TYNES: No. 23 MR. SCHUERING: All right. All of that 24 being said, we will adjourn the public hearing at 11:53 a.m. subject to the submission of additional evidence 25

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1	by the lawyers on or before 5 p.m. tomorrow. Thank you
2	all for coming.
3	(Wherein, the public hearing was
4	adjourned at 11:53 a.m.)
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1	CERTIFICATE OF REPORTER
2	
3	I, JOANNA CHARLTON, RPR, CCR(MO), CSR(IL),
4	the officer before whom the foregoing public hearing
5	was taken, do hereby certify that foregoing public
6	hearing was taken by me to the best of my ability and
7	thereafter reduced to typewriting under my direction;
8	that I am neither counsel for, related to, nor employed
9	by any of the parties to the action in which this
10	public hearing was taken, and further that I am not a
11	relative or employee of any attorney or counsel
12	employed by the parties thereto, nor financially or
13	otherwise interested in the outcome of the action.
14	
15	
16	JOANNA CHARLTON,
17	RPR, CCR(MO), CSR(IL)
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