

In The Matter Of:

*MCLEAN COUNTY ZONING BOARD OF APPEALS
Arrowsmith, Moraine Solar, Lexington Chenoa Wind Farm*

*HEARINGS
February 6, 2018*

*ADVANTAGE REPORTING SERVICE
110 S.W. JEFFERSON AVE., SUITE 430
PEORIA, IL 61602
PHONE: 309-673-1881 FAX: 309-673-0341
reportingservice@att.net*

1
2 IN THE MATTER OF:
3 MCLEAN COUNTY ZONING BOARD OF APPEALS
4
5
6 ARROWSMITH I, LLC
7 ARROWSMITH II, LLC
8 MORAINE SOLAR, LLC
9 LEXINGTON CHENOA WIND FARM, LLC
10
11 FEBRUARY 6, 2018
12 BLOOMINGTON, ILLINOIS
13
14 TRANSCRIPT OF PROCEEDINGS had at the
15 hearing of the above-entitled cause, taken before
16 Paula A. Morsch, C.S.R. License No. 84-002965, a
17 Certified Shorthand Reporter in the State of
18 Illinois, on the 6th day of February, 2018, at the
19 hour of 8:00 p.m. to 10:10 p.m., at 115 E.
20 Washington Street, McLean County Government Center,
21 Room 400, in the City of Bloomington, County of
22 McLean, State of Illinois.
23

1 I N D E X
2
3 SU-18-03 Staff Report 6
4
5 Presentation by Mr. Streicker 14
6 Presentation by Mr. Novack 17
7 Questions by the Board 29
8 Questions by Ms. Ziegler 61
9 Questions by Ms. Winterland 67
10
11 SU-18-04 Staff Report 72
12 SU-18-05 Staff Report 74
13 SU-18-02 Staff Report 78
14
15
16
17
18
19
20
21
22
23

1
2 MCLEAN COUNTY ZONING BOARD OF APPEALS
3 MEETING
4
5 TUESDAY, FEBRUARY 6, 2018
6 8:00 P.M.
7 at
8
9 MCLEAN COUNTY GOVERNMENT CENTER
10 115 E. Washington Street
11 Bloomington, Illinois
12 Case Nos. SU-18-03; SU-18-04, SU-18-05, SU-18-02
13
14 BOARD MEMBERS PRESENT:
15
16 Julia Turner, Chairwoman
17 Mark Judd
18 Michael Kuritz
19 Rick Dean
20 Brian Bangert
21 Chris Carlton
22 Mary Beth Taylor
23
24 ALSO PRESENT:
25 Philip Dick, Director of Building & Zoning
26 Samantha Walley, Esq, Assistant State's Attorney
27 Luke Hohulin, Assistant County Engineer

1 MR. KURITZ: I'd like to make a
2 motion that we appoint Julia Turner the Acting
3 Chairman.
4 MR. DEAN: I'll second that.
5 MR. DICK: We'll do a roll call on
6 that. Mark Judd?
7 MR. JUDD: Yes.
8 MR. DICK: Brian Bangert?
9 MR. BANGERT: Yes.
10 MR. DICK: Michael Kuritz?
11 MR. KURITZ: Yes.
12 MR. DICK: Rick Dean?
13 MR. DEAN: Yes.
14 MR. DICK: Julia Turner?
15 MS. TURNER: I guess so, yes.
16 MR. DICK: Jim Finnegan, he's
17 recused. Chris Carlton?
18 MS. CARLTON: Yes.
19 MR. DICK: Mary Beth Taylor?
20 MS. TAYLOR: Yes.
21 CHAIRWOMAN TURNER: Okay. With
22 that --
23 MR. DICK: Can we do a roll call

Page 5

1 then, too, to make sure that we did that? That
2 wasn't really a roll call. That was an election.
3 CHAIRWOMAN TURNER: Oh, okay.
4 MR. DICK: I'll do a roll call.
5 CHAIRWOMAN TURNER: Okay. Do a roll
6 call.
7 MR. DICK: Roll call is Mark Judd.
8 MR. BANGERT: Yes.
9 MR. DICK: Brian Bangert.
10 MR. BANGERT: Here.
11 MR. DICK: Michael Kuritz.
12 MR. KURITZ: Here.
13 MR. DICK: Rick Dean.
14 MR. DEAN: Here.
15 MR. DICK: Julia Turner.
16 CHAIRWOMAN TURNER: Here.
17 MR. DICK: Craig Zimmerman. Jim
18 Finnegan. Chris Carlton.
19 MS. CARLTON: Here.
20 MR. DICK: Mary Beth Taylor.
21 MS. TAYLOR: Here.
22 CHAIRWOMAN TURNER: Okay. And it
23 looks like we have the people for case SU-18-03

Page 6

1 forward, is that correct, Arrowsmith Solar?
2 MR. STREICKER: That's correct.
3 CHAIRWOMAN TURNER: And with I'll
4 have staff bring forward the case.
5 MR. DICK: This is case number
6 SU-18-03 application of Arrowsmith I Solar, LLC, by
7 Cypress Creek Renewables for a special use to allow
8 a Solar Power Generating Facility in the Agriculture
9 District on property in the southwest quarter of
10 Section 14, Township 23 North, Range 5 East of the
11 3rd principal meridian located in Arrowsmith
12 Township immediately north of 1100 North Road
13 approximately 2/5ths of a mile east of 3400 East
14 Road.
15 Public notice of this hearing was
16 published in the Pantagraph on January 20, 2018, as
17 provided by law. All the other required
18 notifications have been made and the applicant has
19 paid the publication cost.
20 As the first exhibit I'd like to pass the
21 application and a plat map showing where this
22 property is located in Arrowsmith Township and a
23 zoning map showing that this property is in the

Page 7

1 Agriculture District in Arrowsmith Township and a
2 communication from the Soil and Water Conservation
3 District indicating it did a soil evaluation of the
4 property and the Land Evaluation and Site Assessment
5 was also completed for this property, a
6 communication from the Illinois Department of
7 Natural Resources indicating that there are likely
8 no -- let's see here. It concluded that adverse
9 effects are unlikely; therefore, consultation is
10 terminated for the endangered species.
11 Here is a site plan of the property. The
12 owner of this property lives in this house here and
13 there's a farm dwelling across the street and these
14 transformers are located away from both of them, and
15 the site plan meets the requirements of our
16 ordinance. This is the remainder of their
17 application which they have for the other cases as
18 well and I'll pass that.
19 I have aerial site photos of the property
20 to show at this time. It's the property outlined in
21 red here where this solar farm is to be located.
22 This is facing northeast at the southwest corner of
23 the property where this solar farm will be located,

Page 8

1 and this is facing east along the public road there
2 and facing north where the applicant, where the
3 owner of the property has his farm residence, and
4 this is facing west. This is at the east, the
5 southeast corner where the solar farm is going to be
6 located facing northwest. This is the farm dwelling
7 located across the street from where this solar farm
8 will be located. Again the aerial photo.
9 And I'll deliver a staff report. The
10 staff reports for this case are similar to the other
11 two cases and the applicant has a Power Point
12 presentation that they will present for this case
13 but it will reflect, affect the other cases as well.
14 The property is relatively flat and drains
15 to the south. It's in crop production at this time
16 and the public road is oil and chip, 17 feet in
17 width. The surrounding zoning is Agriculture
18 District on all sides. The surrounding land use to
19 the north and east is in crop production and to the
20 south is crop production and a farm dwelling and to
21 the west is crop production and a single family
22 dwelling.
23 The property has a soil score of 89.6

Page 9

1 points out of 100 and a site assessment of 169
2 points out of 200, and this is for Land Evaluation
3 and Site Assessment, giving it a total score of
4 258.6 points out of 300. A LESA report score of 230
5 points and above means that the property is of high
6 value for agricultural land protection.

7 The staff analysis of this application is
8 as follows: A, the proposed special use will not be
9 detrimental to or endanger the health, safety,
10 morals, comfort, or welfare of the public. This
11 standard is met. The applicant proposes to
12 establish a two megawatt solar power generating
13 facility on this property which will meet all the
14 county setback requirements and use standards for a
15 solar power generating facility.

16 The application indicates that this
17 facility will contain rows of photovoltaic cell
18 panels mounted on posts set in the ground. These
19 rows of panels are referred to as solar rays,
20 arrays. Cypress Creek Renewables will mount the
21 solar arrays in one of two ways, on a fixed tilt or
22 on a tracking system, which allows them to follow
23 the sun throughout the day if they're on a tracking

Page 10

1 system. After site specifics and design components
2 are fully developed for the solar farm, Cypress
3 Creek will develop -- will determine which system is
4 more appropriate for this site. The solar arrays
5 will be designed with an anti-reflective coating.

6 The basic components of solar energy
7 facilities include the PV panels, inverters,
8 combiner boxes, transformers, wires and conductor
9 cables, structural racking systems for PV modules
10 and perimeter fencing. Solar electricity production
11 includes the following five components; electrical
12 power generation, a combination box, an inverter and
13 transformer and utility transmission, and they're
14 defined in this report.

15 The applicant also -- the applicant
16 indicates that the solar arrays will be a maximum of
17 12 feet in height but on average will be eight to
18 nine feet in height. The applicant submitted a
19 communication from the Illinois Department of
20 Natural Resources identifying protected resources
21 that may be in the vicinity of the proposed action.
22 They have evaluated that the information provided
23 concluded that adverse effects are unlikely. There

Page 11

1 has been no communication submitted from the
2 Illinois Historic Preservation Agency.

3 B, the proposed special use will not be
4 injurious to the use and enjoyment of other property
5 in the immediate vicinity for purposes already
6 permitted or substantially diminish property values
7 in the immediate area. This standard is met.

8 Nearby property that is currently in crop production
9 will continue to be desirable for such use. One
10 farm dwelling and one single family dwelling nearby
11 will not be significantly impacted by the proposed
12 solar power generating facility.

13 The proposed special use will not impede
14 the orderly development of the surrounding property
15 for use as permitted in the district. This standard
16 is met. Nearby property that is currently in crop
17 production will continue to be desirable for such
18 use. One farm dwelling and one single family
19 dwelling nearby will not be significantly impacted
20 by the proposed solar power generating facility.

21 Adequate utilities, access roads, drainage
22 or other necessary facilities have been or will be
23 provided, and this standard is met. The property

Page 12

1 has approximately 950 feet of frontage on the north
2 side of 1100 North Road. The Saybrook-Arrowsmith
3 Fire District will provide fire protection for the
4 subject property and pre-development drainage
5 patterns will be retained as much as possible. The
6 applicant will provide certified plans for storm
7 water detention or retention before a permit is
8 issued for the proposed solar power generating
9 facility. The applicant will need to have all field
10 tile damaged in the construction process repaired by
11 a competent contractor with experience in such
12 repair during the life of the solar farm.

13 E, adequate measures have been or will be
14 taken to provide ingress and egress so designed to
15 minimize congestion in the public streets. This
16 standard is met. It appears that safe site distance
17 can be provided at the proposed entrance. The
18 applicant will need to obtain an entrance permit
19 from the Arrowsmith Township Road Commissioner.

20 F, the establishment, maintenance, and
21 operation of the special use will be in conformance
22 with the intent of the district for which the
23 special use is proposed to be located, and this

Page 13

1 standard is met. The preamble states, "provide for
2 the location and govern the establishment and
3 operation of land uses which are compatible with
4 agriculture and are of such nature that their
5 location away from residential, commercial, and
6 industrial areas is most desirable."
7 The proposed special use, in all other
8 respects, conforms to the applicable regulations of
9 the district in which it is located. This standard
10 is met. According to the Zoning Ordinance, "The
11 Land Evaluation and Site Assessment system has been
12 designed to provide a rational process for assisting
13 officials in making farmland conversion decisions
14 through the local zoning process." Although this
15 property has a high LESA score, the applicant
16 indicates that native grasses will be grown and
17 maintained on the site and the prime soils will be
18 preserved as long as the solar power generating
19 facility is operational. After the subject property
20 is returned to its original condition, as required
21 by the Zoning Ordinance, the land can be returned to
22 crop production. It was reported that up to
23 35 percent of corn grown in McLean County was used

Page 14

1 to make ethanol. Harvesting the wind and the sun to
2 produce electricity in the Agriculture District with
3 wind turbines and solar farms is similar and another
4 way of, another way to produce significant value
5 from farmland in addition to crop production.
6 In conclusion, staff recommends that this
7 application meets all the standards set forth in the
8 Zoning Ordinance providing the following
9 stipulations; one, an entrance permit is obtained
10 from the Arrowsmith Township Road Commissioner; two,
11 the applicant shall provide certified plans for
12 storm water detention/retention before a permit is
13 issued for the proposed solar power generating
14 facility; three, the applicant shall complete a
15 consultation with the Illinois Historic Preservation
16 Agency before construction can begin; four, the
17 applicant shall have all field tile damaged in the
18 construction process repaired by a competent
19 contractor with experience in such repair during the
20 life of the solar farm; and five, the development
21 shall follow the plans and documents submitted with
22 the application and with zoning regulations,
23 including Article VI, Section 350-43, the use

Page 15

1 standards for a solar power generating facility.
2 And that concludes my report.
3 CHAIRWOMAN TURNER: Okay. Are all of
4 you going to talk through or is one of you going to
5 talk first?
6 MR. STREICKER: Potentially I thought
7 I might open.
8 CHAIRWOMAN TURNER: That's great.
9 MR. STREICKER: Good evening. Thank
10 you, Members.
11 CHAIRWOMAN TURNER: Let me affirm or
12 let me swear you in first.
13 (Mr. Streicker sworn in)
14 CHAIRWOMAN TURNER: Give us your
15 name and your address, please.
16 MR. STREICKER: My name is David
17 Streicker. That's S-T-R-E-I-C-K-E-R. My address is
18 150 North Riverside Plaza in Chicago, Illinois.
19 Thank you to the members of the board, counsel, and
20 staff for hearing about the Arrowsmith I project
21 this evening. Just by way of introduction, to my
22 left is Scott Novack from Cypress. He's one of the
23 representatives from the developer here to talk

Page 16

1 about the solar process and how the arrays work and
2 what type of a project we're planning in Arrowsmith
3 Township. To his left is Andrew Lines. Andrew is
4 one of our valuation experts in case board members
5 had questions along those lines, and then our
6 project engineer, Dan Veriotti, is to his left and
7 he's the one that's helping with site layout, et
8 cetera. Also Mr. Sandage, our property owner, is
9 here as well.
10 But specifically with regard to Arrowsmith
11 I and the other two community scale solar projects
12 that we're here to present on tonight, we're very
13 excited to talk about these projects with you. We
14 think that solar would be a perfect accent to the
15 wind farms that you saw in the area. We hope to
16 continue McLean County's trailblazing heritage into
17 renewable energy space. We believe this project
18 will not only, as staff mentioned, be a good steward
19 of farmlands, it will also help the state of
20 Illinois meet its renewable energy and economic
21 development goals that went along with that which we
22 will think will be a significant benefit to McLean
23 County.

1 We appreciate the staff's recommendation
2 with this project and that it's in conformance with
3 not only the overall zoning code but the solar
4 specific provisions that have been acted, enacted by
5 McLean County. We also understand the stipulations
6 and do not have an issue with those.

7 What we would propose to do is take the
8 board through a brief orientation on the solar
9 electric generation process, the community scale
10 solar projects, what our layouts look like, and
11 hopefully to leave you with the impression that our
12 solar projects, and specifically Arrowsmith I in
13 this case, will be a very good neighbor. Hopefully
14 you won't know we're there. We are going to have
15 scheduled routine maintenance, but it will be
16 hopefully not overly burdensome on the road system
17 or the traffic patterns in the area, and also again
18 we expect to have fairly significant construction
19 spend in the area and then hopefully a lasting
20 impact with a limited amount of local spending but,
21 of course, property tax revenue as a legacy, along
22 with the renewable energy generation. With that,
23 Scott, I'm going to introduce you.

1 CHAIRWOMAN TURNER: Before you get
2 started, I need to swear you in also.

3 (Mr. Novack sworn)

4 CHAIRWOMAN TURNER: Your name and
5 your address?

6 MR. NOVACK: Scott Novack, that's
7 N-O-V-A-C-K. I'm at 18 South Michigan in Chicago,
8 60603.

9 CHAIRWOMAN TURNER: Go ahead.

10 MR. NOVACK: What I thought I would
11 do here, because we do have these three
12 applications, we have a presentation preloaded so
13 I'll just talk a little bit while that gets put on
14 the screen here, but I thought I'd talk just very
15 briefly about us, Cypress Creek, and then transition
16 into kind of an orientation into this particular
17 type of solar development. I'm going to have a few
18 site specific things to talk about as well.

19 Cypress Creek was founded in 2014 by a
20 pair of individuals who have over 20 years of
21 experience each in solar development across the
22 country. They basically came together with the
23 formula to be able to replicate solar development

1 across the country that they were doing in their
2 individual markets. We have a number of operational
3 projects right now that we manage, so we're a
4 development company but we also build, finance, and
5 construct solar power plants and operate and
6 maintain them most importantly. So we have about
7 1.5 gigawatts worth of solar farms that we're
8 currently operating. We've developed as a company
9 2.2 gigawatts and these projects, just to give you
10 an idea of scale, these projects we're talking about
11 right now are two megawatts each. A megawatt is a
12 thousand -- or a gigawatt is a thousand megawatts.
13 So you can move forward.

14 We're active pretty much all over the
15 country. If there's a color on the map, that means
16 we're active in those states. Yellow represents
17 areas in which we have completed operating solar
18 farms. Blue such as Illinois are states which we
19 are currently developing projects and expect to be
20 under construction sometime in the next few years.

21 Just as from a big picture perspective,
22 the solar industry is growing at really impressive
23 rates. One in 50 jobs back in 2016 were actually in

1 the solar industry of the new jobs that were added.
2 There's over 260,000 solar workers and that number
3 is climbing at about 25 percent per year. A lot of
4 what's driving that are just prices that are falling
5 significantly. Since 2010 prices have fallen
6 70 percent, and that's not just panels. I'm talking
7 about all components that you'd find on a solar farm
8 as a whole have fallen by 70 percent since 2010, and
9 that's really fueling a lot of this growth.

10 Just to really be clear, there's really
11 two main types when you talk about solar energy.
12 There's solar thermal we're not talking about.
13 That's where you redirect sunlight with mirrors into
14 a central location, and then there's solar PV or
15 photovoltaics, which is what we're talking about
16 here, and that's what developers in general in
17 Illinois you'll see being built here. That's the
18 opposite. The idea there is to soak in and absorb
19 the sunlight and then you create electricity from
20 that sunlight. Then when you're talking about PV,
21 Phil did an excellent job in his staff report and
22 I'm just hoping to put a little pictures to words
23 that he had talked about, but you have a fixed tilt

1 and then you have a single axis tracking, two
2 different styles of how you actually rack the panels
3 themselves. At this stage we haven't done final
4 design on any of these solar farms and we really
5 never do in the zoning process. That's reserved for
6 later when we're achieving a building permit.
7 That's when we select which type of racking system
8 we'll use. It's estimated that in this state we're
9 likely to be using single axis tracking. It's just
10 a way to achieve a little bit more yield, follow the
11 sun throughout the day. And the way that these
12 things move are super slowly. You can't even -- you
13 have to really have a lot of time on your hands to
14 sit and watch and see one of these move.
15 Essentially they face east in the morning. They're
16 kind of flat over midday and then in the afternoon
17 they're facing west.

18 Both types of these systems sit on steel
19 posts that are driven about six to ten feet,
20 depending on soil conditions, into the ground. I
21 thought I'd show a few pictures here to give an idea
22 of scale and sort of what these projects will look
23 like. Here's an average height gentleman, so you

1 can see this is about seven, eight feet to the top
2 of those panels and under no scenario would it ever
3 be higher than 12 feet, as Phil mentioned earlier.
4 This is an idea of what the wiring looks like
5 underneath each panel in a row, and this is kind of
6 scaled back a little bit here. We show a couple
7 other components of a solar farm such as an access
8 road and a fence.

9 This equipment you see in this picture,
10 this is the inverter and transformer pair. Phil
11 mentioned these. These are central, centrally
12 located on each solar farm. They're the only
13 equipment that do a few things. One, they're the
14 only equipment on a solar farm that sits on any sort
15 of concrete at all, and that concrete pad you're
16 looking at when you combine those two is about the
17 size of a one-car garage, about 20 by 10. On a site
18 that has two megawatts like a 20-acre site that
19 we're talking about here, Arrowsmith I, you would
20 find two sets of each of those equipment centrally
21 located to the site.

22 The reason we centrally locate it is for a
23 number of reasons. One, all the power is cycling

1 through those pieces of equipment. That's the
2 equipment that's bringing it to the appropriate
3 voltage and also converting it from DC to AC. It's
4 also the only equipment that makes any sort of noise
5 at all, and it's basically a fan that cools it. So
6 midday if you're sitting right next to it you can
7 hear it, but if you're 150 feet away, you can't hear
8 it at all. Some other components, Phil had
9 mentioned fencing and racking and cables and
10 combiner boxes.

11 A couple of pictures of the construction
12 process. On the right we have a site that's been,
13 the racking systems have all been installed that's
14 waiting for panels to be assembled. On the left
15 that shows the process of posts being driven into
16 the ground. So the equipment that we're talking
17 about, the scale here of this equipment is not very
18 large. I like this photo because it gives an idea
19 of what kind of equipment is needed on a site like
20 this.

21 As far as the agricultural impact is
22 concerned, because of the limited concrete, really
23 the permeable nature of the land is not being

1 altered much at all, which is really nice. Field
2 tiles, of course, are found pretty much everywhere,
3 especially in certain parts of the state like where
4 we are at right now, and we recognize that and we're
5 committed to, not only as a condition or a
6 stipulation to this permit, but we're committed to
7 locating them as to the best of our ability ahead of
8 time before final design and then designing around
9 them when possible and also, most importantly, if
10 for whatever reason they are mislocated or we hit
11 one by accident during the construction process, we
12 will repair and replace as soon as we know of the
13 damage that's been done.

14 Here's a couple of pictures of our closest
15 completed solar farms. We don't have any in
16 Illinois yet. It's really a function of just the
17 state kind of on the precipice now. Similar to what
18 happened with wind a decade ago, we're at that spot
19 now with solar. So solar is taking off. Cypress as
20 well as a few other, a number of other developers
21 have recognized the opportunity and they're here.
22 But our closest farms are in Indiana, similar
23 terrain. These are around the Terra Haute, kind of

1 west central Indiana. These are larger projects but
 2 I thought they'd still give a good idea kind of a
 3 scale. So you can picture almost half of what
 4 you're looking at right now to be each individual
 5 project. So if you're looking at Arrowsmith I and
 6 II together, it would have a similar look to this.
 7 On the left is a drone photo. On the right is from
 8 a street level. You can go to the next one.
 9 Same thing, different farm but same size,
 10 also in Indiana in that Terra Haute region. I
 11 thought it would be nice to give a couple examples
 12 of photos. I just want to highlight there's no
 13 risks. Solar development, just like any other power
 14 plant development or real estate development, goes
 15 through a litany of permit regulations, right;
 16 National Building Code, National Electric Code, any
 17 local codes, civil, structural, electrical engineers
 18 of course, and we go through the erosion and storm
 19 water permitting process. From a safety perspective
 20 once the farm is complete, there's a perimeter
 21 fencing around the entire solar farm and that's
 22 locked with a KnoxBox where only emergency services
 23 have the code.

1 From an operations and maintenance
 2 standpoint, it's kind of nice that solar farms are
 3 really self-sufficient. They're managed remotely.
 4 Nobody sits at the location and if there's a problem
 5 identified, we'll send somebody out, somebody local
 6 who's qualified to work on solar farms. And then we
 7 also visit, we have a contractor visit to do mowing
 8 just a few times a year, monthly at most, but really
 9 in the neighborhood of five to nine times per year
 10 including those mowing visits.
 11 There's two types of panels, crystalline
 12 silicon and then thin film. Both accomplish the
 13 same thing. Both contain no fluids, no chemicals,
 14 no leaks, no possibility of any materials leaching
 15 into the area or the soil whatsoever. They're both
 16 made of essentially what amounts to -- I'm blanking
 17 on the term -- tempered glass whereby if one were to
 18 break, and they really can't break but if it were to
 19 break, it breaks in a manner in which no shards of
 20 glass enter anywhere. It all stays like a car
 21 windshield, all stays in one sheet, and then there's
 22 just an aluminum frame around each that then helps
 23 to bind the panel together.

1 I mentioned this earlier. Because of the
 2 limited moving parts, there's really no sound
 3 either. Outside of 150 feet away from that inverter
 4 and transformer equipment, you can't detect any
 5 noise at all. And the same applies for
 6 electromagnetic fields. You find them everywhere,
 7 appliances in your home, overhead power lines.
 8 There's no like real strong sources on a solar farm.
 9 The equipment that makes the most of that is that
 10 same inverter/transformer equipment, but
 11 conveniently outside of that 150-foot radius which
 12 is shown here in that white circle, you can't detect
 13 anything above the earth's magnetic field; another
 14 reason why we centrally locate that equipment, but
 15 you can be right up next to that equipment and it's
 16 not at unsafe levels at all.
 17 Many benefits, both local and in general.
 18 It's a really good way for people to participate or
 19 feel good about having renewable energy generated in
 20 their area and without the hassle of investing in a
 21 rooftop system or some other type of system whereby
 22 there's a quiet, essentially self-sufficient power
 23 generating source right there that's not really

1 noticeable. It's low profile, and of course there's
 2 an economic growth component too with construction
 3 jobs. There's dollars spent per year just on
 4 maintenance and then there's, of course, property
 5 tax revenue associated with projects such as these.
 6 Now is the part I'll talk individually
 7 about, I'll start with Arrowsmith I Solar and we can
 8 move on to the next. So Phil had already referenced
 9 and showed a map, right, so we're at 1100 Road North
 10 right outside of Arrowsmith. We're in Arrowsmith
 11 Township. The site is approximately 20 acres. A
 12 rule of thumb is in the neighborhood of ten acres
 13 per megawatt, typically a little bit smaller when
 14 all is said and done but for we might encounter
 15 field tiles or wet soil, some other conditions
 16 during the final design stage and the construction
 17 stage and so having a little bit of flexibility is
 18 paramount and key to the design process.
 19 So what you're looking at on the right is
 20 a zoning site plan. It hasn't been engineered,
 21 hasn't been -- this is not a final design by any
 22 means, but it gives a good idea especially combined
 23 with the images that I showed earlier of what a site

Page 29

1 of this size will look like and then some numbers
2 associated with a site of this size. So the service
3 volume is estimated to be about 320 homes. That's
4 the number of homes a site this size can power per
5 year.
6 I mentioned earlier the passive use and
7 low impact. Particularly from a utility or
8 municipal service perspective, that's really
9 important. So there's no water needed. No
10 utilities are needed whatsoever, no additional
11 county services, police, emergency services.
12 There's no extra students in schools, of course, so
13 there's really nothing that comes with these solar
14 farms.
15 Total investment, Dave mentioned earlier
16 about 4 million, a little under. Of that 2.3 is
17 estimated to be injected into the local economy with
18 local spending of a modest 30,000, but again that's
19 for routine maintenance and checkups and some mowing
20 and then the amount of local jobs is about 25.
21 That's what I had for Arrowsmith I. I hopefully
22 left enough time for questions and that was the
23 goal.

Page 30

1 MR. STREICKER: Mr. Lines and
2 Mr. Veriotti did not prepare presentations but are
3 here to answer questions from the board.
4 CHAIRWOMAN TURNER: Great. Does the
5 board have any questions?
6 MR. DEAN: One of my questions would
7 be we know the permeability of the soil but it seems
8 to me this object on top of the ground is going to
9 alter the rainfall leaving the soil at a very rapid
10 rate. Do you have information on that? And then as
11 far as this project goes, is there a culvert that
12 goes underneath that railroad track and how is that
13 going to work?
14 CHAIRWOMAN TURNER: Thank you.
15 (Mr. Veriotti sworn)
16 CHAIRWOMAN TURNER: Your name and
17 address?
18 MR. VERIOTTI: My name is Dan, last
19 name Veriotti, V-E-R-I-O-T-T-I, 230 West Monroe,
20 Chicago, Illinois, 60606. So I am a licensed
21 professional engineer with TRC in Chicago. We work
22 with various solar developers in the United States
23 including Illinois, and obviously it's our pleasure

Page 31

1 to be here tonight. Thanks for the invite.
2 We work a lot with Cypress Creek
3 Renewables and we have a variety of projects
4 ongoing, not only the natural resources portion but
5 obviously our group is focused on engineering. We
6 typically get involved in the early stages and all
7 the way to final design.
8 So going back to your question, in a
9 summary we do our due diligence. So, first of all,
10 I would like to assure you that some of the things
11 in the early stages that we look at are the surface
12 drainage, how the water drains and what is the
13 existing topography. We would have two foot
14 contours from the beginning and we look at things,
15 we already did, and then we go and we identify all
16 the major draining features on site. What you have
17 here on the north side is a storm water pond that
18 was constructed awhile ago by the owner of the
19 property and we also have hydraulic connection under
20 the tracks. That is true. We also have another
21 culvert on the east side on the other parcel and
22 then very likely we have another culvert going
23 underneath the road, County Road 1100 North, that

Page 32

1 connects, provides the hydraulic connection with the
2 property to the south.
3 Overall this is a pretty flat surface. We
4 have about one in 100 type of slope. On the
5 northwest corner we have an elevation contour of
6 840 feet, while on the southeast corner we have
7 about 803. So only a 30-foot drop overall which is
8 pretty mild. A pretty mild slope that's in my mind
9 almost flat.
10 So going back to the soils, we have three
11 types of soils for each one of the parcels. They
12 are predominant silty loams. They have some
13 infiltration rates. They are performing better so
14 they belong to a category that infiltrates the
15 water. So I can tell you that, you know, I've
16 probably provided too much information at this stage
17 but comparing to other counties, the soils here
18 drain better. So we now have some groundwater
19 variation and a lot of storage that we in other
20 locations then even in the county we don't have. So
21 soils are pretty good, good infiltration rates.
22 They drain and we don't have a lot of ponding
23 issues. Also we have information from the owner

Page 33

1 that the existing drain tile on site works really
2 well. It's a clay drain tile system. Pretty much
3 everything in Illinois is old, 50, 100 years old,
4 but what we have drains well and from all the
5 records that we have, obviously the site drainage
6 and the subsurface drainage, I would say they
7 perform very well.

8 So during the engineering, that's when we
9 actually go in the field. We start with the owner
10 providing information. We actually identify the
11 inlets and the outlets. We do light excavations.
12 We GPS. We flag the alignment of the pipes. We GPS
13 them and then we bring them in the base mount. So
14 when we have the engineering, you know, final design
15 in place, we'll know exactly what the drain tile,
16 where the pipes are.

17 MR. DEAN: Okay. I think my question
18 is if the rain falls down and it hits the ground,
19 the infiltration is going to be uniform.

20 MR. VERIOTTI: Yes.

21 MR. DEAN: But where you've got this
22 thing directing it down into one spot, it seems to
23 me like there would be a challenge there.

Page 34

1 MR. VERIOTTI: No, so in reality what
2 we're going to end up having, first of all, the
3 surface we put in, it's not impervious. We're not
4 treating the panels. No county in Illinois is
5 looking at panels as an impervious surface. It's
6 not like you pave the surface. Actually it's highly
7 pervious the way it is right now. So we're not
8 really changing anything on site. First of all,
9 we're not changing the grading. We're not bringing
10 imported fill. The drainage surface will be the
11 same. Infiltration rates, if anything, will be
12 greater, will be improved because of the surface
13 that we're putting in.

14 So right now you have crops. What we're
15 going to have is a metal type of just grasses with
16 slow growth, but that type of vegetation will allow
17 better infiltration rates so, if anything, we're
18 going to end up with a net improvement in the total
19 suspended solids, less solids carried away from the
20 site to the neighboring properties and obviously the
21 infiltration rates will improve.

22 MR. DEAN: Okay, I'll buy that.

23 MR. VERIOTTI: Well, we did a lot of

Page 35

1 calculations on that so we stand behind it.

2 CHAIRWOMAN TURNER: So just to make
3 sure I understand, you plant grasses as ground cover
4 to help prevent ground erosion?

5 MR. VERIOTTI: Yes, every time you do
6 storm water calculations, you find out that the
7 metal type of grasses that you put in actually help
8 with the infiltration rates and actually the storm
9 water management at the end.

10 CHAIRWOMAN TURNER: So where it
11 stands as bare soil now for a good part of the year,
12 what you're saying is there will be grasses there
13 that will help it?

14 MR. VERIOTTI: It will be a net
15 improvement, yes.

16 MR. DEAN: And you can't actually get
17 grass to grow underneath the solar collector?

18 MR. VERIOTTI: Yeah, it will grow
19 under as well.

20 MR. DEAN: Okay.

21 MR. KURITZ: But it is acting the
22 same as a roof would, so it's concentrating a flow.
23 Just like the eaves of a roof would, you've got a

Page 36

1 hard surface, the water collects in a larger area.
2 It's not the same as if there was nothing there.

3 MR. VERIOTTI: That is partially
4 true. Let's not forget two things. You're looking
5 at the total surface. You have a lot of spaces in
6 between. And if you are to have a concentrated
7 flow, it will be for a short duration of time for
8 the positioning of the panel. If, for example, the
9 panel slightly moved, if you have a rainfall over
10 ten hours, then obviously that's not true anymore
11 because the panels will obviously shift. So they
12 move. So, you know, you've got to think about the
13 most significant storms. For example, if you take
14 what's called a 100-year storm, say about 7.7 inches
15 in 24 hours, you can only imagine during that
16 duration of time rainfall will hit different areas
17 in the field. So no county so far is treating these
18 panels as impervious just so you know, because they
19 looked at exactly the same thing, because the
20 rainfall sometimes with the wind, based on the
21 angle, again it will be uniformly spread. The water
22 will be uniformly spread on the property.

23 MR. KURITZ: But if you're having a

1 large rain storm, they're not going to move, right?
2 Because they're tracking the sun and if the cloud
3 cover is heavy enough, there won't be any movement
4 in the panels.

5 MR. VERIOTTI: I think it's a
6 question of the programming of the units. Right now
7 it is not decided which system will be implemented,
8 but the system is preprogrammed to go based on the
9 time of the day and not based on the sun. So it's
10 based on, you know, every hour they probably are
11 preprogrammed to move a little bit, and obviously
12 the developer has a lot more information than us at
13 this point about their units they would like to use
14 so, Scott, if you can just talk about the
15 preprogramming?

16 MR. NOVACK: Yeah. Well, I was going
17 to simply mention because there are a number of
18 solar fronts, not just ours, that are installed in
19 wet areas with fixed tilt, right, and I mentioned
20 that that was one of our options, but I want to
21 point out that there's a significant amount of
22 spacing in between these rows and so I don't want
23 that to get lost in this discussion. It's easy when

1 you look at pictures like the one that's up on the
2 screen and then if you're looking at an overhead
3 picture, you see a lot of dark blue and not a whole
4 lot of ground, but when you really zoom in, these
5 rows are between six and up to 20 feet actually on a
6 fixed mount. So there's a significant amount of
7 space in between these rows for the water. It gets
8 relocated to your point, but that's kind of the
9 difference between comparing it to a roof that
10 obviously has an impervious surface under it and
11 then understanding this is like there's a bunch of
12 open space in between these rows.

13 MR. KURITZ: But ultimately storm
14 water retention will be figured and you will abide
15 by county regulations?

16 MR. VERIOTTI: Yeah, it's a two-step
17 process, exactly. So it's a very detailed process
18 where a licensed engineer will perform the
19 calculations and obviously we put together the soil
20 erosion and sedimentation control plan and storm
21 water management plan. These two things coupled
22 with the calculations will be submitted
23 electronically then to another licensed engineer at

1 the county. So it's a two-step process. It's
2 independently performed by two professional
3 engineers so I trust that's 100 percent accurate.
4 MR. KURITZ: Also another question.
5 The transformer and the inverter; is that correct?
6 Okay. They're mounted on concrete. I'm assuming
7 that at least the transformer, if not the inverter,
8 those are vaults that they're located on, not just a
9 pad of concrete. I used to put in a lot of vaults
10 for big electrical transformers and they have the
11 footings that go down and they have the hollows so
12 that you can pull wires in through the bottom
13 because all the wires come in through the bottom,
14 not from the side arm.

15 MR. VERIOTTI: So I think it depends.
16 I don't have a straight answer to your question
17 because most of the time we don't end up with more
18 than four inches on the concrete pad. So
19 everything -- think about it this way. Going back
20 to the solar arrays, everything is under the panels.
21 Then it goes underground about two-foot to the
22 combiner box. Then it goes still two foot deep to
23 the location of the combiner transformer. So

1 basically the wire is buried two feet at that
2 location and then it goes to the utility riser pole
3 and then from that location it goes overhead to the
4 main point of interconnect. So it depends with a
5 vault. I think it also depends on the size and
6 surface area for each one of these concrete pads,
7 but most of the time we don't see a vault. We don't
8 provide that. It's just --

9 MR. KURITZ: Do you provide the
10 transformer or is that a power company?

11 MR. NOVACK: That's all part of our
12 whole process from the beginning to end. It falls
13 under us. But as far as the vault, I don't want to
14 get out over my skis because I'm not an electrical
15 engineer, but I'm not familiar with that terminology
16 being associated with the way that we construct our
17 pads and our inverter and transformer equipment.

18 MR. KURITZ: Okay. I've just done a
19 lot of them for Illinois Power and they've got
20 footings and they've got a void under it with a
21 section where the wire can come in and make the big
22 loop because it's usually large diameter wire and
23 that type of stuff, and I was curious. I know that

Page 41

1 on our wind farms, and we go back to recollection,
2 you've got to take it down five feet. Some of those
3 went down five feet. I just want to make sure if
4 they're going to be five feet or deeper, the entire
5 thing would come out, not just --
6 MR. NOVACK: Yes, so the entire
7 concrete pad will be removed when deconstructing or
8 decommissioning occurs and there's no footings. At
9 least not that I've heard or seen, there's no
10 footings. It's a floating concrete pad.
11 MR. VERIOTTI: Also keep in mind the
12 size of the wire here. For this type of facility
13 we're looking at the main, you know, electrical
14 cables being in the order of one to two inches. So
15 for that reason obviously it's going to be in
16 conduit but we're not looking at the industrial
17 sizes. We're not looking at the typical, you know,
18 service that will be provided from a power plant
19 serving millions of residential customers or
20 anything like that. So that's the reason why we're
21 not thinking of vault. We're looking just two foot
22 down on the wire itself and then obviously it's
23 going to be a rise going up to the inverter and

Page 42

1 transformer location.
2 MR. KURITZ: The vaults I was talking
3 about were connected with a building like this that
4 we're standing in right now. So they aren't huge
5 wires. They're just coming from the big high
6 tension lines. So it still takes a little distance
7 to bend one of those.
8 MR. BANGERT: The solar panels that
9 you are describing here, are these on the cutting
10 edge of technology as to what's available or is the
11 next best thing just around the corner?
12 MR. NOVACK: That's a great question.
13 That's part of the reason why we haven't specked the
14 final equipment at this stage in the project because
15 we do want to make sure that we're using the best
16 equipment out there. However, once we do lock in on
17 a specific type of panel for a specific location,
18 the technology has proven itself to have an
19 extremely long shelf life whereby it will continue
20 to be efficient enough to create the amount of power
21 that is specked to be interconnected into the grid
22 without replacing the equipment.
23 So oftentimes we hear, well, what happens

Page 43

1 if ten years from now there's a panel that's double
2 efficient and half the size? Well, the answer is
3 we're only -- we're limited by our interconnection
4 agreement with the utility, the amount of power that
5 we can plug into the grid at any given location. So
6 for us there's no -- we can't grow that during the
7 term of that contract. This equipment is estimated
8 to last and panels that were created 40 years ago
9 are still going. So the estimate is 30 to 40 years
10 on the panels, the inverter and transformer
11 equipment about 15 to 20 years. So in that scenario
12 we very much budget to go in, take the old equipment
13 out, recycle it, and install new equipment. But the
14 estimate is to leave the panels as is for the life
15 of the farm, however long that is.
16 MR. BANGERT: So if the final spec
17 could change on these panels, you will be required
18 to report what they're made of because --
19 MR. NOVACK: Right.
20 MR. BANGERT: -- you said that
21 there's not any hazardous materials. That spec
22 would have to remain identical to what you said here
23 tonight. Is that what you're --

Page 44

1 MR. NOVACK: I don't know exactly how
2 the building permit process works.
3 MR. STREICKER: Well, the SUP
4 application itself states there's no hazardous
5 materials.
6 MR. BANGERT: Right, but the final
7 spec might change.
8 MR. STREICKER: Correct. But I would
9 argue that based on the fact that we put in the SUP
10 application that there would be no hazardous
11 materials in the panel, if the permit was granted,
12 we would not be able to change that. I would
13 consider that a material provision in the
14 application then.
15 MR. BANGERT: Okay. And then you're
16 going to identify the tile that enter the property
17 and leave the property and if you're to hit any of
18 the tile, they were to be fixed. How easy is that
19 going to be when sometimes that's not going to be
20 evident for a very, very long time?
21 MR. VERIOTTI: You know, it's a great
22 question. Thank you for asking it. I think most of
23 the time you find out when you hit something,

Page 45

1 especially if it's a sizable pipe, you find out when
2 you drive the pile, when you drive the support, the
3 H profile type of support piles. Sometimes you
4 don't, especially when you're talking about a very
5 small diameter pipe, a lateral feeder, you know,
6 that comes into the main, most of the time you
7 obviously will not have a record of that. But
8 shortly after when, say, you have the first
9 significant rainfall event, you're going to see
10 ponding at the location of the broken tile and
11 that's an indication of broken tile that we have to
12 go out there and fix right away. It's in the best
13 interest of the developer, see, to maintain an
14 existing drain tile system because you don't want to
15 end up with ponding in the field for a variety of
16 reasons and obviously that's the way you see it. So
17 again if you miss it during the construction, you're
18 going to pick it up right away after the very first
19 significant rainfall event.
20 MR. BANGERT: Agriculture is adapting
21 new types of tiling technologies. It would appear
22 to me that it would be feasible or make sense to
23 system drain a system or a field like this prior to

Page 46

1 construction; therefore, you know where the lines
2 are, you know where you're going to be building it
3 and then you wouldn't have to deal with it down the
4 road because some of these could be underneath the
5 panel which isn't going to be easy to dig
6 underneath, and you're affecting everybody upstream,
7 downstream from this. It just would seem like it
8 would make sense to just forget what might be there
9 and just put in a new system. Has that idea ever
10 been crossed?
11 MR. VERIOTTI: Well, I would say yes,
12 I think it's a complicated question. Long story
13 short, nowadays they put in the perforated plastic
14 material pipe. It's a flexible type of material.
15 You know exactly where you're going to put it. You
16 can come up with, say, the coordinates on a map and
17 then the guys doing that will know exactly where to
18 go in the field. They will lay it down equal
19 spacing, denote the sizes. So obviously if you do
20 that without interfering with an existing system,
21 then obviously that's the way to go.
22 It's not that easy because we have an
23 existing system that we have some information about,

Page 47

1 but obviously we would have to do a really detailed
2 survey of the existing tile, look at the sizes, look
3 at where it is, and very likely because it's an old
4 system it was not like laid down in equal spacing
5 transects and it's not a regular pattern. Very
6 likely it's going to be something that was done over
7 many years and obviously the previous owners put in
8 a couple, then after some years more was added. So
9 it's complicated because it's an interconnect of
10 existing pipes. It's not like this property site is
11 independent of the other ones. They are connected
12 hydraulically for the subsurface drainage and that's
13 why putting in again a new system right here becomes
14 a very problematic area. It's like a domino effect.
15 If you want to really do it like that, you would
16 have to expand it in a very large area. If it's
17 again one single property not being connected on the
18 neighboring properties, then yes, it becomes
19 feasible. If not, we can't.
20 MR. NOVACK: I'll just add a little
21 bit because I've had some long conversations with
22 our construction and engineering teams over topics
23 like this and it is something that we've discussed.

Page 48

1 The thought came up like, well, what if you have a
2 field that's just got zigzag of tile every which way
3 and the thought of designing the arrays around them
4 is too difficult? Well, then the conversation
5 becomes, well, we'll just redesign the tile system
6 and make sure that we're still appropriately
7 treating the drainage so that when it comes time to
8 hand the land back over to the owner, that we're
9 handing it in equal or better condition which we're
10 contractually obligated to do. But that is
11 certainly, and to Dan's point, of course, not
12 affecting, adversely affecting what's happening
13 outside the property. So the tiles that are
14 draining off site would have to be obviously
15 considered in any sort of tiling redesign. But it
16 is something that's been talked about on a case by
17 case basis. I know that I can hear my engineer on
18 my shoulder saying we would never want to say we're
19 always going to do that because there's going to be
20 sites where it's not right to do. There's probably
21 going to be sites where something like that should
22 be entertained.
23 MR. BANGERT: It would seem to me it

Page 49

1 would be easier to know that you hit a tile when
2 you're digging but when you're driving a post in,
3 you're potentially driving it into something that's
4 plastic or if it's older, then you're driving it
5 into something that might be considered clay, but it
6 seems to me like it would be a very difficult area
7 to migrate and just go, well, we'll just fix it down
8 the road.
9 MR. NOVACK: And we had those same
10 thoughts when we first started really doing our
11 diligence on the Illinois market, and part of that
12 was talking with drain tile experts and those who
13 specialize in doing drain tile field surveys. We
14 looked into it. Before we want to make sure we're
15 committing, we wanted to really understand what we
16 were committing to when we're talking about doing
17 drain tile surveys in this kind of investigation so
18 we did extensive research and understood that the
19 process is actually quite effective. And the labor,
20 I mean, there's a lot that goes into it. We've got
21 to pay for it. But we understand with that process
22 of, you know, the number that was quoted to me was
23 like 95 percent effective as far as locating every

Page 50

1 tile on a site basically by probing and flagging and
2 GPS locating, everything. So it's something that is
3 very much on the forefront of our mind and we want
4 to limit our expenses going forward and that might
5 mean a little bit more up front expense locating
6 them but so we can understand to best design the
7 site.
8 MR. SANDAGE: Can I just interject
9 one thing into the conversation? The guy that does
10 my farming -- I can't do it? Okay.
11 CHAIRWOMAN TURNER: Well, I'm not
12 sure who you are.
13 MR. SANDAGE: I'm the owner.
14 CHAIRWOMAN TURNER: Is he with you
15 guys?
16 MR. STREICKER: That's the landowner.
17 CHAIRWOMAN TURNER: You're the
18 landowner?
19 MR. SANDAGE: Yes. You want to swear
20 me in so I can say one thing?
21 CHAIRWOMAN TURNER: Just a second.
22 MR. STREICKER: If there's the
23 opportunity for testimony, that might be the

Page 51

1 appropriate time or whatever the board --
2 CHAIRWOMAN TURNER: You can come on
3 up. You can get sworn in. You will still be able
4 to give testimony later.
5 MR. SANDAGE: The guy who does the --
6 CHAIRWOMAN TURNER: Hold on.
7 (Mr. Sandage sworn).
8 CHAIRWOMAN TURNER: Your name and
9 address?
10 MR. SANDAGE: David Sandage, 34292
11 East 1100 North Road, Arrowsmith, Illinois. The guy
12 who does my farming has farmed that piece of ground
13 for 20 plus years. He's the owner of D & M Tiling.
14 That's all I'm going to say.
15 CHAIRWOMAN TURNER: Okay. Go ahead
16 and turn that off.
17 MR. VERIOTTI: So to complete the
18 question that you asked, for this type of site
19 obviously we did some internal homework and we're
20 better off just by being accurate with the drain
21 tile, locating what we have and designing around
22 that so we don't hit the main pipes and beyond then,
23 you know, putting in a new drain tile system. So we

Page 52

1 want to keep it on the practical side and then
2 obviously avoid any potential problems with the
3 neighboring properties.
4 MR. DEAN: Do you have an agreement
5 with an electricity retailer or wholesaler? What's
6 your plan there?
7 MR. NOVACK: Our plan, this project
8 will never get off the ground without that
9 agreement. We have initial results that show a
10 favorable interconnection, meaning an agreement is
11 likely and once we do have an agreement, that will
12 be part of our final building permit package, but
13 that agreement will be with Ameren and it will be
14 under the community solar program that the Illinois
15 Power Agency is laying out to the state.
16 MR. DEAN: So it's not in place yet
17 but it's pending?
18 MR. NOVACK: That's right.
19 CHAIRWOMAN TURNER: Okay. I want to
20 know why here? I don't feel like we get any
21 sunshine here, especially this time of year, and
22 that seems to be the question. How much sun does it
23 take to make these things profitable and other than

1 sun, why else here?
2 MR. NOVACK: So that's a great
3 question and I'd like to answer this because I live
4 in the state, and the answer is there is enough sun.
5 The prices falling down has been a really important
6 trend in the market and what's happened are state,
7 essentially state governments have taken note and
8 they thought, well, now we can add solar to our
9 growing list of renewable power offerings and that's
10 exactly what Illinois did. Governor Rauner signed
11 the Future Energy Jobs Act back in December of 2016.
12 It's a bill. Some people know it as a nuclear
13 bailout bill in which they saved essentially two
14 nuclear power plants, but they solidified this goal
15 of having 25 percent of the power procured in the
16 state come from renewable sources. That was already
17 in place, but what they did is they, like I said,
18 solidified it by basically creating a path to
19 achieving this and they've identified which types, X
20 amount from solar, X amount from wind, and they laid
21 out some programs to achieve it. And so that's why
22 now is the time that developers from really all over
23 the country are moving into Illinois as one of the

1 next great solar states.
2 So there's enough yield or sunshine to
3 warrant, based on the price of components, economic
4 project that makes sense. Now there's a component
5 with this program that the Illinois Power Agency is
6 laying out that basically guarantees what's called a
7 RAC, which is a renewable energy credit which is a
8 component of the revenue so that the developer knows
9 what the revenue is going to be on a particular
10 project, and that gives kind of the incentive. Some
11 people use the term subsidies. It's not a subsidy
12 in the sense that our costs are being -- our costs
13 are our costs, but the revenue stream is kind of
14 laid out and understood prior to putting a shovel
15 into the earth, the dirt.
16 CHAIRWOMAN TURNER: So essentially
17 you know what your revenue stream is so you can make
18 a business decision based on whether or not you can
19 make money based on that revenue stream?
20 MR. NOVACK: That's exactly right.
21 And to take it one step further, because oftentimes
22 the question is why here, like why in this
23 particular spot, why East 1100 North Road outside of

1 Arrowsmith; what we look for are a couple of things.
2 So a minimum 20 acres, 20 acres of relatively
3 flat -- I mean we can deal with some texture but
4 relatively flat land that is of close proximity to
5 existing electrical infrastructure, electrical
6 infrastructure that has capacity to take on
7 additional power. So combine those two things with
8 also a willing landowner who wants to either lease
9 out their land or sell their land or partner with a
10 solar developer, those are the ingredients that come
11 to a successful solar project.
12 MR. KURITZ: So do you actually have
13 to have sunshine or does the ultraviolet ray work
14 with these units?
15 MR. NOVACK: I always describe it as
16 you know how you can still get a sunburn, at least
17 my mom taught me and there's a few times I've had
18 evidence of this, you can get a sunburn on a cloudy
19 day? It's like that. The solar panels are still
20 absorbing energy or sunlight or creating electricity
21 out of it on a cloudy day. The sunnier the better.
22 MS. TAYLOR: Is there any concern
23 within the industry, I heard a report somewhere in

1 the last couple of weeks that there may be a
2 significant increase on the importation of solar
3 panels and that could have a very adverse effect on
4 the industry. Is there anything to that?
5 MR. NOVACK: That's a great question.
6 We were extremely disappointed by the tariff
7 decision that the president rubber stamped last
8 month.
9 A couple things to point out though. For
10 one, so what it did is it's requiring a tariff on
11 imported solar panels and we, like a lot of other
12 solar developers, most from time to time depending
13 on the site would use panels that are imported from
14 overseas, oftentimes China. And so it affects us in
15 that way. However, the 30 percent is only on the
16 panels themselves. So there's a number of other
17 components that I outlined earlier today, the
18 racking system, the inverter, transformer, all the
19 wires, all the labor, the land cost. All of those
20 are not affected by this specific decision. So it's
21 not as if this just became 30 percent more expensive
22 fortunately. But we're disappointed. However, I
23 think the Illinois -- the Future Energy Jobs Act has

1 really carved out a system that could weather this
2 type of blow based on the way that the REC's are
3 assigned, the renewable energy credits. The rate
4 payors, all of us in this room, are kind of in on
5 that, right, and so that's going to be there. The
6 costs going up change kind of the numbers a little
7 bit, but that's going to be there.

8 We as a company, one of the benefits to
9 being one of the largest by most recent ranking, the
10 third largest solar developer in the country, is
11 we're well capitalized so we can take advantage of
12 doing things that larger companies can do like
13 buying panels in bulk and negotiating purchase
14 orders well into the future that kind of protect us
15 against price rising. So things like that have --
16 we're not having any change in our strategy in this
17 particular state, but that's a great question.

18 MS. TAYLOR: You don't see it as a
19 serious threat to the industry as a whole?

20 MR. NOVACK: I think there is some
21 aspects of the industry that could be seriously
22 threatened. It's a wide array, right? You've got
23 residential, rooftop solar. You've got small ground

1 mount systems, you've got utility scale ground mount
2 systems. You've got a lot so I don't want to speak
3 for the whole industry. I just know that we're
4 extremely disappointed, particularly when you factor
5 in the fact that the companies that brought that
6 complaint forward to the International Trade
7 Commission, they only manufacture panels that are
8 used on residential and rooftops. They're 60 cell
9 panels as opposed to 72 cell panels that we use on a
10 utility scale. So it didn't really add up because
11 the companies that were complaining about these
12 panels really couldn't manufacture the panels that
13 are needed by utility scale developers.

14 There are definitely jobs that I think are
15 going to be lost. I don't want to say that
16 everybody is going to come out of here perfect, but
17 I don't want to speak for the whole industry, but
18 I'm very comfortable with where Cypress Creek is
19 headed.

20 MR. STREICKER: I would add that post
21 tariff we're still hear tonight, and we feel very
22 good about these projects, Arrowsmith I, II, and
23 Moraine.

1 CHAIRWOMAN TURNER: I want to touch a
2 little bit on solar versus farmland. Obviously one
3 of our main thrusts here is to conserve our natural
4 resources and obviously farmland. We're in the
5 richest farmland around. So we have this one in
6 front of us, perhaps precedent setting, probably
7 precedent setting, so that's something we're going
8 to struggle with, you know. We're taking land out
9 of production, farm production. I realize it's
10 other production. So talk to us a little bit about
11 that, and I'm sure valuation would go into that a
12 little bit, you know. What's the difference in tax
13 income for us? What's the difference in -- what's
14 your argument for doing this versus letting it stay
15 farmland?

16 MR. NOVACK: That's a great question
17 for a number of reasons. I do want to highlight,
18 and we understand the premise here, but I do want to
19 highlight that this is a temporary removal of
20 farmland. This is not permanent. This is not a
21 parking lot or an industrial complex or a
22 residential subdivision, something that's going to
23 permanently remove farmland. Luckily we're here

1 asking for a special use permit in an ag zone.
2 We're not here asking for a zoning change, which I
3 think is wonderful that a special use permit is the
4 appropriate way here because this is ag land that in
5 the long term will remain ag land. So this is a
6 temporary use. The land lying fallow,
7 ecoscience, soil scientists, ecobiologists have
8 actually chimed in talking about the benefits of
9 letting the land lie fallow. So we're proud of that
10 and it's temporary.

11 There's a substantial tax benefit right
12 now being assessed at the ag level compared to what
13 these will be assessed at. I can't give exact
14 numbers because they're not out yet. Similar to the
15 wind industry though, the assessors are coming
16 together and the state will have legislation that
17 says here's how these properties are going to be
18 assessed, and that's just not done yet. We have an
19 estimate in the range of \$7,000 per megawatt per
20 year, which is in the neighborhood of 14,000 for a
21 site like this, two megawatts per year, which of
22 course when you look at it alone, I don't think
23 anybody is going to be doing backflips over that

1 amount, but the relative increase over what it's
2 kicking out today, and I should have done this
3 research because I don't know, but I would wager
4 that it's in the hundreds, not the thousands. So
5 it's a significant uptick. I think Dave wants to
6 say something.

7 MR. STREICKER: I would just add for
8 the board that this will be assessed locally at the
9 McLean County level similar to what you saw with
10 wind. There was assessments at the county,
11 sometimes the township level for various projects,
12 and then eventually the state came in with a
13 centralized assessed or an equalized value across
14 statewide. That may or may not happen here, and the
15 numbers that Mr. Novack is talking about are
16 estimates. We have not sat down with the McLean
17 County assessor with any detail to my knowledge.

18 MR. NOVACK: That's right. We've
19 just been following the industry and what the
20 industry is discussing. I know that people always
21 get nervous when I throw numbers out. I only do
22 that because when I don't throw numbers out, people
23 get really mad at me, kind of in between a rock and

1 a hard place.

2 CHAIRWOMAN TURNER: You certainly
3 have more experience with those numbers and what
4 they've done across the country than what we do
5 here. Any other questions? Staff have any
6 questions?

7 MR. DICK: No.

8 CHAIRWOMAN TURNER: Anyone in the
9 audience have any questions of the applicant?

10 Please give your name and address.

11 MS. ZIEGLER: Anna Ziegler, 2242
12 Westgate Drive, Bloomington, Illinois.

13 CHAIRWOMAN TURNER: Go ahead.

14 MS. ZIEGLER: So you've talked a
15 little bit about what community solar is. I wonder
16 if you could define that a little bit more and talk
17 about the subscription aspect of that type of solar
18 farm.

19 MR. NOVACK: Certainly. Thank you
20 for that. I did not delve into that. So under the
21 Illinois Power Agency, as they enact the directives
22 of this Future Energy Jobs Act, there's a couple of
23 different programs really that the solar, renewable

1 solar energy developments will fall under. Anything
2 above two megawatts is utility scale. We're talking
3 about the two megawatts. So two megawatts and lower
4 fall into the community solar program, which is what
5 Anna -- right?

6 MS. ZIEGLER: Yeah.

7 MR. NOVACK: Is asking about, and I'd
8 like to take some time to tell you about it. So the
9 difference between the utility scale and the
10 community program is the community program can have
11 local subscribers. So in other words, the off take,
12 we as developers are charged under the community
13 solar program to find subscribers. So we have to
14 fill -- based on the amount of electricity that the
15 site will generate, we go out and find people who
16 are going to use that same amount of power per year
17 and in order to be eligible to receive the REC's
18 from the IPA; well, from the utility but handed down
19 through the IPA, you have to get those subscribers.
20 There are specific rules as far as how many for each
21 program. For example, no one subscriber can have
22 more than 40 percent of a solar farm. I think they
23 do that just to diversify in case something happens

1 with that subscriber and they go out of business,
2 whatever. But we're talking about residential,
3 commercial, businesses as well. The only -- we as a
4 developer and I think other developers agree, we
5 would like subscribers that are as local as
6 possible, but in order to handle and absorb all of
7 this power here, the IPA has set it up where you can
8 have a subscriber as long as they're in the same
9 utility territory. So somebody who pays a power
10 bill to Ameren could subscribe to Arrowsmith I or
11 Arrowsmith II or Moraine Solar, and which is nice
12 because it gives an opportunity to really fill these
13 subscriptions but it's also nice on the community
14 side because it gives an opportunity for those that
15 are in the community, and I think this is why it's
16 termed this, to participate in these power plants.

17 MS. ZIEGLER: So what happens if
18 you're not able to fulfill your subscriptions?

19 MR. NOVACK: So I'd have to check
20 with a few of the folks who handle the subscription
21 part of this, but it is our understanding that if we
22 have a solar farm that has not been subscribed at
23 least to the level that's required by the Illinois

Page 65

1 Power Agency, then we wouldn't move forward with
2 that project. But it's not based on the broad -- I
3 think that's the reason why those that are in Ameren
4 are eligible to subscribe to Ameren's community
5 solar farms. Based on that, we don't have any
6 qualms or any worries about not being able to fill
7 the subscriptions for these farms. I should have
8 led with that.

9 MS. ZIEGLER: So as a user of
10 property within the agricultural district, have you
11 been asked to sign an ag nuisance disclaimer?

12 MR. STREICKER: Not to my knowledge
13 but understanding what it is, if it's something we
14 have to do, we can certainly take that into
15 consideration and likely execute it. I haven't seen
16 the terms yet.

17 MS. ZIEGLER: And then so solar farms
18 are relatively new to Illinois and there is an
19 Agricultural Impact Mitigation Agreement that is
20 being negotiated with the Illinois Department of
21 Agriculture. I believe you may have been involved
22 as a company in some of those negotiations. Would
23 you be willing to voluntarily abide by those terms

Page 66

1 in terms of repair of compaction and rutting,
2 erosion control, tile drainage repair which we've
3 already discussed, as well as the financial
4 assurance required by a decommissioning plan?

5 MR. NOVACK: The short answer is yes.
6 We are in the process, as you stated right now, the
7 Illinois Department of Agriculture is in the process
8 of soliciting feedback from the industry on what
9 this AIMA will look like, and so long as it's
10 applicable for solar development and not just, say,
11 wind development which is the template that it's
12 based off of naturally because it came in first,
13 then those are stipulations that we would abide by
14 because they will be in common practice with how we
15 develop land.

16 MR. STREICKER: We're already
17 operating with what we believe is the highest
18 standards with regard to tile repair and I think
19 it's one of the primary thrusts with what the AIMA
20 looks to. Also, obviously the county ordinance
21 requires decommissioning and returning that land to
22 essentially the condition it was when we arrived,
23 and I know the AIMA is within that spirit, not

Page 67

1 having seen the specific terms, but it's certainly
2 in spirit and that would be something we would
3 strongly consider and hope that we're already living
4 up to those standards through staff recommendations
5 and stipulations and obviously the Zoning Ordinance
6 requirements.

7 MS. ZIEGLER: Then transmission
8 lines, will those be buried or overhead from the
9 solar farm to your interconnection point?

10 MR. VERIOTTI: So as we discussed
11 earlier, pretty much everything will be buried in
12 the ground. The only thing that's going to be
13 overhead is from the main riser, the last utility
14 pole that we're going to have on site, the short
15 distance between that location and the main point of
16 interconnect with the overhead power lines on the
17 south side of the site.

18 MS. ZIEGLER: So the interconnection
19 is on the property, not on an adjacent property?

20 MR. VERIOTTI: The interconnection
21 will be on the south side. You have the line of
22 power lines south of it, so that's going to be the
23 overhead from the last point that we're going to

Page 68

1 have on site to actually the existing Ameren utility
2 power lines.

3 MS. ZIEGLER: So you don't anticipate
4 the need for easements with additional landowners?

5 MR. NOVACK: That's correct. I just
6 want to correct one thing. You had mentioned
7 transmission lines and I just want to clarify.
8 Distribution lines for a project of this size, a two
9 megawatt project, would be tapping into distribution
10 lines.

11 MS. ZIEGLER: Okay. Thank you.

12 CHAIRWOMAN TURNER: Anybody else
13 have questions? Go ahead.

14 MS. WINTERLAND: Amy Winterland,
15 22825 North 3075 East Road, Colfax.

16 MR. DICK: Could you spell your name,
17 please?

18 MS. WINTERLAND: A-M-Y,
19 W-I-N-T-E-R-L-A-N-D. So I think I heard you guys
20 say you're the third largest solar company in the
21 U.S., is that correct?

22 MR. NOVACK: Yeah, I mean there's no
23 like one single source of that information, but that

1 was a recent ranking that I had seen.
2 MS. WINTERLAND: So I'm just curious
3 about solar kind of an overview. Can you give me
4 like a picture of the percentage of solar panels
5 that are on barren or arid ground, the percentage
6 that are on buildings or rooftops that you
7 mentioned, and then the percentage that are actually
8 over farm ground?

9 MR. NOVACK: I don't have those
10 numbers. I could tell you with the amount of solar
11 that is required to be for the state to procure it
12 to get to that 25 percent renewable source, there is
13 no way that there's enough rooftops to handle that
14 volume of solar.

15 I understand the question. Unfortunately
16 just the sheer number of megawatts that are required
17 in this state there is going to be farm ground that
18 is going to be needed. Unfortunately like when a
19 development comes together such as this, I mentioned
20 kind of the things that all need to fall into place,
21 and finding the land to do this is no small part of
22 that and being tasked to find that land is much more
23 difficult than just taking out the map and going to

1 all the areas that are not productive farmland and
2 just sticking a pin and saying here is where we want
3 to do business. Simply there's just no way that
4 that could be a feasible way to do solar
5 development.

6 MS. WINTERLAND: Have you guys done
7 any solar arrays on parking lots?

8 MR. NOVACK: I believe we've done
9 smaller installations. I don't know with certainty,
10 you know. I can't speak to all of the different
11 solar projects we've done across the country.
12 Typically parking lot installations are a magnitude
13 smaller than like a two megawatt project that we're
14 talking about here. You would need 20 acres of
15 parking lots in order to do that.

16 MS. WINTERLAND: So are you familiar
17 with the LegoLand in Florida parking lot which is
18 like a two-story drive underneath of it and the
19 solar panels are over the top parking lot? Have you
20 guys done anything like that?

21 MR. NOVACK: I would need to check on
22 our history exactly, but again that's a totally
23 different scale of project than what we're talking

1 about here. If you think about what 20 acres is
2 compared to a parking lot, even the largest of
3 parking lots, and when you're thinking about the
4 fact that we're talking about not just one 20-acre
5 project but a number of them, it's very impossible
6 to find improved land or, say, brownfields or
7 airports that people have asked about. All of these
8 things, they don't add up to nearly enough land to
9 be able to generate the power that's needed.

10 MS. WINTERLAND: Okay. So just one
11 other question. As a farmer and also I've planted
12 pasture, bee pollinator patches and covered grasses.
13 Invasive weeds can sometimes be an issue. Do you
14 guys have a plan for invasive weeds? I know you
15 said you were going to mow, but sometimes things
16 like waterhemp and palmer amarath need to be dealt
17 with.

18 MR. NOVACK: We certainly do, and in
19 our vegetation plan we have a weed maintenance plan
20 as well I believe submitted with this application.
21 I don't have it in front of me now, but that is
22 definitely something that we consider greatly and if
23 we're doing a pollinator friendly habitat, which

1 sometimes we do, we only do it when the community
2 has asked for it and it is something that they have
3 initiative for, and in that instance there's a plan
4 in place for weed mitigation. So it's not a
5 situation where we wouldn't involve the local
6 community in a decision such as that.

7 MS. WINTERLAND: Okay, thank you.

8 CHAIRWOMAN TURNER: Thank you. Right
9 now we need to do a little bit of a procedural thing
10 because we're not going to get through everything we
11 need to get through tonight. So I need to
12 officially open the other cases, is this correct?
13 So I'm going to officially reconvene this one for
14 tomorrow night so that I have a chance to open the
15 other ones so we can reconvene them at different
16 times, okay?

17 MR. STREICKER: Yes, thank you.

18 CHAIRWOMAN TURNER: That's for
19 tomorrow night at 7 o'clock. Reconvene at tomorrow
20 night at 7 o'clock. You can probably stay there.

21 Now I would like to call case number
22 SU-18-04. Staff, you can go ahead and present the
23 case.

Page 73

1 MR. DICK: This is case SU-18-04,
2 application of Arrowsmith II Solar, LLC, by Cypress
3 Creek Renewables for special use to allow a solar
4 power generated facility in the Agriculture District
5 on property in the southeast quarter of Section 14,
6 Township 23 North, Range 5 East of the 3rd principal
7 meridian located in Arrowsmith Township immediately
8 north of 1100 North Road, approximately three-fifths
9 of a mile east of 3400 East Road. Public notice of
10 this hearing was published in the Pantagraph on
11 January 20, 2018, as provided by law. All the other
12 required notifications have been made and the
13 applicant has paid the publication cost.
14 As the first exhibits, I'll pass the
15 application, a township map showing where this
16 property is located and a zoning map showing that
17 this is in the Agriculture District, a site plan for
18 the proposed site, a small site plan is included
19 with your staff report; a communication from the
20 Soil and Water Conservation District that also
21 includes the Land Evaluation and Site Assessment, a
22 communication from the Illinois Department of
23 Natural Resources that I will pass.

Page 74

1 I will deliver a staff report indicating
2 that this is property is relatively flat and the
3 drainage is to the south. It's used for crop
4 production and the public road is 17 feet in width
5 and it's made of oil and chip. It's surrounded by
6 Agriculture District on all sides and it's
7 surrounded by crop production on all sides. The
8 LESA soil score is 169 out of 200 and a total score
9 of -- no, a site assessment of 169 out of 200 and
10 the soil score is 90.4 out of 100. The total LESA
11 score is 259.4 points out of 300, and anything above
12 230 points means the site is of high value for
13 agricultural land protection.
14 The site standards are very similar to the
15 previous staff report and it's the same township and
16 the same road commissioner will need to be applied
17 for an entrance permit, and the concluding opinion
18 is that staff recommends that this application meets
19 all the standards of the Zoning Ordinance and the
20 standards for special uses. An entrance permit
21 needs to be provided. The applicant shall provide
22 certified plans for storm water detention and
23 retention before permit is issued. The applicant

Page 75

1 shall complete consultation with the Illinois
2 Historic Preservation Agency before construction can
3 begin. The applicant shall have all field tile
4 damaged in the construction process repaired by a
5 competent contractor with experience in such repair
6 during the life of the solar farm, and the
7 development shall follow the plans and documents
8 submitted with the application, and that concludes
9 my report.
10 CHAIRWOMAN TURNER: Okay. Then I
11 would like to officially continue that until
12 tomorrow evening. And now I would like to call case
13 number SU-18-05.
14 MR. DICK: Application is SU-18-05,
15 application of Moraine Solar, LLC, by Cypress Creek
16 Renewables for a special use to allow a solar power
17 generating facility in the Ag District on property
18 in the northeast quarter of Section 10, Township 22
19 North, Range 3 East in the third principal meridian
20 located in Downs Township immediately west of 2200
21 East Road approximately 3/5ths of a mile north of
22 600 North Road. Public notice of this hearing was
23 published in the Pantagraph on January 20, 2018, as

Page 76

1 provided by law. All the other required
2 notifications have been made and the applicant has
3 paid the publication cost.
4 As a first exhibit I'd like to pass the
5 application and a township map showing where this
6 property is located in the Downs Township, the
7 zoning map showing that this property is in the
8 Agriculture District, and a site plan showing the
9 development of this property, and a communication
10 from the Soil and Water Conservation District with
11 an attachment with the Land Evaluation and Site
12 Assessment and a communication from the Illinois
13 Department of Natural Resources.
14 We will show some site photos of the
15 property. This is located in Downs Township. You
16 can see the piece there, and that's the outlying
17 property in red and this is a public road to the
18 north and the property is to the left. This is the
19 access road to the west that is on the south side of
20 the subject property. This is across the property
21 from the southeast corner of the property facing it.
22 This is across to the south where this overpass goes
23 over I-74. This is the property that is part of an

Page 77

1 old borrow pit. It's a recreation area now that was
2 used when they were building I-74, and this is also
3 the property to the south of it. This is looking
4 across the subject property from the south toward
5 the southwest of the property, this access road
6 facing straight east with the property to the left.
7 This is the northeast corner of the property along
8 the old railroad right-of-way. This is the public
9 road facing south. There you see the overpass ahead
10 of you and it's the subject property on the right.
11 This is facing southwest across the corner of the
12 property and then the subject property outlined in
13 red.

14 The subject property is relatively flat.
15 It drains to the northwest. It has crop production
16 as vegetation. The public road is an oil and chip
17 road, 18 feet in width. The surrounding zoning is
18 Agriculture District on all sides. The property to
19 the side is in crop production, to the south a pond
20 in part and Interstate I-74 in part, and to the east
21 is crop production and to the west is crop
22 production.
23 The Land Evaluation and Site Assessment

Page 78

1 has a soil score of 95.5 out of 100 and a site
2 assessment of 162 out of 200, giving it a total
3 score of 257.9 out of 300. A score of above 230
4 points means the site is of high value for
5 agricultural land protection.

6 The use standards are very similar, or the
7 standards are very similar to the other two reports
8 except that they need to get approval through the
9 Downs Township road commissioner and the protection
10 is from the Downs Township Fire Protection District.
11 It has the same use standards or stipulations as in
12 the other application. It had one additional one
13 here that it needs to have a 50-foot setback from
14 the front property line or 80 feet from the center
15 line of the township road, whichever is greater, but
16 their new site plan shows that done properly so I
17 would recommend approval with the following
18 stipulations: Entrance permit from the Downs
19 Township road commissioner; two, the applicant shall
20 provide certified plans for storm water detention
21 and retention before permit is issued; three, the
22 applicant shall complete consultation with the
23 Illinois Historic Preservation Agency before

Page 79

1 construction can begin; the applicant shall have all
2 field tile damaged in the construction process
3 repaired by a competent contractor with experience
4 in such repair during the life of this solar farm;
5 and six, the development shall follow the plans and
6 documents submitted with the application and with
7 zoning regulations including Article VI, Section
8 350.43(3), Use Standard for Solar Power Generating
9 Facilities, and that concludes my report.

10 CHAIRWOMAN TURNER: Thank you. And I
11 will continue that until tomorrow evening. Now I'd
12 like to call case number SU-18-02.

13 MR. DICK: This is case number
14 SU-18-02, Lexington Chenoa Wind Farm, LLC, by EDP
15 Renewables North America, LLC, for special use to
16 allow a wind energy conversion system consisting of
17 up to 58 wind turbine generators that are up to
18 550 feet in height as well as any access roads,
19 transformers, power lines, communication lines,
20 interconnection lines, substation, construction
21 lay-down yards, and other ancillary facilities or
22 structures on approximately 4,922 acres in the
23 Agriculture District.

Page 80

1 The application also requests that the
2 time period to apply for a building permit for the
3 wind energy conversion system be extended to
4 three years rather than two as provided by the
5 McLean County zoning Ordinance. This is on property
6 in Sections 13, 24, 25, 26, and 36 in Chenoa
7 Township, in Sections 4, 9, 10, 17, 18, 19, 20, 21,
8 28, 29, 30, 31, 32, 33, and 34 in Yates Township,
9 and in Sections 3, 4, 9, 10, and 16 in Lawndale
10 Township, and generally bounded to the west by Old
11 Route 66, to the north by 3200 North Road, to the
12 east by County Highway 13, and to the south by the
13 line established by 2300 North Road if it were
14 extended.

15 Public notice of this hearing was
16 published in the Pantagraph on January 20, 2018, as
17 provided by law and all the other required
18 notifications have been made and the applicant has
19 paid the publication cost.

20 The first communication, the first exhibit
21 I'd like to pass is the application and the plat map
22 showing where these properties are located in the
23 different township and communications from the

Page 81

1 Illinois Department of Natural Resources, and I will
2 give you individual copies of these on Thursday
3 night when we hear this case. In fact I have made
4 copies. I can give them to you tonight. But I'll
5 pass these.

6 CHAIRWOMAN TURNER: I vote Thursday
7 unless you -- do you guys want them tonight, the
8 copies?

9 MR. KURITZ: Okay.

10 MR. DICK: And I will give the staff
11 report. The existing land use is primarily crop
12 production and pasture. Topography is generally
13 relatively flat and the drainage is to multiple
14 drainage patterns. The surrounding zoning is
15 Agriculture District. The land use is primarily
16 crop production with some pasture.

17 The use standards are as follows, or the
18 standards for the special use are as follows: The
19 proposed special use will not be detrimental or
20 endanger the health, safety, morals, comfort, or
21 welfare of the public. This standard can be met.
22 The applicant is proposing to build a Wind Energy
23 Conversion System, or WECS, consisting of up to 58

Page 82

1 wind turbine generators that are up to 550 feet in
2 height that will produce 208 megawatts of
3 electricity. The applicant intends to use a
4 combination of the Vestas V136 3.45 megawatts and
5 4.6 megawatt turbine models for the project. In
6 their analysis 27 of the 58 turbines have been
7 assumed to be equipped with serrated trailing edge
8 blades to reduce acoustic impact. The substation is
9 also included in this noise analysis. A sound
10 impact assessment was submitted with the application
11 that concludes that all applicable Illinois
12 Pollution Control Board sound regulations at all
13 existing occupied residences in the project area are
14 met. If the applicant changes the type of turbine,
15 an updated sound impact assessment will need to be
16 provided to ensure compliance with IPCB noise
17 regulations.

18 The proposed Wind Energy Conversion System
19 meets the setback requirements of the Zoning
20 Ordinance. The applicant's application states that
21 no turbine will be closer than the greater of
22 500 feet or 1.1 times the total height of the
23 turbine to the property line of a nonparticipating

Page 83

1 landowner and no closer than 1,500 feet or three
2 times the total height of the turbine to the closest
3 corner of an occupied residence. The turbines will
4 be set back 1.1 times the height of the turbine from
5 all side and rear property lines of nonparticipating
6 property owners, from the edge of any public road
7 right-of-way, third party transmission lines, and
8 communication towers as measured from the tip of the
9 blade. Three residences are located within distance
10 of three times the turbine height for which the
11 applicant is working with homeowners on setback
12 agreements.

13 A professional engineer shall certify as
14 part of the building permit application that the
15 foundation and tower design of the WECS is within
16 acceptable professional standards. After
17 construction is complete, a professional engineer
18 will certify or verify they are built according to
19 the approved plans.

20 The applicant has submitted an Obstruction
21 Evaluation and Air Space Analysis, a micro beam --
22 Microwave Beam Path report, an Off Air TV Reception
23 Analysis, an AM and FM analysis and Land Mobile

Page 84

1 Emergency Services Report. Project neighbors living
2 within close proximity to the project are eligible
3 to sign a neighbor agreement which entitles them to
4 annual payments for the life of the project. The
5 applicant will work to remedy or mitigate any
6 problems caused by the project by maintaining a
7 hotline for 24-hour access once construction begins.
8 After the project is complete, the applicant will
9 maintain an on-site complaint resolution process at
10 their local operating and maintenance facility. The
11 application states that the applicant commits to
12 meet with participating and nonparticipating
13 landowners in the project area upon request and will
14 attempt to resolve issues of concern, including any
15 involving noise, shadow or flicker effect,
16 telecommunications, aerial application to
17 agricultural land, traffic or other operational
18 aspects of the project.

19 The application states that in the event
20 that a public safety entity believes its coverage
21 has been compromised by the presence of the wind
22 energy facility, it has many options to improve its
23 signal coverage to the area through optimization of

Page 85

1 a nearby base station or even adding a repeater
2 site. Utility towers, meteorological towers, or
3 even the turbine tower within the wind project area
4 can serve as the platform for a base station or
5 repeater site.

6 The application includes an emergency
7 action plan that establishes procedures required to
8 effectively respond to emergencies that may affect
9 the project or the surrounding community. This EAP
10 will be prepared and implemented throughout the
11 construction operation of the project. It is
12 necessary for the applicant to coordinate and
13 provide aid to local fire districts to promote
14 safety and emergency response procedures.

15 The applicant indicates they will fulfill
16 the decommissioning use standard of the Zoning
17 Ordinance. The applicant will submit a
18 decommissioning plan when the Agricultural
19 Mitigation Agreement is finalized with the Illinois
20 Department of Agriculture.

21 The application includes a site
22 characterization study which is reported that the
23 applicant conducted wildlife studies in consultation

Page 86

1 with the Illinois Department of Natural Resources
2 and United States Fish and Wildlife Service to
3 verify the results of the study.

4 The application indicates the following
5 studies addressing all relevant species have been
6 completed as recommended by IDNR and USFWS; land
7 cover mapping in 2009, avian use surveys 2009 to
8 2010, raptor nest survey from 2009 to 2010, land
9 cover mapping in 2009, acoustic bat surveys in 2009,
10 stage one eagle risk assessment in 2016, avian use
11 surveys December 2016 to December 2017, raptor nest
12 survey from February 28, 2017, through March 1 of
13 2017, American golden plover surveys April 18, 2017,
14 through May 9, 2017, and bat habitat assessment in
15 2017.

16 The application states that prior to
17 operations the applicant will submit a
18 post-construction study plan including methodology
19 for post-construction bird and bat fatality
20 monitoring to IDNR and USFWS for review. A minimum
21 of one year post-construction fatality monitoring
22 will be conducted at the project, the results of
23 which will be submitted to IDNR and USFWS. The

Page 87

1 applicant will minimize potential bat mortality
2 caused by operation of the project by implementing
3 turbine operational adjustments. The applicant will
4 feather turbine blades when wind speeds are below
5 the manufacturer's cut in speed at night during the
6 fall migration period. The applicant will consult
7 with IDNR and USFWS on any follow-up issues raised
8 with respect to the results of these
9 post-construction studies.

10 The county has not yet received a
11 pre-siting study, although we received it now but
12 not by the time I wrote this. An implementation of
13 the IDNR recommendations based on pre-siting study
14 results is required in the Zoning Ordinance for
15 wildlife.

16 There has been no communication submitted
17 from the Illinois Historic Preservation Agency, and
18 the McLean County Regional Comprehensive Plan
19 approved on November 17, 2009, proposes that the
20 project area remain in agricultural land and states
21 that wind energy developments are an opportunity for
22 preserving local farmland and agricultural heritage.
23 The plan goes on to state in reference to the two

Page 88

1 wind farms that have already been approved at the
2 time, "Besides adding significant tax dollars, both
3 projects will assist local farmers, as some take
4 advantage of annual turbine rental fees for allowing
5 energy firms to erect turbines on private property."

6 Two, the proposed special use will not be
7 injurious to the use and enjoyment of other property
8 in the immediate vicinity for purposes already
9 permitted or substantially diminish property values
10 in the immediate area. This standard can be met.
11 The surrounding property that is currently used for
12 crop production will continue to be desirable for
13 such use and will continue to be farmed. The
14 proposed wind farm is compatible with agricultural
15 operations in the project area and these
16 agricultural operations will not likely be
17 negatively impacted.

18 The application meets the setback
19 requirements of the Zoning Ordinance. Compliance
20 with these setback requirements ensure that project
21 improvements are located in safe distances from
22 other uses. The application demonstrates that the
23 project will comply with noise standards of the

Page 89

1 IPCB. The noise analysis and the turbine setback
2 requirements from occupied residences show that the
3 project will not injure nearby residents.
4 The applicant is requesting to be allowed
5 to apply for a building permit for up to three years
6 after county board approval rather than two years as
7 allowed. This is a reasonable request and has been
8 approved for other wind farms in the county.
9 Site approval for each wind turbine within
10 the project area needs to be approved by the Federal
11 Aviation Administration before construction can
12 begin. Lighting on turbines shall meet the FAA
13 lighting requirements. The application states that
14 no more intensive lighting will be installed than is
15 required to meet minimum FAA lighting requirements.
16 None of the proposed turbines is within one and a
17 half miles of a municipal boundary.
18 McLean County has not yet received a
19 pre-siting study addressing all the relevant species
20 submitted to the Illinois Department of Natural
21 Resources and implementation of the IDNR
22 recommendations based on pre-siting study results is
23 required in the Zoning Ordinance for wildlife.

Page 90

1 Three, the proposed special use will not
2 impede the orderly development of the surrounding
3 property for use as permitted in the district. This
4 standard can be met. The Agriculture District is
5 very restrictive for establishing non-agricultural
6 residential uses. Nearby land that is suitable for
7 crop production will continue to be suitable for
8 such use. In the limited areas where residences are
9 located, turbines will be set back 1,500 feet or
10 three times the turbine height from occupied
11 residences, except for three residences that the
12 applicant has not identified.
13 The application meets the requirements of
14 the Zoning Ordinance with respect to
15 decommissioning. The applicant will submit a
16 decommissioning plan when the Ag Mitigation
17 Agreement is finalized with the Illinois Department
18 of Agriculture.
19 The applicant indicates that there are two
20 private airports located within ten-mile radiuses of
21 the property, of the proposed site; Mays Aviation
22 Airport located within the site in Section 19 of
23 Yates Township and Thacker Airport is approximately

Page 91

1 1.7 miles northwest of the site.
2 The application indicates turbines are
3 arranged in lines running east to west parallel to
4 property lines based on feedback from landowners and
5 aerial applicators.
6 Four, adequate utilities, access roads
7 and/or other necessary facilities have been or will
8 be provided. This standard is met. The applicant
9 will protect the existing drainage near the project
10 and repair any damage made to drain tile or other
11 drainage improvements. The applicant is proposing
12 to build gravel access roads to each tower.
13 Drainage problems have developed along and through
14 some of these access roads in the already built Twin
15 Groves Wind Farm. It is necessary to install
16 vegetated strips along the upstream side of access
17 roads that are prone to washing out, particularly
18 where the access roads cross waterways. To minimize
19 erosion along access roads, waterways shall be
20 improved before access roads are installed or the
21 crossing will not be installed in a way that
22 minimizes erosion.
23 Five, adequate measures have been and will

Page 92

1 be provided to provide ingress and egress so
2 designed as to minimize traffic congestion in the
3 public streets. This standard is met. The
4 applicant has been working with the county and
5 townships to obtain road use agreements to maintain
6 the public roads and provide adequate access during
7 the construction process. A side road agreement;
8 excuse me, a signed road agreement with the county
9 for use of county roads will need to be approved
10 before the county board takes action in this
11 application. A written road use agreement with the
12 applicable township road commissioners will need to
13 be obtained before construction permits are issued.
14 Six, the establishment, maintenance, and
15 operation of the special use will be in conformance
16 with the intent of the district in which the special
17 use is proposed to be located. This standard is
18 met. The intent of the Agriculture District states,
19 "Provide for the location and govern the
20 establishment and operation of land uses which are
21 compatible with agriculture and are in such a nature
22 that their location away from residential,
23 commercial, and industrial areas is most desirable."

1 Seven, the proposed special use in all
 2 other respects conforms to the applicable
 3 regulations in the Agriculture District, and this
 4 standard is met.

5 In conclusion, staff recommends that this
 6 application meets all the standards set forth in
 7 Article VII, Section 350-56, Standards for Special
 8 Use Permits) of the Zoning Ordinance provided the
 9 following stipulation, stipulations:

10 One, a road use agreement shall be
 11 obtained with the county before the county board
 12 approves this application;

13 Two, a written road use agreement shall be
 14 obtained with the applicable township road
 15 commissioners before construction permits are
 16 issued;

17 Three, development shall follow the plans
 18 and documents submitted with the application and
 19 with zoning regulations including the use standards
 20 for WECS;

21 Four, adequate financial assurances
 22 acceptable to the county shall be submitted with the
 23 county according to the application and

1 decommissioning plan submitted with the Agricultural
 2 Mitigation Agreement with the Illinois Department of
 3 Agriculture;

4 Five, if decommissioning is triggered, all
 5 facilities will be removed as required under the Ag
 6 Mitigation Agreement, including turbine foundations
 7 to a depth of five feet below grade;

8 Six, McLean County shall receive a
 9 pre-siting study addressing all relevant species
 10 submitted to the IDNR and implementation of the IDNR
 11 recommendations based on pre-siting study results as
 12 required in the Zoning Ordinance for wildlife;

13 Seven, Vestas V136 3.5 megawatts and 4.6
 14 megawatt turbine models shall be installed in this
 15 project according to the project layout submitted
 16 with the application. If the applicant changes the
 17 type of turbine, an updated sound impact assessment
 18 will need to be provided in compliance with IPCB
 19 noise regulations;

20 Eight, the applicant shall complete a
 21 consultation with Illinois Historic Preservation
 22 Agency before construction can begin;

23 Nine, the applicant shall rectify any

1 television and internet connection problems in the
 2 project area and return them to at least the level
 3 of service that occurred before the turbines were
 4 installed;

5 Ten, no lighting shall be installed that
 6 is more intensive than the minimum required by the
 7 FAA;

8 Eleven, the applicant will coordinate and
 9 provide aid to local fire districts to promote
 10 safety and emergency response procedures. That
 11 concludes my report.

12 CHAIRWOMAN TURNER: Thank you. And I
 13 will continue that case until Thursday at 6 o'clock.
 14 And with that, I will say we will reconvene tomorrow
 15 at 7 a.m -- at 7 p.m.

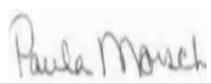
16 (ZBA Hearing Adjourned)

17
18
19
20
21
22
23

1 STATE OF ILLINOIS :
 2 COUNTY OF PEORIA :
 3

4 I, Paula A. Morsch, a certified shorthand
 5 reporter in and for the County of Tazewell, State of
 6 Illinois, do hereby certify that the foregoing
 7 transcription is true and correct to the best of my
 8 knowledge and belief;

9 That I am not related to any of the
 10 parties hereto by blood or marriage, nor shall I
 11 benefit by the outcome of this matter financially or
 12 otherwise.

13
14
15 
 16 Paula A. Morsch, C.S.R. 84-002965
 17
18
19
20
21
22
23

	19:14,16	against (1) 57:15	altered (1) 24:1	13:15;14:11,14,17; 62:9;73:13;74:21,23; 75:3;76:2;78:19,22; 79:1;80:18;81:22;82:3, 14;83:11,20;84:5,8,11; 85:12,15,17,23;86:17; 87:1,3,6;89:4;90:12,15, 19;91:8,11;92:4;94:16, 20,23;95:8
\$	actually (14) 19:23;21:2;33:9,10; 34:6;35:7,8,16;38:5; 49:19;55:12;60:8;68:1; 69:7	Agency (10) 11:2;14:16;52:15; 54:5;62:21;65:1;75:2; 78:23;87:17;94:22	Although (2) 13:14;87:11	applicant's (1) 82:20
\$7,000 (1) 60:19		ago (3) 24:18;31:18;43:8	aluminum (1) 26:22	application (43) 6:6,21;7:17;9:7,16; 14:7,22;44:4,10,14; 71:20;73:2,15;74:18; 75:8,14,15;76:5;78:12; 79:6;80:1,21;82:10,20; 83:14;84:11,16,19; 85:6,21;86:4,16;88:18, 22;89:13;90:13;91:2; 92:11;93:6,12,18,23; 94:16
A	adapting (1) 45:20	agree (1) 64:4	always (3) 48:19;55:15;61:20	applications (1) 18:12
abide (3) 38:14;65:23;66:13	add (6) 47:20;53:8;58:10,20; 61:7;71:8	agreement (17) 43:4;52:4,9,10,11, 13;65:19;84:3;85:19; 90:17;92:7,8,11;93:10, 13;94:2,6	amarath (1) 71:16	applicators (1) 91:5
ability (1) 24:7	added (2) 20:1;47:8	agreements (2) 83:12;92:5	Ameren (4) 52:13;64:10;65:3; 68:1	applied (1) 74:16
able (6) 18:23;44:12;51:3; 64:18;65:6;71:9	adding (2) 85:1;88:2	agricultural (13) 9:6;23:21;65:10,19; 74:13;78:5;84:17; 85:18;87:20,22;88:14, 16;94:1	Ameren's (1) 65:4	applies (1) 27:5
above (5) 9:5;27:13;63:2; 74:11;78:3	addition (1) 14:5	agreements (2) 83:12;92:5	America (1) 79:15	apply (2) 80:2;89:5
absorb (2) 20:18;64:6	additional (4) 29:10;55:7;68:4; 78:12	agreements (2) 83:12;92:5	American (1) 86:13	appoint (1) 4:2
absorbing (1) 55:20	address (6) 15:15,17;18:5;30:17; 51:9;62:10	agreements (2) 83:12;92:5	amount (12) 17:20;29:20;37:21; 38:6;42:20;43:4;53:20, 20;61:1;63:14,16; 69:10	appreciate (1) 17:1
AC (1) 23:3	addressing (3) 86:5;89:19;94:9	Agriculture (22) 6:8;7:1,8;17:13,4; 14:2;45:20;65:21;66:7; 73:4,17;74:6;76:8; 77:18;79:23;81:15; 85:20;90:4,18;92:18, 21;93:3;94:3	amounts (1) 26:16	appropriate (4) 10:4;23:2;51:1;60:4
accent (1) 16:14	Adequate (6) 11:21;12:13;91:6,23; 92:6;93:21	Agriculture (22) 6:8;7:1,8;17:13,4; 14:2;45:20;65:21;66:7; 73:4,17;74:6;76:8; 77:18;79:23;81:15; 85:20;90:4,18;92:18, 21;93:3;94:3	Amy (1) 68:14	appropriately (1) 48:6
acceptable (2) 83:16;93:22	adjacent (1) 67:19	aid (2) 85:13;95:9	A-M-Y (1) 68:18	approval (4) 78:8,17;89:6,9
access (14) 11:21;22:7;76:19; 77:5;79:18;84:7;91:6, 12,14,16,18,19,20;92:6	Adjoined (1) 95:16	AIMA (3) 66:9,19,23	analysis (7) 9:7;82:6,9;83:21,23, 23;89:1	approved (6) 83:19;87:19;88:1; 89:8,10;92:9
accident (1) 24:11	adjustments (1) 87:3	Air (2) 83:21,22	ancillary (1) 79:21	approves (1) 93:12
accomplish (1) 26:12	Administration (1) 89:11	Airport (2) 90:22,23	and/or (1) 91:7	approximately (7) 6:13;12:1;28:11; 73:8;75:21;79:22; 90:23
According (4) 13:10;83:18;93:23; 94:15	advantage (2) 57:11;88:4	airports (2) 71:7;90:20	Andrew (2) 16:3,3	April (1) 86:13
accurate (2) 39:3;51:20	adverse (3) 7:8;10:23;56:3	alignment (1) 33:12	angle (1) 36:21	area (21) 11:7;16:15;17:17,19; 26:15;27:20;36:1;40:6; 47:14,16;49:6;77:1; 82:13;84:13,23;85:3; 87:20;88:10,15;89:10; 95:2
achieve (2) 21:10;53:21	adversely (1) 48:12	allow (5) 6:7;34:16;73:3; 75:16;79:16	Anna (2) 62:11;63:5	areas (7) 13:6;19:17;36:16; 37:19;70:1;90:8;92:23
achieving (2) 21:6;53:19	aerial (4) 7:19;8:8;84:16;91:5	allowed (2) 89:4,7	annual (2) 84:4;88:4	
acoustic (2) 82:8;86:9	affect (2) 8:13;85:8	allowing (1) 88:4	anticipate (1) 68:3	
acres (7) 28:11,12;55:2,2; 70:14;71:1;79:22	affected (1) 56:20	allows (1) 9:22	anti-reflective (1) 10:5	
across (11) 7:13;8:7;18:21;19:1; 61:13;62:4;70:11; 76:20,22;77:4,11	affecting (3) 46:6;48:12,12	almost (2) 25:3;32:9	anymore (1) 36:10	
Act (3) 53:11;56:23;62:22	affects (1) 56:14	alone (1) 60:22	appear (1) 45:21	
acted (1) 17:4	affirm (1) 15:11	along (8) 8:1;16:5,21;17:21; 77:7;91:13,16,19	appears (1) 12:16	
Acting (2) 4:2;35:21	afternoon (1) 21:16	alter (1) 30:9	appliances (1) 27:7	
action (3) 10:21;85:7;92:10	ag (8) 60:1,4,5,12;65:11; 75:17;90:16;94:5		applicable (6) 13:8;66:10;82:11; 92:12;93:2,14	
active (2)	Again (8) 8:8;17:17;29:18; 36:21;45:17;47:13,17; 70:22		applicant (51) 6:18;8:2,11;9:11; 10:15,15,18;12:6,9,18;	

<p>argue (1) 44:9</p> <p>argument (1) 59:14</p> <p>arid (1) 69:5</p> <p>arm (1) 39:14</p> <p>around (8) 24:8,23;25:21;26:22; 42:11;48:3;51:21;59:5</p> <p>arranged (1) 91:3</p> <p>array (1) 57:22</p> <p>arrays (8) 9:20,21;10:4,16; 16:1;39:20;48:3;70:7</p> <p>arrived (1) 66:22</p> <p>Arrowsmith (24) 6:1,6,11,22;7:1; 12:19;14:10;15:20; 16:2,10;17:12;22:19; 25:5;28:7,10,10;29:21; 51:11;55:1;58:22; 64:10,11;73:2,7</p> <p>Article (3) 14:23;79:7;93:7</p> <p>aspect (1) 62:17</p> <p>aspects (2) 57:21;84:18</p> <p>assembled (1) 23:14</p> <p>assessed (5) 60:12,13,18;61:8,13</p> <p>Assessment (14) 7:4;9:1,3;13:11; 73:21;74:9;76:12; 77:23;78:2;82:10,15; 86:10,14;94:17</p> <p>assessments (1) 61:10</p> <p>assessor (1) 61:17</p> <p>assessors (1) 60:15</p> <p>assigned (1) 57:3</p> <p>assist (1) 88:3</p> <p>assisting (1) 13:12</p> <p>associated (3) 28:5;29:2;40:16</p> <p>assumed (1) 82:7</p> <p>assuming (1) 39:6</p> <p>assurance (1) 66:4</p> <p>assurances (1)</p>	<p>93:21</p> <p>assure (1) 31:10</p> <p>attachment (1) 76:11</p> <p>attempt (1) 84:14</p> <p>audience (1) 62:9</p> <p>available (1) 42:10</p> <p>average (2) 10:17;21:23</p> <p>avian (2) 86:7,10</p> <p>Aviation (2) 89:11;90:21</p> <p>avoid (1) 52:2</p> <p>away (8) 7:14;13:5;23:7;27:3; 34:19;45:12,18;92:22</p> <p>awhile (1) 31:18</p> <p>axis (2) 21:1,9</p>	<p>83:21,22</p> <p>became (1) 56:21</p> <p>becomes (3) 47:13,18;48:5</p> <p>bee (1) 71:12</p> <p>begin (5) 14:16;75:3;79:1; 89:12;94:22</p> <p>beginning (2) 31:14;40:12</p> <p>begins (1) 84:7</p> <p>behind (1) 35:1</p> <p>believes (1) 84:20</p> <p>belong (1) 32:14</p> <p>below (2) 87:4;94:7</p> <p>bend (1) 42:7</p> <p>benefit (2) 16:22;60:11</p> <p>benefits (3) 27:17;57:8;60:8</p> <p>Besides (1) 88:2</p> <p>best (5) 24:7;42:11,15;45:12; 50:6</p> <p>Beth (2) 4:19;5:20</p> <p>better (6) 32:13,18;34:17;48:9; 51:20;55:21</p> <p>beyond (1) 51:22</p> <p>big (4) 19:21;39:10;40:21; 42:5</p> <p>bill (3) 53:12,13;64:10</p> <p>bind (1) 26:23</p> <p>bird (1) 86:19</p> <p>bit (15) 18:13;21:10;22:6; 28:13,17;37:11;47:21; 50:5;57:7;59:2,10,12; 62:15,16;72:9</p> <p>blade (1) 83:9</p> <p>blades (2) 82:8;87:4</p> <p>blanking (1) 26:16</p> <p>Bloomington (1) 62:12</p> <p>blow (1)</p>	<p>57:2</p> <p>Blue (2) 19:18;38:3</p> <p>board (11) 15:19;16:4;17:8; 30:3,5;51:1;61:8; 82:12;89:6;92:10; 93:11</p> <p>borrow (1) 77:1</p> <p>both (7) 7:14;21:18;26:12,13, 15:27;17:88:2</p> <p>bottom (2) 39:12,13</p> <p>boundary (1) 89:17</p> <p>bounded (1) 80:10</p> <p>box (2) 10:12;39:22</p> <p>boxes (2) 10:8;23:10</p> <p>break (3) 26:18,18,19</p> <p>breaks (1) 26:19</p> <p>Brian (2) 4:8;5:9</p> <p>brief (1) 17:8</p> <p>briefly (1) 18:15</p> <p>bring (2) 6:4;33:13</p> <p>bringing (2) 23:2;34:9</p> <p>broad (1) 65:2</p> <p>broken (2) 45:10,11</p> <p>brought (1) 58:5</p> <p>brownfields (1) 71:6</p> <p>budget (1) 43:12</p> <p>build (3) 19:4;81:22;91:12</p> <p>building (10) 21:6;25:16;42:3; 44:2;46:2;52:12;77:2; 80:2;83:14;89:5</p> <p>buildings (1) 69:6</p> <p>built (3) 20:17;83:18;91:14</p> <p>bulk (1) 57:13</p> <p>bunch (1) 38:11</p> <p>burdensome (1) 17:16</p>	<p>buried (3) 40:1;67:8,11</p> <p>business (3) 54:18;64:1;70:3</p> <p>businesses (1) 64:3</p> <p>buy (1) 34:22</p> <p>buying (1) 57:13</p>
C				
<p>back (10) 19:23;22:6;31:8; 32:10;39:19;41:1;48:8; 53:11;83:4;90:9</p> <p>backflips (1) 60:23</p> <p>bailout (1) 53:13</p> <p>Bangert (12) 4:8,9;5:8,9,10;42:8; 43:16,20;44:6,15; 45:20;48:23</p> <p>bare (1) 35:11</p> <p>barren (1) 69:5</p> <p>base (3) 33:13;85:1,4</p> <p>based (17) 36:20;37:8,9,10; 44:9;54:3,18,19;57:2; 63:14;65:2,5;66:12; 87:13;89:22;91:4; 94:11</p> <p>basic (1) 10:6</p> <p>basically (6) 18:22;23:5;40:1; 50:1;53:18;54:6</p> <p>basis (1) 48:17</p> <p>bat (4) 86:9,14,19;87:1</p> <p>beam (2)</p>	<p>B</p>	<p>becomes (3) 47:13,18;48:5</p> <p>bee (1) 71:12</p> <p>begin (5) 14:16;75:3;79:1; 89:12;94:22</p> <p>beginning (2) 31:14;40:12</p> <p>begins (1) 84:7</p> <p>behind (1) 35:1</p> <p>believes (1) 84:20</p> <p>belong (1) 32:14</p> <p>below (2) 87:4;94:7</p> <p>bend (1) 42:7</p> <p>benefit (2) 16:22;60:11</p> <p>benefits (3) 27:17;57:8;60:8</p> <p>Besides (1) 88:2</p> <p>best (5) 24:7;42:11,15;45:12; 50:6</p> <p>Beth (2) 4:19;5:20</p> <p>better (6) 32:13,18;34:17;48:9; 51:20;55:21</p> <p>beyond (1) 51:22</p> <p>big (4) 19:21;39:10;40:21; 42:5</p> <p>bill (3) 53:12,13;64:10</p> <p>bind (1) 26:23</p> <p>bird (1) 86:19</p> <p>bit (15) 18:13;21:10;22:6; 28:13,17;37:11;47:21; 50:5;57:7;59:2,10,12; 62:15,16;72:9</p> <p>blade (1) 83:9</p> <p>blades (2) 82:8;87:4</p> <p>blanking (1) 26:16</p> <p>Bloomington (1) 62:12</p> <p>blow (1)</p>	<p>buried (3) 40:1;67:8,11</p> <p>business (3) 54:18;64:1;70:3</p> <p>businesses (1) 64:3</p> <p>buy (1) 34:22</p> <p>buying (1) 57:13</p>	

84:6;87:2 cell (3) 9:17;58:8,9 center (1) 78:14 central (3) 20:14;22:11;25:1 centralized (1) 61:13 centrally (4) 22:11,20,22;27:14 certain (1) 24:3 certainly (6) 48:11;62:2,19;65:14; 67:1;71:18 certainty (1) 70:9 certified (4) 12:6;14:11;74:22; 78:20 certify (2) 83:13,18 cetera (1) 16:8 Chairman (1) 4:3 CHAIRWOMAN (39) 4:21;5:3,5,16,22;6:3; 15:3,8,11,14;18:1,4,9; 30:4,14,16;35:2,10; 50:11,14,17,21;51:2,6, 8,15;52:19;54:16;59:1; 62:2,8,13;68:12;72:8, 18;75:10;79:10;81:6; 95:12 challenge (1) 33:23 chance (1) 72:14 change (6) 43:17;44:7,12;57:6, 16;60:2 changes (2) 82:14;94:16 changing (2) 34:8,9 characterization (1) 85:22 charged (1) 63:12 check (2) 64:19;70:21 checkups (1) 29:19 chemicals (1) 26:13 Chenoa (2) 79:14;80:6 Chicago (4) 15:18;18:7;30:20,21 chimed (1) 60:8	China (1) 56:14 chip (3) 8:16;74:5;77:16 Chris (2) 4:17;5:18 circle (1) 27:12 civil (1) 25:17 clarify (1) 68:7 clay (2) 33:2;49:5 clear (1) 20:10 climbing (1) 20:3 close (2) 55:4;84:2 closer (2) 82:21;83:1 closest (3) 24:14,22;83:2 cloud (1) 37:2 cloudy (2) 55:18,21 coating (1) 10:5 code (4) 17:3;25:16,16,23 codes (1) 25:17 Colfax (1) 68:15 collector (1) 35:17 collects (1) 36:1 color (1) 19:15 combination (2) 10:12;82:4 combine (2) 22:16;55:7 combined (1) 28:22 combiner (4) 10:8;23:10;39:22,23 comfort (2) 9:10;81:20 comfortable (1) 58:18 coming (2) 42:5;60:15 commercial (3) 13:5;64:3;92:23 Commission (1) 58:7 Commissioner (5) 12:19;14:10;74:16; 78:9,19	commissioners (2) 92:12;93:15 commits (1) 84:11 committed (2) 24:5,6 committing (2) 49:15,16 common (1) 66:14 communication (12) 7:2,6;10:19;11:1; 73:19,22;76:9,12; 79:19;80:20;83:8; 87:16 communications (1) 80:23 community (14) 16:11;17:9;52:14; 62:15;63:4,10,10,12; 64:13,15;65:4;72:1,6; 85:9 compaction (1) 66:1 companies (3) 57:12;58:5,11 company (6) 19:4,8;40:10;57:8; 65:22;68:20 compared (2) 60:12;71:2 comparing (2) 32:17;38:9 compatible (3) 13:3;88:14;92:21 competent (4) 12:11;14:18;75:5; 79:3 complaining (1) 58:11 complaint (2) 58:6;84:9 complete (8) 14:14;25:20;51:17; 75:1;78:22;83:17;84:8; 94:20 completed (4) 7:5;19:17;24:15; 86:6 complex (1) 59:21 compliance (3) 82:16;88:19;94:18 complicated (2) 46:12;47:9 comply (1) 88:23 component (3) 28:2;54:4,8 components (8) 10:1,6,11;20:7;22:7; 23:8;54:3;56:17 Comprehensive (1)	87:18 compromised (1) 84:21 concentrated (1) 36:6 concentrating (1) 35:22 concern (2) 55:22;84:14 concerned (1) 23:22 concluded (2) 7:8;10:23 concludes (5) 15:2;75:8;79:9; 82:11;95:11 concluding (1) 74:17 conclusion (2) 14:6;93:5 concrete (9) 22:15,15;23:22;39:6, 9,18;40:6;41:7,10 condition (4) 13:20;24:5;48:9; 66:22 conditions (2) 21:20;28:15 conducted (2) 85:23;86:22 conductor (1) 10:8 conduit (1) 41:16 conformance (3) 12:21;17:2;92:15 conforms (2) 13:8;93:2 congestion (2) 12:15;92:2 connected (3) 42:3;47:11,17 connection (3) 31:19;32:1;95:1 connects (1) 32:1 Conservation (3) 7:2;73:20;76:10 conserve (1) 59:3 consider (3) 44:13;67:3;71:22 consideration (1) 65:15 considered (2) 48:15;49:5 consisting (2) 79:16;81:23 construct (2) 19:5;40:16 constructed (1) 31:18 construction (25)	12:10;14:16,18; 17:18;19:20;23:11; 24:11;28:2,16;45:17; 46:1;47:22;75:2,4; 79:1,2,20;83:17;84:7; 85:11;89:11;92:7,13; 93:15;94:22 consult (1) 87:6 consultation (6) 7:9;14:15;75:1; 78:22;85:23;94:21 contain (2) 9:17;26:13 continue (10) 11:9,17;16:16;42:19; 75:11;79:11;88:12,13; 90:7;95:13 contour (1) 32:5 contours (1) 31:14 contract (1) 43:7 contractor (5) 12:11;14:19;26:7; 75:5;79:3 contractually (1) 48:10 control (3) 38:20;66:2;82:12 conveniently (1) 27:11 conversation (2) 48:4;50:9 conversations (1) 47:21 conversion (5) 13:13;79:16;80:3; 81:23;82:18 converting (1) 23:3 cools (1) 23:5 coordinate (2) 85:12;95:8 coordinates (1) 46:16 copies (3) 81:2,4,8 corn (1) 13:23 corner (9) 7:22;8:5;32:5,6; 42:11;76:21;77:7,11; 83:3 cost (5) 6:19;56:19;73:13; 76:3;80:19 costs (4) 54:12,12,13;57:6 counsel (1) 15:19
--	---	---	--	--

<p>counties (1) 32:17</p> <p>country (7) 18:22;19:1,15;53:23; 57:10;62:4;70:11</p> <p>county (31) 9:14;13:23;16:23; 17:5;29:11;31:23; 32:20;34:4;36:17; 38:15;39:1;61:9,10,17; 66:20;80:5,12;87:10, 18;89:6,8,18;92:4,8,9, 10;93:11,11,22,23;94:8</p> <p>County's (1) 16:16</p> <p>couple (9) 22:6;23:11;24:14; 25:11;47:8;55:1;56:1, 9;62:22</p> <p>coupled (1) 38:21</p> <p>course (8) 17:21;24:2;25:18; 28:1,4;29:12;48:11; 60:22</p> <p>cover (4) 35:3;37:3;86:7,9</p> <p>coverage (2) 84:20,23</p> <p>covered (1) 71:12</p> <p>Craig (1) 5:17</p> <p>create (2) 20:19;42:20</p> <p>created (1) 43:8</p> <p>creating (2) 53:18;55:20</p> <p>credit (1) 54:7</p> <p>credits (1) 57:3</p> <p>Creek (9) 6:7;9:20;10:3;18:15, 19;31:2;58:18;73:3; 75:15</p> <p>crop (18) 8:15,19,20,21;11:8, 16;13:22;14:5;74:3,7; 77:15,19,21,21;81:11, 16;88:12;90:7</p> <p>crops (1) 34:14</p> <p>cross (1) 91:18</p> <p>crossed (1) 46:10</p> <p>crossing (1) 91:21</p> <p>crystalline (1) 26:11</p> <p>culvert (3)</p>	<p>30:11;31:21,22</p> <p>curious (2) 40:23;69:2</p> <p>currently (5) 11:8,16;19:8,19; 88:11</p> <p>customers (1) 41:19</p> <p>cut (1) 87:5</p> <p>cutting (1) 42:9</p> <p>cycling (1) 22:23</p> <p>Cypress (11) 6:7;9:20;10:2;15:22; 18:15,19;24:19;31:2; 58:18;73:2;75:15</p>	<p>41:7</p> <p>deep (1) 39:22</p> <p>deeper (1) 41:4</p> <p>define (1) 62:16</p> <p>defined (1) 10:14</p> <p>definitely (2) 58:14;71:22</p> <p>deliver (2) 8:9;74:1</p> <p>delve (1) 62:20</p> <p>demonstrates (1) 88:22</p> <p>denote (1) 46:19</p> <p>Department (12) 7:6;10:19;65:20; 66:7;73:22;76:13;81:1; 85:20;86:1;89:20; 90:17;94:2</p> <p>depending (2) 21:20;56:12</p> <p>depends (3) 39:15;40:4,5</p> <p>depth (1) 94:7</p> <p>describe (1) 55:15</p> <p>describing (1) 42:9</p> <p>design (10) 10:1;21:4;24:8; 28:16,18,21;31:7; 33:14;50:6;83:15</p> <p>designed (4) 10:5;12:14;13:12; 92:2</p> <p>designing (3) 24:8;48:3;51:21</p> <p>desirable (5) 11:9,17;13:6;88:12; 92:23</p> <p>detail (1) 61:17</p> <p>detailed (2) 38:17;47:1</p> <p>detect (2) 27:4,12</p> <p>detention (3) 12:7;74:22;78:20</p> <p>detention/retention (1) 14:12</p> <p>determine (1) 10:3</p> <p>detrimental (2) 9:9;81:19</p> <p>develop (2) 10:3;66:15</p> <p>developed (3)</p>	<p>10:2;19:8;91:13</p> <p>developer (7) 15:23;37:12;45:13; 54:8;55:10;57:10;64:4</p> <p>developers (8) 20:16;24:20;30:22; 53:22;56:12;58:13; 63:12;64:4</p> <p>developing (1) 19:19</p> <p>development (19) 11:14;14:20;16:21; 18:17,21,23;19:4; 25:13,14,14;66:10,11; 69:19;70:5;75:7;76:9; 79:5;90:2;93:17</p> <p>developments (2) 63:1;87:21</p> <p>diameter (2) 40:22;45:5</p> <p>DICK (23) 4:5,8,10,12,14,16,19, 23;5:4,7,9,11,13,15,17, 20;6:5;62:7;68:16; 73:1;75:14;79:13; 81:10</p> <p>difference (4) 38:9;59:12,13;63:9</p> <p>different (8) 21:2;25:9;36:16; 62:23;70:10,23;72:15; 80:23</p> <p>difficult (3) 48:4;49:6;69:23</p> <p>dig (1) 46:5</p> <p>digging (1) 49:2</p> <p>diligence (2) 31:9;49:11</p> <p>diminish (2) 11:6;88:9</p> <p>directing (1) 33:22</p> <p>directives (1) 62:21</p> <p>dirt (1) 54:15</p> <p>disappointed (3) 56:6,22;58:4</p> <p>disclaimer (1) 65:11</p> <p>discussed (3) 47:23;66:3;67:10</p> <p>discussing (1) 61:20</p> <p>discussion (1) 37:23</p> <p>distance (4) 12:16;42:6;67:15; 83:9</p> <p>distances (1) 88:21</p>	<p>Distribution (2) 68:8,9</p> <p>District (26) 6:9;7:1,3;8:18; 11:15;12:3,22;13:9; 14:2;65:10;73:4,17,20; 74:6;75:17;76:8,10; 77:18;78:10;79:23; 81:15;90:3,4;92:16,18; 93:3</p> <p>districts (2) 85:13;95:9</p> <p>diversify (1) 63:23</p> <p>documents (4) 14:21;75:7;79:6; 93:18</p> <p>dollars (2) 28:3;88:2</p> <p>domino (1) 47:14</p> <p>done (13) 21:3;24:13;28:14; 40:18;47:6;60:18;61:2; 62:4;70:6,8,11,20; 78:16</p> <p>double (1) 43:1</p> <p>down (13) 33:18,22;39:11;41:2, 3,22;46:3,18;47:4; 49:7;53:5;61:16;63:18</p> <p>Downs (6) 75:20;76:6,15;78:9, 10,18</p> <p>downstream (1) 46:7</p> <p>drain (13) 32:18,22;33:1,2,15; 45:14,23;49:12,13,17; 51:20,23;91:10</p> <p>drainage (15) 11:21;12:4;31:12; 33:5,6;34:10;47:12; 48:7;66:2;74:3;81:13, 14;91:9,11,13</p> <p>draining (2) 31:16;48:14</p> <p>drains (4) 8:14;31:12;33:4; 77:15</p> <p>drive (4) 45:2,2;62:12;70:18</p> <p>driven (2) 21:19;23:15</p> <p>driving (4) 20:4;49:2,3,4</p> <p>drone (1) 25:7</p> <p>drop (1) 32:7</p> <p>due (1) 31:9</p>
D				

<p>duration (2) 36:7,16</p> <p>during (12) 12:12;14:19;24:11; 28:16;33:8;36:15;43:6; 45:17;75:6;79:4;87:5; 92:6</p> <p>dwelling (8) 7:13;8:6,20,22; 11:10,10,18,19</p>	<p>12:14;92:1</p> <p>eight (3) 10:17;22:1;94:20</p> <p>either (2) 27:3;55:8</p> <p>election (1) 5:2</p> <p>electric (2) 17:9;25:16</p> <p>electrical (7) 10:11;25:17;39:10; 40:14;41:13;55:5,5</p> <p>electricity (7) 10:10;14:2;20:19; 52:5;55:20;63:14;82:3</p> <p>electromagnetic (1) 27:6</p> <p>electronically (1) 38:23</p> <p>elevation (1) 32:5</p> <p>Eleven (1) 95:8</p> <p>eligible (3) 63:17;65:4;84:2</p> <p>else (2) 53:1;68:12</p> <p>emergencies (1) 85:8</p> <p>emergency (6) 25:22;29:11;84:1; 85:6,14;95:10</p> <p>enact (1) 62:21</p> <p>enacted (1) 17:4</p> <p>encounter (1) 28:14</p> <p>end (6) 34:2,18;35:9;39:17; 40:12;45:15</p> <p>endanger (2) 9:9;81:20</p> <p>endangered (1) 7:10</p> <p>energy (20) 10:6;16:17,20;17:22; 20:11;27:19;53:11; 54:7;55:20;56:23;57:3; 62:22;63:1;79:16;80:3; 81:22;82:18;84:22; 87:21;88:5</p> <p>engineer (8) 16:6;30:21;38:18,23; 40:15;48:17;83:13,17</p> <p>engineered (1) 28:20</p> <p>engineering (4) 31:5;33:8,14;47:22</p> <p>engineers (2) 25:17;39:3</p> <p>enjoyment (2) 11:4;88:7</p>	<p>enough (7) 29:22;37:3;42:20; 53:4;54:2;69:13;71:8</p> <p>ensure (2) 82:16;88:20</p> <p>enter (2) 26:20;44:16</p> <p>entertained (1) 48:22</p> <p>entire (3) 25:21;41:4,6</p> <p>entitles (1) 84:3</p> <p>entity (1) 84:20</p> <p>entrance (6) 12:17,18;14:9;74:17, 20;78:18</p> <p>equal (3) 46:18;47:4;48:9</p> <p>equalized (1) 61:13</p> <p>equipment (23) 22:9,13,14,20;23:1,2, 4,16,17,19;27:4,9,10, 14,15;40:17;42:14,16, 22;43:7,11,12,13</p> <p>equipped (1) 82:7</p> <p>erect (1) 88:5</p> <p>erosion (6) 25:18;35:4;38:20; 66:2;91:19,22</p> <p>especially (5) 24:3;28:22;45:1,4; 52:21</p> <p>Essentially (7) 21:15;26:16;27:22; 53:7,13;54:16;66:22</p> <p>establish (1) 9:12</p> <p>established (1) 80:13</p> <p>establishes (1) 85:7</p> <p>establishing (1) 90:5</p> <p>establishment (4) 12:20;13:2;92:14,20</p> <p>estate (1) 25:14</p> <p>estimate (3) 43:9,14;60:19</p> <p>estimated (4) 21:8;29:3,17;43:7</p> <p>estimates (1) 61:16</p> <p>et (1) 16:7</p> <p>ethanol (1) 14:1</p> <p>evaluated (1)</p>	<p>10:22</p> <p>evaluation (8) 7:3,4;9:2;13:11; 73:21;76:11;77:23; 83:21</p> <p>even (5) 21:12;32:20;71:2; 85:1,3</p> <p>evening (4) 15:9,21;75:12;79:11</p> <p>event (3) 45:9,19;84:19</p> <p>eventually (1) 61:12</p> <p>everybody (2) 46:6;58:16</p> <p>everywhere (2) 24:2;27:6</p> <p>evidence (1) 55:18</p> <p>evident (1) 44:20</p> <p>exact (1) 60:13</p> <p>exactly (9) 33:15;36:19;38:17; 44:1;46:15,17;53:10; 54:20;70:22</p> <p>example (3) 36:8,13;63:21</p> <p>examples (1) 25:11</p> <p>excavations (1) 33:11</p> <p>excellent (1) 20:21</p> <p>except (2) 78:8;90:11</p> <p>excited (1) 16:13</p> <p>excuse (1) 92:8</p> <p>execute (1) 65:15</p> <p>exhibit (3) 6:20;76:4;80:20</p> <p>exhibits (1) 73:14</p> <p>existing (12) 31:13;33:1;45:14; 46:20,23;47:2,10;55:5; 68:1;81:11;82:13;91:9</p> <p>expand (1) 47:16</p> <p>expect (2) 17:18;19:19</p> <p>expense (1) 50:5</p> <p>expenses (1) 50:4</p> <p>expensive (1) 56:21</p> <p>experience (6)</p>	<p>12:11;14:19;18:21; 62:3;75:5;79:3</p> <p>experts (2) 16:4;49:12</p> <p>extended (2) 80:3,14</p> <p>extensive (1) 49:18</p> <p>extra (1) 29:12</p> <p>extremely (3) 42:19;56:6;58:4</p>
E		F		
<p>eagle (1) 86:10</p> <p>EAP (1) 85:9</p> <p>earlier (7) 22:3;27:1;28:23; 29:6,15;56:17;67:11</p> <p>early (2) 31:6,11</p> <p>earth (1) 54:15</p> <p>earth's (1) 27:13</p> <p>easements (1) 68:4</p> <p>easier (1) 49:1</p> <p>East (20) 6:10,13,13;8:1,4,19; 21:15;31:21;51:11; 54:23;68:15;73:6,9,9; 75:19,21;77:6,20; 80:12;91:3</p> <p>easy (4) 37:23;44:18;46:5,22</p> <p>eaves (1) 35:23</p> <p>ecobiologists (1) 60:7</p> <p>economic (3) 16:20;28:2;54:3</p> <p>economy (1) 29:17</p> <p>ecoscientists (1) 60:7</p> <p>edge (3) 42:10;82:7;83:6</p> <p>EDP (1) 79:14</p> <p>effect (3) 47:14;56:3;84:15</p> <p>effective (2) 49:19,23</p> <p>effectively (1) 85:8</p> <p>effects (2) 7:9;10:23</p> <p>efficient (2) 42:20;43:2</p> <p>egress (2)</p>	<p>FAA (3) 89:12,15;95:7</p> <p>face (1) 21:15</p> <p>facilities (6) 10:7;11:22;79:9,21; 91:7;94:5</p> <p>Facility (15) 6:8;9:13,15,17; 11:12,20;12:9;13:19; 14:14;15:1;41:12;73:4; 75:17;84:10,22</p> <p>facing (10) 7:22;8:1,2,4,6;21:17; 76:21;77:6,9,11</p> <p>fact (4) 44:9;58:5;71:4;81:3</p> <p>factor (1) 58:4</p> <p>fairly (1) 17:18</p> <p>fall (4) 63:1,4;69:20;87:6</p> <p>fallen (2) 20:5,8</p> <p>falling (2) 20:4;53:5</p> <p>fallow (2) 60:6,9</p> <p>falls (2) 33:18;40:12</p> <p>familiar (2) 40:15;70:16</p> <p>family (3) 8:21;11:10,18</p> <p>fan (1) 23:5</p> <p>far (6) 23:21;30:11;36:17; 40:13;49:23;63:20</p> <p>farm (34) 7:13,21,23;8:3,5,6,7, 20;10:2;11:10,18; 12:12;14:20;20:7;22:7, 12,14;25:9,20,21;27:8; 43:15;59:9;62:18; 63:22;64:22;67:9;69:8, 17;75:6;79:4,14;88:14;</p>			

<p>91:15 farmed (2) 51:12;88:13 farmer (1) 71:11 farmers (1) 88:3 farming (2) 50:10;51:12 farmland (10) 13:13;14:5;59:2,4,5, 15,20,23;70:1;87:22 farmlands (1) 16:19 farms (16) 14:3;16:15;19:7,18; 21:4;24:15,22;26:2,6; 29:14;41:1;65:5,7,17; 88:1;89:8 fatality (2) 86:19,21 favorable (1) 52:10 feasible (3) 45:22;47:19;70:4 feather (1) 87:4 features (1) 31:16 February (1) 86:12 Federal (1) 89:10 feedback (2) 66:8;91:4 feeder (1) 45:5 feel (3) 27:19;52:20;58:21 fees (1) 88:4 feet (24) 8:16;10:17,18;12:1; 21:19;22:1,3;23:7; 27:3;32:6;38:5;40:1; 41:2,3,4;74:4;77:17; 78:14;79:18;82:1,22; 83:1;90:9;94:7 fence (1) 22:8 fencing (3) 10:10;23:9;25:21 few (8) 18:17;19:20;21:21; 22:13;24:20;26:8; 55:17;64:20 field (14) 12:9;14:17;24:1; 27:13;28:15;33:9; 36:17;45:15,23;46:18; 48:2;49:13;75:3;79:2 fields (1) 27:6</p>	<p>figured (1) 38:14 fill (4) 34:10;63:14;64:12; 65:6 film (1) 26:12 final (10) 21:3;24:8;28:16,21; 31:7;33:14;42:14; 43:16;44:6;52:12 finalized (2) 85:19;90:17 finance (1) 19:4 financial (2) 66:3;93:21 find (10) 20:7;22:20;27:6; 35:6;44:23;45:1;63:13, 15;69:22;71:6 finding (1) 69:21 Finnegan (2) 4:16;5:18 fire (5) 12:3,3;78:10;85:13; 95:9 firms (1) 88:5 first (14) 6:20;15:5,12;31:9; 34:2,8;45:8,18;49:10; 66:12;73:14;76:4; 80:20,20 Fish (1) 86:2 five (9) 10:11;14:20;26:9; 41:2,3,4;91:23;94:4,7 fix (2) 45:12;49:7 fixed (5) 9:21;20:23;37:19; 38:6;44:18 flag (1) 33:12 flagging (1) 50:1 flat (9) 8:14;21:16;32:3,9; 55:3,4;74:2;77:14; 81:13 flexibility (1) 28:17 flexible (1) 46:14 flicker (1) 84:15 floating (1) 41:10 Florida (1) 70:17</p>	<p>flow (2) 35:22;36:7 fluids (1) 26:13 FM (1) 83:23 focused (1) 31:5 folks (1) 64:20 follow (6) 9:22;14:21;21:10; 75:7;79:5;93:17 following (6) 10:11;14:8;61:19; 78:17;86:4;93:9 follows (3) 9:8;81:17,18 follow-up (1) 87:7 foot (3) 31:13;39:22;41:21 footings (4) 39:11;40:20;41:8,10 forefront (1) 50:3 forget (2) 36:4;46:8 formula (1) 18:23 forth (2) 14:7;93:6 fortunately (1) 56:22 forward (6) 6:1,4;19:13;50:4; 58:6;65:1 found (1) 24:2 foundation (1) 83:15 foundations (1) 94:6 founded (1) 18:19 four (4) 14:16;39:18;91:6; 93:21 frame (1) 26:22 friendly (1) 71:23 front (4) 50:5;59:6;71:21; 78:14 frontage (1) 12:1 fronts (1) 37:18 fueling (1) 20:9 fulfill (2) 64:18;85:15</p>	<p>fully (1) 10:2 function (1) 24:16 further (1) 54:21 Future (4) 53:11;56:23;57:14; 62:22</p> <p style="text-align: center;">G</p> <p>garage (1) 22:17 general (2) 20:16;27:17 generally (2) 80:10;81:12 generate (2) 63:15;71:9 generated (2) 27:19;73:4 Generating (12) 6:8;9:12,15;11:12, 20;12:8;13:18;14:13; 15:1;27:23;75:17;79:8 generation (3) 10:12;17:9,22 generators (2) 79:17;82:1 gentleman (1) 21:23 gets (2) 18:13;38:7 gigawatt (1) 19:12 gigawatts (2) 19:7,9 given (1) 43:5 gives (5) 23:18;28:22;54:10; 64:12,14 giving (2) 9:3;78:2 glass (2) 26:17,20 goal (2) 29:23;53:14 goals (1) 16:21 goes (10) 25:14;30:11,12; 39:21,22;40:2,3;49:20; 76:22;87:23 golden (1) 86:13 Good (11) 15:9;16:18;17:13; 25:2;27:18,19;28:22; 32:21,21;35:11;58:22 govern (2) 13:2;92:19</p>	<p>governments (1) 53:7 Governor (1) 53:10 GPS (3) 33:12,12;50:2 grade (1) 94:7 grading (1) 34:9 granted (1) 44:11 grass (1) 35:17 grasses (6) 13:16;34:15;35:3,7, 12;71:12 gravel (1) 91:12 great (9) 15:8;30:4;42:12; 44:21;53:2;54:1,56:5; 57:17;59:16 greater (3) 34:12;78:15;82:21 greatly (1) 71:22 grid (2) 42:21;43:5 ground (16) 9:18;21:20;23:16; 30:8;33:18;35:3,4; 38:4;51:12;52:8;57:23; 58:1;67:12;69:5,8,17 groundwater (1) 32:18 group (1) 31:5 Groves (1) 91:15 grow (3) 35:17,18;43:6 growing (2) 19:22;53:9 grown (2) 13:16,23 growth (3) 20:9;28:2;34:16 guarantees (1) 54:6 guess (1) 4:15 guy (3) 50:9;51:5,11 guys (7) 46:17;50:15;68:19; 70:6,20;71:14;81:7</p> <p style="text-align: center;">H</p> <p>habitat (2) 71:23;86:14 half (3)</p>
---	---	---	---	--

<p>25:3;43:2;89:17 hand (1) 48:8 handed (1) 63:18 handing (1) 48:9 handle (3) 64:6,20;69:13 hands (1) 21:13 happen (1) 61:14 happened (2) 24:18;53:6 happening (1) 48:12 happens (3) 42:23;63:23;64:17 hard (2) 36:1;62:1 Harvesting (1) 14:1 hassle (1) 27:20 Haute (2) 24:23;25:10 hazardous (3) 43:21;44:4,10 headed (1) 58:19 health (2) 9:9;81:20 hear (6) 23:7,7;42:23;48:17; 58:21;81:3 heard (3) 41:9;55:23;68:19 hearing (6) 6:15;15:20;73:10; 75:22;80:15;95:16 heavy (1) 37:3 height (10) 10:17,18;21:23; 79:18;82:2,22;83:2,4, 10:90:10 help (4) 16:19;35:4,7,13 helping (1) 16:7 helps (1) 26:22 Here's (3) 21:23;24:14;60:17 heritage (2) 16:16;87:22 high (5) 9:5;13:15;42:5; 74:12;78:4 higher (1) 22:3 highest (1)</p>	<p>66:17 highlight (3) 25:12;59:17,19 highly (1) 34:6 Highway (1) 80:12 Historic (6) 11:2;14:15;75:2; 78:23;87:17;94:21 history (1) 70:22 hit (6) 24:10;36:16;44:17, 23;49:1;51:22 hits (1) 33:18 Hold (1) 51:6 hollows (1) 39:11 home (1) 27:7 homeowners (1) 83:11 homes (2) 29:3,4 homework (1) 51:19 hope (2) 16:15;67:3 hopefully (5) 17:11,13,16,19; 29:21 hoping (1) 20:22 hotline (1) 84:7 hour (1) 37:10 hours (2) 36:10,15 house (1) 7:12 huge (1) 42:4 hundreds (1) 61:4 hydraulic (2) 31:19;32:1 hydraulically (1) 47:12</p>	<p>identified (3) 26:5;53:19;90:12 identify (3) 31:15;33:10;44:16 identifying (1) 10:20 IDNR (8) 86:6,20,23;87:7,13; 89:21;94:10,10 II (4) 25:6;58:22;64:11; 73:2 Illinois (40) 7:6;10:19;11:2; 14:15;15:18;16:20; 19:18;20:17;24:16; 30:20,23;33:3;34:4; 40:19;49:11;51:11; 52:14;53:10,23;54:5; 56:23;62:12,21;64:23; 65:18,20;66:7;73:22; 75:1;76:12;78:23;81:1; 82:11;85:19;86:1; 87:17;89:20;90:17; 94:2,21 images (1) 28:23 imagine (1) 36:15 immediate (4) 11:5,7;88:8,10 immediately (3) 6:12;73:7;75:20 impact (8) 17:20;23:21;29:7; 65:19;82:8,10,15; 94:17 impacted (3) 11:11,19;88:17 impede (2) 11:13;90:2 impervious (4) 34:3,5;36:18;38:10 implementation (3) 87:12;89:21;94:10 implemented (2) 37:7;85:10 implementing (1) 87:2 important (2) 29:9;53:5 importantly (2) 19:6;24:9 importation (1) 56:2 imported (3) 34:10;56:11,13 impossible (1) 71:5 impression (1) 17:11 impressive (1) 19:22</p>	<p>improve (2) 34:21;84:22 improved (3) 34:12;71:6;91:20 improvement (2) 34:18;35:15 improvements (2) 88:21;91:11 incentive (1) 54:10 inches (3) 36:14;39:18;41:14 include (1) 10:7 included (2) 73:18;82:9 includes (4) 10:11;73:21;85:6,21 including (8) 14:23;26:10;30:23; 79:7;84:14;86:18; 93:19;94:6 income (1) 59:13 increase (2) 56:2;61:1 independent (1) 47:11 independently (1) 39:2 Indiana (3) 24:22;25:1,10 indicates (7) 9:16;10:16;13:16; 85:15;86:4;90:19;91:2 indicating (3) 7:3,7;74:1 indication (1) 45:11 individual (3) 19:2;25:4;81:2 individually (1) 28:6 individuals (1) 18:20 industrial (4) 13:6;41:16;59:21; 92:23 industry (12) 19:22;20:1;55:23; 56:4;57:19,21;58:3,17; 60:15;61:19,20;66:8 infiltrates (1) 32:14 infiltration (7) 32:13,21;33:19; 34:11,17,21;35:8 information (8) 10:22;30:10;32:16, 23;33:10;37:12;46:23; 68:23 infrastructure (2) 55:5,6</p>	<p>ingredients (1) 55:10 ingress (2) 12:14;92:1 initial (1) 52:9 initiative (1) 72:3 injected (1) 29:17 injure (1) 89:3 injurious (2) 11:4;88:7 inlets (1) 33:11 install (2) 43:13;91:15 installations (2) 70:9,12 installed (8) 23:13;37:18;89:14; 91:20,21;94:14;95:4,5 instance (1) 72:3 intends (1) 82:3 intensive (2) 89:14;95:6 intent (3) 12:22;92:16,18 interconnect (3) 40:4;47:9;67:16 interconnected (1) 42:21 interconnection (6) 43:3;52:10;67:9,18, 20;79:20 interest (1) 45:13 interfering (1) 46:20 interject (1) 50:8 internal (1) 51:19 International (1) 58:6 internet (1) 95:1 Interstate (1) 77:20 into (26) 16:16;18:16,16; 20:13;21:20;23:15; 26:15;29:17;33:22; 42:21;43:5;45:6;49:3, 5,14,20;50:9;53:23; 54:15;57:14;59:11; 62:20;63:4;65:14;68:9; 69:20 introduce (1) 17:23</p>
	I			
	<p>I-74 (3) 76:23;77:2,20 idea (8) 19:10;20:18;21:21; 22:4;23:18;25:2;28:22; 46:9 identical (1) 43:22</p>			

<p>introduction (1) 15:21</p> <p>Invasive (2) 71:13,14</p> <p>inverter (9) 10:12;22:10;27:3; 39:5,7;40:17;41:23; 43:10;56:18</p> <p>inverter/transformer (1) 27:10</p> <p>inverters (1) 10:7</p> <p>investigation (1) 49:17</p> <p>investing (1) 27:20</p> <p>investment (1) 29:15</p> <p>invite (1) 31:1</p> <p>involve (1) 72:5</p> <p>involved (2) 31:6;65:21</p> <p>involving (1) 84:15</p> <p>IPA (3) 63:18,19;64:7</p> <p>IPCB (3) 82:16;89:1;94:18</p> <p>issue (2) 17:6;71:13</p> <p>issued (6) 12:8;14:13;74:23; 78:21;92:13;93:16</p> <p>issues (3) 32:23;84:14;87:7</p>	<p>61:2</p> <p>kind (18) 18:16;21:16;22:5; 23:19;24:17;23;25:2; 26:2;38:8;49:17;54:10, 13;57:4,6,14;61:23; 69:3,20</p> <p>knowledge (2) 61:17;65:12</p> <p>knows (1) 54:8</p> <p>KnoxBox (1) 25:22</p> <p>KURITZ (14) 4:1,10,11;5:11,12; 35:21;36:23;38:13; 39:4;40:9,18;42:2; 55:12;81:9</p>	<p>79:21</p> <p>laying (2) 52:15;54:6</p> <p>layout (2) 16:7;94:15</p> <p>layouts (1) 17:10</p> <p>leaching (1) 26:14</p> <p>leaks (1) 26:14</p> <p>lease (1) 55:8</p> <p>least (5) 39:7;41:9;55:16; 64:23;95:2</p> <p>leave (3) 17:11;43:14;44:17</p> <p>leaving (1) 30:9</p> <p>led (1) 65:8</p> <p>left (8) 15:22;16:3,6;23:14; 25:7;29:22;76:18;77:6</p> <p>legacy (1) 17:21</p> <p>legislation (1) 60:16</p> <p>LegoLand (1) 70:17</p> <p>LESA (4) 9:4;13:15;74:8,10</p> <p>less (1) 34:19</p> <p>letting (2) 59:14;60:9</p> <p>level (6) 25:8;60:12;61:9,11; 64:23;95:2</p> <p>levels (1) 27:16</p> <p>Lexington (1) 79:14</p> <p>licensed (3) 30:20;38:18,23</p> <p>lie (1) 60:9</p> <p>life (7) 12:12;14:20;42:19; 43:14;75:6;79:4;84:4</p> <p>light (1) 33:11</p> <p>Lighting (5) 89:12,13,14,15;95:5</p> <p>likely (8) 7:7;21:9;31:22;47:3, 6;52:11;65:15;88:16</p> <p>limit (1) 50:4</p> <p>limited (5) 17:20;23:22;27:2; 43:3;90:8</p>	<p>line (5) 67:21;78:14,15; 80:13;82:23</p> <p>Lines (20) 16:3,5;27:7;30:1; 42:6;46:1;67:8,16,22; 68:2,7,8,10;79:19,19, 20;83:5,7;91:3,4</p> <p>list (1) 53:9</p> <p>litany (1) 25:15</p> <p>little (18) 18:13;20:22;21:10; 22:6;28:13,17;29:16; 37:11;42:6;47:20;50:5; 57:6;59:2,10,12;62:15, 16;72:9</p> <p>live (1) 53:3</p> <p>lives (1) 7:12</p> <p>living (2) 67:3;84:1</p> <p>LLC (5) 6:6;73:2;75:15; 79:14,15</p> <p>loams (1) 32:12</p> <p>local (16) 13:14;17:20;25:17; 26:5;27:17;29:17,18, 20;63:11;64:5;72:5; 84:10;85:13;87:22; 88:3;95:9</p> <p>locally (1) 61:8</p> <p>locate (2) 22:22;27:14</p> <p>located (25) 6:11,22;7:14,21,23; 8:6,7,8;12:23;13:9; 22:12,21;39:8;73:7,16; 75:20;76:6,15;80:22; 83:9;88:21;90:9,20,22; 92:17</p> <p>locating (5) 24:7;49:23;50:2,5; 51:21</p> <p>location (14) 13:2,5;20:14;26:4; 39:23;40:2,3;42:1,17; 43:5;45:10;67:15; 92:19,22</p> <p>locations (1) 32:20</p> <p>lock (1) 42:16</p> <p>locked (1) 25:22</p> <p>long (9) 13:18;42:19;43:15; 44:20;46:12;47:21;</p>	<p>60:5;64:8;66:9</p> <p>look (12) 17:10;21:22;25:6; 29:1;31:11,14;38:1; 47:2,2;55:1;60:22;66:9</p> <p>looked (2) 36:19;49:14</p> <p>looking (12) 22:16;25:4,5;28:19; 34:5;36:4;38:2;41:13, 16,17,21;77:3</p> <p>looks (3) 5:23;22:4;66:20</p> <p>loop (1) 40:22</p> <p>lost (2) 37:23;58:15</p> <p>lot (21) 20:3,9;21:13;31:2; 32:19,22;34:23;36:5; 37:12;38:3,4;39:9; 40:19;49:20;56:11; 58:2;59:21;70:12,17, 19;71:2</p> <p>lots (3) 70:7,15;71:3</p> <p>low (2) 28:1;29:7</p> <p>lower (1) 63:3</p> <p>Luckily (1) 59:23</p> <p>lying (1) 60:6</p>
<p style="text-align: center;">J</p> <p>January (4) 6:16;73:11;75:23; 80:16</p> <p>Jim (2) 4:16;5:17</p> <p>job (1) 20:21</p> <p>jobs (8) 19:23;20:1;28:3; 29:20;53:11;56:23; 58:14;62:22</p> <p>Judd (3) 4:6,7;5:7</p> <p>Julia (3) 4:2,14;5:15</p>	<p style="text-align: center;">L</p> <p>labor (2) 49:19;56:19</p> <p>laid (3) 47:4;53:20;54:14</p> <p>Land (38) 7:4;8:18;9:2,6;13:3, 11,21;23:23;48:8;55:4, 9,9;56:19;59:8;60:4,5, 6,9;66:15,21;69:21,22; 71:6,8;73:21;74:13; 76:11;77:23;78:5; 81:11,15;83:23;84:17; 86:6,8;87:20;90:6; 92:20</p> <p>landowner (4) 50:16,18;55:8;83:1</p> <p>landowners (3) 68:4;84:13;91:4</p> <p>large (4) 23:18;37:1;40:22; 47:16</p> <p>larger (3) 25:1;36:1;57:12</p> <p>largest (4) 57:9,10;68:20;71:2</p> <p>last (6) 30:18;43:8;56:1,7; 67:13,23</p> <p>lasting (1) 17:19</p> <p>later (2) 21:6;51:4</p> <p>lateral (1) 45:5</p> <p>law (4) 6:17;73:11;76:1; 80:17</p> <p>Lawndale (1) 80:9</p> <p>lay (1) 46:18</p> <p>lay-down (1)</p>	<p>leaving (1) 30:9</p> <p>led (1) 65:8</p> <p>left (8) 15:22;16:3,6;23:14; 25:7;29:22;76:18;77:6</p> <p>legacy (1) 17:21</p> <p>legislation (1) 60:16</p> <p>LegoLand (1) 70:17</p> <p>LESA (4) 9:4;13:15;74:8,10</p> <p>less (1) 34:19</p> <p>letting (2) 59:14;60:9</p> <p>level (6) 25:8;60:12;61:9,11; 64:23;95:2</p> <p>levels (1) 27:16</p> <p>Lexington (1) 79:14</p> <p>licensed (3) 30:20;38:18,23</p> <p>lie (1) 60:9</p> <p>life (7) 12:12;14:20;42:19; 43:14;75:6;79:4;84:4</p> <p>light (1) 33:11</p> <p>Lighting (5) 89:12,13,14,15;95:5</p> <p>likely (8) 7:7;21:9;31:22;47:3, 6;52:11;65:15;88:16</p> <p>limit (1) 50:4</p> <p>limited (5) 17:20;23:22;27:2; 43:3;90:8</p>	<p style="text-align: center;">M</p> <p>mad (1) 61:23</p> <p>magnetic (1) 27:13</p> <p>magnitude (1) 70:12</p> <p>main (8) 20:11;40:4;41:13; 45:6;51:22;59:3;67:13, 15</p> <p>maintain (4) 19:6;45:13;84:9; 92:5</p> <p>maintained (1) 13:17</p> <p>maintaining (1) 84:6</p> <p>maintenance (8) 12:20;17:15;26:1; 28:4;29:19;71:19; 84:10;92:14</p> <p>major (1) 31:16</p> <p>makes (3) 23:4;27:9;54:4</p> <p>making (1)</p>	
<p style="text-align: center;">K</p> <p>keep (2) 41:11;52:1</p> <p>key (1) 28:18</p> <p>kicking (1)</p>	<p>landowner (4) 50:16,18;55:8;83:1</p> <p>landowners (3) 68:4;84:13;91:4</p> <p>large (4) 23:18;37:1;40:22; 47:16</p> <p>larger (3) 25:1;36:1;57:12</p> <p>largest (4) 57:9,10;68:20;71:2</p> <p>last (6) 30:18;43:8;56:1,7; 67:13,23</p> <p>lasting (1) 17:19</p> <p>later (2) 21:6;51:4</p> <p>lateral (1) 45:5</p> <p>law (4) 6:17;73:11;76:1; 80:17</p> <p>Lawndale (1) 80:9</p> <p>lay (1) 46:18</p> <p>lay-down (1)</p>	<p>leaving (1) 30:9</p> <p>led (1) 65:8</p> <p>left (8) 15:22;16:3,6;23:14; 25:7;29:22;76:18;77:6</p> <p>legacy (1) 17:21</p> <p>legislation (1) 60:16</p> <p>LegoLand (1) 70:17</p> <p>LESA (4) 9:4;13:15;74:8,10</p> <p>less (1) 34:19</p> <p>letting (2) 59:14;60:9</p> <p>level (6) 25:8;60:12;61:9,11; 64:23;95:2</p> <p>levels (1) 27:16</p> <p>Lexington (1) 79:14</p> <p>licensed (3) 30:20;38:18,23</p> <p>lie (1) 60:9</p> <p>life (7) 12:12;14:20;42:19; 43:14;75:6;79:4;84:4</p> <p>light (1) 33:11</p> <p>Lighting (5) 89:12,13,14,15;95:5</p> <p>likely (8) 7:7;21:9;31:22;47:3, 6;52:11;65:15;88:16</p> <p>limit (1) 50:4</p> <p>limited (5) 17:20;23:22;27:2; 43:3;90:8</p>	<p>live (1) 53:3</p> <p>lives (1) 7:12</p> <p>living (2) 67:3;84:1</p> <p>LLC (5) 6:6;73:2;75:15; 79:14,15</p> <p>loams (1) 32:12</p> <p>local (16) 13:14;17:20;25:17; 26:5;27:17;29:17,18, 20;63:11;64:5;72:5; 84:10;85:13;87:22; 88:3;95:9</p> <p>locally (1) 61:8</p> <p>locate (2) 22:22;27:14</p> <p>located (25) 6:11,22;7:14,21,23; 8:6,7,8;12:23;13:9; 22:12,21;39:8;73:7,16; 75:20;76:6,15;80:22; 83:9;88:21;90:9,20,22; 92:17</p> <p>locating (5) 24:7;49:23;50:2,5; 51:21</p> <p>location (14) 13:2,5;20:14;26:4; 39:23;40:2,3;42:1,17; 43:5;45:10;67:15; 92:19,22</p> <p>locations (1) 32:20</p> <p>lock (1) 42:16</p> <p>locked (1) 25:22</p> <p>long (9) 13:18;42:19;43:15; 44:20;46:12;47:21;</p>	<p>lot (21) 20:3,9;21:13;31:2; 32:19,22;34:23;36:5; 37:12;38:3,4;39:9; 40:19;49:20;56:11; 58:2;59:21;70:12,17, 19;71:2</p> <p>lots (3) 70:7,15;71:3</p> <p>low (2) 28:1;29:7</p> <p>lower (1) 63:3</p> <p>Luckily (1) 59:23</p> <p>lying (1) 60:6</p>

<p>13:13 manage (1) 19:3 managed (1) 26:3 management (2) 35:9;38:21 manner (1) 26:19 manufacture (2) 58:7,12 manufacturer's (1) 87:5 Many (4) 27:17;47:7;63:20; 84:22 map (11) 6:21,23;19:15;28:9; 46:16;69:23;73:15,16; 76:5,7;80:21 mapping (2) 86:7,9 March (1) 86:12 Mark (2) 4:6;5:7 market (2) 49:11;53:6 markets (1) 19:2 Mary (2) 4:19;5:20 material (3) 44:13;46:14,14 materials (4) 26:14;43:21;44:5,11 maximum (1) 10:16 may (7) 10:21;56:1;61:14,14; 65:21;85:8;86:14 Mays (1) 90:21 McLean (10) 13:23;16:16,22;17:5; 61:9,16;80:5;87:18; 89:18;94:8 mean (4) 49:20;50:5;55:3; 68:22 meaning (1) 52:10 means (5) 9:5;19:15;28:22; 74:12;78:4 measured (1) 83:8 measures (2) 12:13;91:23 meet (5) 9:13;16:20;84:12; 89:12,15 meets (7)</p>	<p>7:15;14:7;74:18; 82:19;88:18;90:13; 93:6 megawatt (8) 9:12;19:11;28:13; 60:19;68:9;70:13;82:5; 94:14 megawatts (11) 19:11,12;22:18; 60:21;63:2,3,3;69:16; 82:2,4;94:13 Members (3) 15:10,19;16:4 mention (1) 37:17 mentioned (11) 16:18;22:3,11;23:9; 27:1;29:6,15;37:19; 68:6;69:7,19 meridian (3) 6:11;73:7;75:19 met (15) 9:11;11:7,16,23; 12:16;13:1,10;81:21; 82:14;88:10;90:4;91:8; 92:3,18;93:4 metal (2) 34:15;35:7 meteorological (1) 85:2 methodology (1) 86:18 Michael (2) 4:10;5:11 Michigan (1) 18:7 micro (1) 83:21 Microwave (1) 83:22 midday (2) 21:16;23:6 might (7) 15:7;28:14;44:7; 46:8;49:5;50:4,23 migrate (1) 49:7 migration (1) 87:6 mild (2) 32:8,8 mile (3) 6:13;73:9;75:21 miles (2) 89:17;91:1 million (1) 29:16 millions (1) 41:19 mind (3) 32:8;41:11;50:3 minimize (4) 12:15;87:1;91:18;</p>	<p>92:2 minimizes (1) 91:22 minimum (4) 55:2;86:20;89:15; 95:6 mirrors (1) 20:13 mislocated (1) 24:10 miss (1) 45:17 mitigate (1) 84:5 Mitigation (6) 65:19;72:4;85:19; 90:16;94:2,6 Mobile (1) 83:23 models (2) 82:5;94:14 modest (1) 29:18 modules (1) 10:9 mom (1) 55:17 money (1) 54:19 monitoring (2) 86:20,21 Monroe (1) 30:19 month (1) 56:8 monthly (1) 26:8 Moraine (3) 58:23;64:11;75:15 morals (2) 9:10;81:20 more (13) 10:4;21:10;37:12; 39:17;47:8;50:5;56:21; 62:3,16;63:22;69:22; 89:14;95:6 morning (1) 21:15 mortality (1) 87:1 most (13) 13:6;19:6;24:9;26:8; 27:9;36:13;39:17;40:7; 44:22;45:6;56:12;57:9; 92:23 motion (1) 4:2 mount (5) 9:20;33:13;38:6; 58:1,1 mounted (2) 9:18;39:6 move (8)</p>	<p>19:13;21:12,14;28:8; 36:12;37:1,11;65:1 moved (1) 36:9 movement (1) 37:3 moving (2) 27:2;53:23 mow (1) 71:15 mowing (3) 26:7,10;29:19 much (11) 12:5;19:14;24:1,2; 32:16;33:2;43:12;50:3; 52:22;67:11;69:22 multiple (1) 81:13 municipal (2) 29:8;89:17</p>	<p>57:13 negotiations (1) 65:22 neighbor (2) 17:13;84:3 neighborhood (3) 26:9;28:12;60:20 neighboring (3) 34:20;47:18;52:3 neighbors (1) 84:1 nervous (1) 61:21 nest (2) 86:8,11 net (2) 34:18;35:14 new (8) 20:1;43:13;45:21; 46:9;47:13;51:23; 65:18;78:16 next (7) 19:20;23:6;25:8; 27:15;28:8;42:11;54:1 nice (5) 24:1;25:11;26:2; 64:11,13 night (5) 72:14,19,20;81:3; 87:5 nine (3) 10:18;26:9;94:23 Nobody (1) 26:4 noise (8) 23:4;27:5;82:9,16; 84:15;88:23;89:1; 94:19 non-agricultural (1) 90:5 None (1) 89:16 nonparticipating (3) 82:23;83:5;84:12 North (25) 6:10,12,12;8:2,19; 12:1,2;15:18;28:9; 31:17,23;51:11;54:23; 68:15;73:6,8,8;75:19, 21,22;76:18;79:15; 80:11,11,13 northeast (3) 7:22;75:18;77:7 northwest (4) 8:6;32:5;77:15;91:1 note (1) 53:7 notice (4) 6:15;73:9;75:22; 80:15 noticeable (1) 28:1 notifications (4)</p>
N				
			<p>name (9) 15:15,16;18:4;30:16, 18,19;51:8;62:10; 68:16 National (2) 25:16,16 native (1) 13:16 Natural (9) 7:7;10:20;31:4;59:3; 73:23;76:13;81:1;86:1; 89:20 naturally (1) 66:12 nature (3) 13:4;23:23;92:21 near (1) 91:9 Nearby (7) 11:8,10,16,19;85:1; 89:3;90:6 nearly (1) 71:8 necessary (4) 11:22;85:12;91:7,15 need (17) 12:9,18;18:2;68:4; 69:20;70:14,21;71:16; 72:9,11,11;74:16;78:8; 82:15;92:9,12;94:18 needed (6) 23:19;29:9,10;58:13; 69:18;71:9 needs (3) 74:21;78:13;89:10 negatively (1) 88:17 negotiated (1) 65:20 negotiating (1)</p>	

<p>6:18;73:12;76:2; 80:18 Novack (33) 15:22;18:3,6,6,10; 37:16;40:11;41:6; 42:12;43:19;44:1; 47:20;49:9;52:7,18; 53:2;54:20;55:15;56:5; 57:20;59:16;61:15,18; 62:19;63:7;64:19;66:5; 68:5,22;69:9;70:8,21; 71:18 N-O-V-A-C-K (1) 18:7 November (1) 87:19 nowadays (1) 46:13 nuclear (2) 53:12,14 nuisance (1) 65:11 number (16) 6:5;19:2;20:2;22:23; 24:20;29:4;37:17; 49:22;56:16;59:17; 69:16;71:5;72:21; 75:13;79:12,13 numbers (8) 29:1;57:6;60:14; 61:15,21,22;62:3; 69:10</p>	<p>20;52:8;63:11;66:12; 83:22 offerings (1) 53:9 officially (3) 72:12,13;75:11 officials (1) 13:13 oftentimes (3) 42:23;54:21;56:14 oil (3) 8:16;74:5;77:16 old (7) 33:3,3;43:12;47:3; 77:1,8;80:10 older (1) 49:4 once (4) 25:20;42:16;52:11; 84:7 one (50) 9:21;11:9,10,18,18; 14:9;15:4,22;16:4,7; 19:23;21:14;22:13,23; 24:11;25:8;26:17,21; 30:6;32:4,11;33:22; 37:20;38:1;40:6;41:14; 42:7;47:17;50:9,20; 53:23;54:21;56:10; 57:8,9;59:2,5;63:21; 66:19;68:6,23;71:4,10; 72:13;78:12,12;86:10, 21;89:16;93:10</p>	<p>opportunity (5) 24:21;50:23;64:12, 14;87:21 opposed (1) 58:9 opposite (1) 20:18 optimization (1) 84:23 options (2) 37:20;84:22 order (4) 41:14;63:17;64:6; 70:15 orderly (2) 11:14;90:2 orders (1) 57:14 ordinance (16) 7:16;13:10,21;14:8; 66:20;67:5;74:19;80:5; 82:20;85:17;87:14; 88:19;89:23;90:14; 93:8;94:12 orientation (2) 17:8;18:16 original (1) 13:20 ours (1) 37:18 out (38) 9:1,2,4;26:5;35:6; 37:21;40:14;41:5; 42:16;43:13;44:23; 45:1,12;52:15;53:21; 54:6,14;55:9,21;56:9; 57:1;58:16;59:8;60:14; 61:2,21,22;63:15;64:1; 69:23;74:8,9,10,11; 78:1,2,3;91:17 outlets (1) 33:11 outlined (3) 7:20;56:17;77:12 outlying (1) 76:16 Outside (5) 27:3,11;28:10;48:13; 54:23 over (15) 18:20;19:14;20:2; 21:16;36:9;40:14;47:6, 22;48:8;53:22;60:23; 61:1;69:8;70:19;76:23 overall (3) 17:3;32:3,7 overhead (7) 27:7;38:2;40:3;67:8, 13,16,23 overly (1) 17:16 overpass (2) 76:22;77:9</p>	<p>overseas (1) 56:14 overview (1) 69:3 owner (9) 7:12;8:3;16:8;31:18; 32:23;33:9;48:8;50:13; 51:13 owners (2) 47:7;83:6</p>	<p>particular (4) 18:16;54:9,23;57:17 Particularly (3) 29:7;58:4;91:17 partner (1) 55:9 parts (2) 24:3;27:2 party (1) 83:7 pass (7) 6:20;7:18;73:14,23; 76:4;80:21;81:5 passive (1) 29:6 pasture (3) 71:12;81:12,16 patches (1) 71:12 path (2) 53:18;83:22 pattern (1) 47:5 patterns (3) 12:5;17:17;81:14 pave (1) 34:6 pay (1) 49:21 payments (1) 84:4 payors (1) 57:4 pays (1) 64:9 pending (1) 52:17 people (8) 5:23;27:18;53:12; 54:11;61:20,22;63:15; 71:7 per (9) 20:3;26:9;28:3,13; 29:4;60:19,19,21; 63:16 percent (11) 13:23;20:3,6,8;39:3; 49:23;53:15;56:15,21; 63:22;69:12 percentage (3) 69:4,5,7 perfect (2) 16:14;58:16 perforated (1) 46:13 perform (2) 33:7;38:18 performed (1) 39:2 performing (1) 32:13 perhaps (1) 59:6</p>	
O		<p>one-car (1) 22:17 ones (2) 47:11;72:15 ongoing (1) 31:4 only (17) 16:18;17:3;22:12,14; 23:4;24:5;25:22;31:4; 32:7;36:15;43:3;56:15; 58:7;61:21;64:3;67:12; 72:1 on-site (1) 84:9 open (4) 15:7;38:12;72:12,14 operate (1) 19:5 operating (4) 19:8,17;66:17;84:10 operation (6) 12:21;13:3;85:11; 87:2;92:15,20 operational (4) 13:19;19:2;84:17; 87:3 operations (4) 26:1;86:17;88:15,16 opinion (1) 74:17</p>	<p>outlets (1) 33:11 outlined (3) 7:20;56:17;77:12 outlying (1) 76:16 Outside (5) 27:3,11;28:10;48:13; 54:23 over (15) 18:20;19:14;20:2; 21:16;36:9;40:14;47:6, 22;48:8;53:22;60:23; 61:1;69:8;70:19;76:23 overall (3) 17:3;32:3,7 overhead (7) 27:7;38:2;40:3;67:8, 13,16,23 overly (1) 17:16 overpass (2) 76:22;77:9</p>	P	<p>package (1) 52:12 pad (5) 22:15;39:9,18;41:7, 10 pads (2) 40:6,17 paid (4) 6:19;73:13;76:3; 80:19 pair (2) 18:20;22:10 palmer (1) 71:16 panel (8) 22:5;26:23;36:8,9; 42:17;43:1;44:11;46:5 panels (32) 9:18,19;10:7;20:6; 21:2;22:2;23:14;26:11; 34:4,5;36:11,18;37:4; 39:20;42:8;43:8,10,14, 17;55:19;56:3,11,13, 16;57:13;58:7,9,9,12, 12;69:4;70:19 Pantagraph (4) 6:16;73:10;75:23; 80:16 parallel (1) 91:3 paramount (1) 28:18 parcel (1) 31:21 parcels (1) 32:11 parking (8) 59:21;70:7,12,15,17, 19;71:2,3 part (12) 28:6;35:11;40:11; 42:13;49:11;52:12; 64:21;69:21;76:23; 77:20,20;83:14 partially (1) 36:3 participate (2) 27:18;64:16 participating (1) 84:12</p>

<p>perimeter (2) 10:10;25:20</p> <p>period (2) 80:2;87:6</p> <p>permanent (1) 59:20</p> <p>permanently (1) 59:23</p> <p>permeability (1) 30:7</p> <p>permeable (1) 23:23</p> <p>permit (20) 12:7,18;14:9,12; 21:6;24:6;25:15;44:2, 11;52:12;60:1,3;74:17, 20,23;78:18,21;80:2; 83:14;89:5</p> <p>permits (3) 92:13;93:8,15</p> <p>permitted (4) 11:6,15;88:9;90:3</p> <p>permitting (1) 25:19</p> <p>perspective (3) 19:21;25:19;29:8</p> <p>pervious (1) 34:7</p> <p>Phil (5) 20:21;22:3,10;23:8; 28:8</p> <p>photo (3) 8:8;23:18;25:7</p> <p>photos (3) 7:19;25:12;76:14</p> <p>photovoltaic (1) 9:17</p> <p>photovoltaics (1) 20:15</p> <p>pick (1) 45:18</p> <p>picture (5) 19:21;22:9;25:3; 38:3;69:4</p> <p>pictures (5) 20:22;21:21;23:11; 24:14;38:1</p> <p>piece (2) 51:12;76:16</p> <p>pieces (1) 23:1</p> <p>pile (1) 45:2</p> <p>piles (1) 45:3</p> <p>pin (1) 70:2</p> <p>pipe (3) 45:1,5;46:14</p> <p>pipes (4) 33:12,16;47:10; 51:22</p> <p>pit (1)</p>	<p>77:1</p> <p>place (6) 33:15;52:16;53:17; 62:1;69:20;72:4</p> <p>plan (23) 7:11,15;28:20;38:20, 21;52:6,7;66:4;71:14, 19,19;72:3;73:17,18; 76:8;78:16;85:7,18; 86:18;87:18,23;90:16; 94:1</p> <p>planning (1) 16:2</p> <p>plans (9) 12:6;14:11,21;74:22; 75:7;78:20;79:5;83:19; 93:17</p> <p>plant (3) 25:14;35:3;41:18</p> <p>planted (1) 71:11</p> <p>plants (3) 19:5;53:14;64:16</p> <p>plastic (2) 46:13;49:4</p> <p>plat (2) 6:21;80:21</p> <p>platform (1) 85:4</p> <p>Plaza (1) 15:18</p> <p>please (3) 15:15;62:10;68:17</p> <p>pleasure (1) 30:23</p> <p>plover (1) 86:13</p> <p>plug (1) 43:5</p> <p>plus (1) 51:13</p> <p>pm (1) 95:15</p> <p>Point (10) 8:11;37:13,21;38:8; 40:4;48:11;56:9;67:9, 15,23</p> <p>points (7) 9:1,2,4,5;74:11,12; 78:4</p> <p>pole (2) 40:2;67:14</p> <p>police (1) 29:11</p> <p>pollinator (2) 71:12,23</p> <p>Pollution (1) 82:12</p> <p>pond (2) 31:17;77:19</p> <p>ponding (3) 32:22;45:10,15</p> <p>portion (1)</p>	<p>31:4</p> <p>positioning (1) 36:8</p> <p>possibility (1) 26:14</p> <p>possible (3) 12:5;24:9;64:6</p> <p>post (2) 49:2;58:20</p> <p>post-construction (4) 86:18,19,21;87:9</p> <p>posts (3) 9:18;21:19;23:15</p> <p>potential (2) 52:2;87:1</p> <p>Potentially (2) 15:6;49:3</p> <p>Power (42) 6:8;8:11;9:12,15; 10:12;11:12,20;12:8; 13:18;14:13;15:1;19:5; 22:23;25:13;27:7,22; 29:4;40:10,19;41:18; 42:20;43:4;52:15;53:9, 14,15;54:5;55:7;62:21; 63:16;64:7,9,16;65:1; 67:16,22;68:2;71:9; 73:4;75:16;79:8,19</p> <p>practical (1) 52:1</p> <p>practice (1) 66:14</p> <p>preamble (1) 13:1</p> <p>precedent (2) 59:6,7</p> <p>precipice (1) 24:17</p> <p>pre-development (1) 12:4</p> <p>predominant (1) 32:12</p> <p>preloaded (1) 18:12</p> <p>premise (1) 59:18</p> <p>prepare (1) 30:2</p> <p>prepared (1) 85:10</p> <p>preprogrammed (2) 37:8,11</p> <p>preprogramming (1) 37:15</p> <p>presence (1) 84:21</p> <p>present (3) 8:12;16:12;72:22</p> <p>presentation (2) 8:12;18:12</p> <p>presentations (1) 30:2</p> <p>Preservation (6)</p>	<p>11:2;14:15;75:2; 78:23;87:17;94:21</p> <p>preserved (1) 13:18</p> <p>preserving (1) 87:22</p> <p>president (1) 56:7</p> <p>pre-siting (6) 87:11,13;89:19,22; 94:9,11</p> <p>pretty (8) 19:14;24:2;32:3,8,8, 21;33:2;67:11</p> <p>prevent (1) 35:4</p> <p>previous (2) 47:7;74:15</p> <p>price (2) 54:3;57:15</p> <p>prices (3) 20:4,5;53:5</p> <p>primarily (2) 81:11,15</p> <p>primary (1) 66:19</p> <p>prime (1) 13:17</p> <p>principal (3) 6:11;73:6;75:19</p> <p>prior (3) 45:23;54:14;86:16</p> <p>private (2) 88:5;90:20</p> <p>probably (5) 32:16;37:10;48:20; 59:6;72:20</p> <p>probing (1) 50:1</p> <p>problem (1) 26:4</p> <p>problematic (1) 47:14</p> <p>problems (4) 52:2;84:6;91:13; 95:1</p> <p>procedural (1) 72:9</p> <p>procedures (3) 85:7,14;95:10</p> <p>process (25) 12:10;13:12,14; 14:18;16:1;17:9;21:5; 23:12,15;24:11;25:19; 28:18;38:17,17;39:1; 40:12;44:2;49:19,21; 66:6,7;75:4;79:2;84:9; 92:7</p> <p>procure (1) 69:11</p> <p>procured (1) 53:15</p> <p>produce (3)</p>	<p>14:2,4;82:2</p> <p>production (22) 8:15,19,20,21;10:10; 11:8,17;13:22;14:5; 59:9,9,10;74:4,7;77:15, 19,21,22;81:12,16; 88:12;90:7</p> <p>productive (1) 70:1</p> <p>professional (5) 30:21;39:2;83:13,16, 17</p> <p>profile (2) 28:1;45:3</p> <p>profitable (1) 52:23</p> <p>program (7) 52:14;54:5;63:4,10, 10,13,21</p> <p>programming (1) 37:6</p> <p>programs (2) 53:21;62:23</p> <p>project (42) 15:20;16:2,6,17; 17:2;25:5;30:11;42:14; 52:7;54:4,10;55:11; 65:2;68:8,9;70:13,23; 71:5;82:5,13;84:1,2,4, 6,8,13,18;85:3,9,11; 86:22;87:2,20;88:15, 20,23;89:3,10;91:9; 94:15,15;95:2</p> <p>projects (16) 16:11,13;17:10,12; 19:3,9,10,19;21:22; 25:1;28:5;31:3;58:22; 61:11;70:11;88:3</p> <p>promote (2) 85:13;95:9</p> <p>prone (1) 91:17</p> <p>properly (1) 78:16</p> <p>properties (5) 34:20;47:18;52:3; 60:17;80:22</p> <p>property (74) 6:9,22,23;7:4,5,11, 12,19,20,23;8:3,14,23; 9:5,13;11:4,6,8,14,16, 23;12:4;13:15,19;16:8; 17:21;28:4;31:19;32:2; 36:22;44:16,17;47:10, 17;48:13;65:10;67:19, 19;73:5,16;74:2;75:17; 76:6,7,9,15,17,18,20, 20,21,23;77:3,4,5,6,7, 10,12,12,14,18;78:14; 80:5;82:23;83:5,6; 88:5,7,9,11;90:3,21; 91:4</p> <p>propose (1)</p>
--	--	---	---	--

<p>17:7 proposed (21) 9:8;10:21;11:3,11, 13,20;12:8,17,23;13:7; 14:13;73:18;81:19; 82:18;88:6,14;89:16; 90:1,21;92:17;93:1 proposes (2) 9:11;87:19 proposing (2) 81:22;91:11 protect (2) 57:14;91:9 protected (1) 10:20 protection (6) 9:6;12:3;74:13;78:5, 9,10 proud (1) 60:9 proven (1) 42:18 provide (15) 12:3,6,14;13:1,12; 14:11;40:8,9;74:21; 78:20;85:13;92:1,6,19; 95:9 provided (16) 6:17;10:22;11:23; 12:17;32:16;41:18; 73:11;74:21;76:1;80:4, 17;82:16;91:8;92:1; 93:8;94:18 provides (1) 32:1 providing (2) 14:8;33:10 provision (1) 44:13 provisions (1) 17:4 proximity (2) 55:4;84:2 Public (17) 6:15;8:1,16;9:10; 12:15;73:9;74:4;75:22; 76:17;77:8,16;80:15; 81:21;83:6;84:20;92:3, 6 publication (4) 6:19;73:13;76:3; 80:19 published (4) 6:16;73:10;75:23; 80:16 pull (1) 39:12 purchase (1) 57:13 purposes (2) 11:5;88:8 put (11) 18:13;20:22;34:3;</p>	<p>35:7;38:19;39:9;44:9; 46:9,13,15;47:7 putting (4) 34:13;47:13;51:23; 54:14 PV (4) 10:7,9;20:14,20</p> <p style="text-align: center;">Q</p> <p>qualified (1) 26:6 qualms (1) 65:6 quarter (3) 6:9;73:5;75:18 quiet (1) 27:22 quite (1) 49:19 quoted (1) 49:22</p> <p style="text-align: center;">R</p> <p>RAC (1) 54:7 rack (1) 21:2 racking (5) 10:9;21:7;23:9,13; 56:18 radius (1) 27:11 radiuses (1) 90:20 railroad (2) 30:12;77:8 rain (2) 33:18;37:1 rainfall (6) 30:9;36:9,16,20; 45:9,19 raised (1) 87:7 Range (4) 6:10;60:19;73:6; 75:19 ranking (2) 57:9;69:1 rapid (1) 30:9 raptor (2) 86:8,11 rate (2) 30:10;57:3 rates (7) 19:23;32:13,21; 34:11,17,21;35:8 rather (2) 80:4;89:6 rational (1) 13:12</p>	<p>Rauner (1) 53:10 ray (1) 55:13 rays (1) 9:19 real (2) 25:14;27:8 reality (1) 34:1 realize (1) 59:9 really (33) 5:2;19:22;20:9,10, 10;21:4,13;23:22;24:1, 16;26:3,8,18;27:2,18, 23;29:8,13;33:1;34:8; 38:4;47:1,15;49:10,15; 53:5,22;57:1;58:10,12; 61:23;62:23;64:12 rear (1) 83:5 reason (7) 22:22;24:10;27:14; 41:15,20;42:13;65:3 reasonable (1) 89:7 reasons (3) 22:23;45:16;59:17 receive (2) 63:17;94:8 received (3) 87:10,11;89:18 recent (2) 57:9;69:1 Reception (1) 83:22 recognize (1) 24:4 recognized (1) 24:21 recollection (1) 41:1 recommend (1) 78:17 recommendation (1) 17:1 recommendations (4) 67:4;87:13;89:22; 94:11 recommended (1) 86:6 recommends (3) 14:6;74:18;93:5 reconvene (4) 72:13,15,19;95:14 record (1) 45:7 records (1) 33:5 recreation (1) 77:1 REC's (2)</p>	<p>57:2;63:17 rectify (1) 94:23 recused (1) 4:17 recycle (1) 43:13 red (3) 7:21;76:17;77:13 redesign (2) 48:5,15 redirect (1) 20:13 reduce (1) 82:8 reference (1) 87:23 referenced (1) 28:8 referred (1) 9:19 reflect (1) 8:13 regard (2) 16:10;66:18 region (1) 25:10 Regional (1) 87:18 regular (1) 47:5 regulations (10) 13:8;14:22;25:15; 38:15;79:7;82:12,17; 93:3,19;94:19 relative (1) 61:1 relatively (7) 8:14;55:2,4;65:18; 74:2;77:14;81:13 relevant (3) 86:5;89:19;94:9 relocated (1) 38:8 remain (3) 43:22;60:5;87:20 remainder (1) 7:16 remedy (1) 84:5 remotely (1) 26:3 removal (1) 59:19 remove (1) 59:23 removed (2) 41:7;94:5 renewable (10) 16:17,20;17:22; 27:19;53:9,16;54:7; 57:3;62:23;69:12 Renewables (6)</p>	<p>6:7;9:20;31:3;73:3; 75:16;79:15 rental (1) 88:4 repair (9) 12:12;14:19;24:12; 66:1,2,18;75:5;79:4; 91:10 repaired (4) 12:10;14:18;75:4; 79:3 repeater (2) 85:1,5 replace (1) 24:12 replacing (1) 42:22 replicate (1) 18:23 report (16) 8:9;9:4;10:14;15:2; 20:21;43:18;55:23; 73:19;74:1,15;75:9; 79:9;81:11;83:22;84:1; 95:11 reported (2) 13:22;85:22 reports (2) 8:10;78:7 representatives (1) 15:23 represents (1) 19:16 request (2) 84:13;89:7 requesting (1) 89:4 requests (1) 80:1 required (17) 6:17;13:20;43:17; 64:23;66:4;69:11,16; 73:12;76:1;80:17;85:7; 87:14;89:15,23;94:5, 12;95:6 requirements (10) 7:15;9:14;67:6; 82:19;88:19,20;89:2, 13,15;90:13 requires (1) 66:21 requiring (1) 56:10 research (2) 49:18;61:3 reserved (1) 21:5 residence (2) 8:3;83:3 residences (6) 82:13;83:9;89:2; 90:8,11,11 residential (8)</p>
--	--	--	---	---

13:5;41:19;57:23; 58:8;59:22;64:2;90:6; 92:22 residents (1) 89:3 resolution (1) 84:9 resolve (1) 84:14 Resources (10) 7:7;10:20,20;31:4; 59:4;73:23;76:13;81:1; 86:1;89:21 respect (2) 87:8;90:14 respects (2) 13:8;93:2 respond (1) 85:8 response (2) 85:14;95:10 restrictive (1) 90:5 results (7) 52:9;86:3,22;87:8, 14;89:22;94:11 retailer (1) 52:5 retained (1) 12:5 retention (4) 12:7;38:14;74:23; 78:21 return (1) 95:2 returned (2) 13:20,21 returning (1) 66:21 revenue (7) 17:21;28:5;54:8,9, 13,17,19 review (1) 86:20 richest (1) 59:5 Rick (2) 4:12;5:13 right (35) 19:3,11;23:6,12; 24:4;25:4,7,15;27:15, 23;28:9,10,19;34:7,14; 37:1,6,19;42:4;43:19; 44:6;45:12,18;47:13; 48:20;52:18;54:20; 57:5,22;60:11;61:18; 63:5;66:6;72:8;77:10 right-of-way (2) 77:8;83:7 rise (1) 41:23 riser (2) 40:2;67:13	rising (1) 57:15 risk (1) 86:10 risks (1) 25:13 Riverside (1) 15:18 Road (43) 6:12,14;8:1,16;12:2, 19;14:10;17:16;22:8; 28:9;31:23,23;46:4; 49:8;51:11;54:23; 68:15;73:8,9;74:4,16; 75:21,22;76:17,19; 77:5,9,16,17;78:9,15, 19;80:11,13;83:6;92:5, 7,8,11,12;93:10,13,14 roads (11) 11:21;79:18;91:6,12, 14,17,18,19,20;92:6,9 rock (1) 61:23 roll (6) 4:5,23;5:2,4,5,7 roof (3) 35:22,23;38:9 rooftop (2) 27:21;57:23 rooftops (3) 58:8;69:6,13 room (1) 57:4 Route (1) 80:11 routine (2) 17:15;29:19 row (1) 22:5 rows (6) 9:17,19;37:22;38:5, 7,12 rubber (1) 56:7 rule (1) 28:12 rules (1) 63:20 running (1) 91:3 rutting (1) 66:1	19;49:9;63:16;64:8; 74:15,16;78:11 Sandage (8) 16:8;50:8,13,19; 51:5,7,10,10 sat (1) 61:16 saved (1) 53:13 saw (2) 16:15;61:9 Saybrook-Arrowsmith (1) 12:2 saying (3) 35:12;48:18;70:2 scale (12) 16:11;17:9;19:10; 21:22;23:17;25:3;58:1, 10,13;63:2,9;70:23 scaled (1) 22:6 scenario (2) 22:2;43:11 scheduled (1) 17:15 schools (1) 29:12 scientists (1) 60:7 score (11) 8:23;9:3,4;13:15; 74:8,8,10,11;78:1,3,3 Scott (4) 15:22;17:23;18:6; 37:14 screen (2) 18:14;38:2 second (2) 4:4;50:21 Section (8) 6:10;14:23;40:21; 73:5;75:18;79:7;90:22; 93:7 Sections (3) 80:6,7,9 sedimentation (1) 38:20 seem (2) 46:7;48:23 seems (4) 30:7;33:22;49:6; 52:22 select (1) 21:7 self-sufficient (2) 26:3;27:22 sell (1) 55:9 send (1) 26:5 sense (4) 45:22;46:8;54:4,12 serious (1)	57:19 seriously (1) 57:21 serrated (1) 82:7 serve (1) 85:4 service (5) 29:2,8;41:18;86:2; 95:3 services (4) 25:22;29:11,11;84:1 serving (1) 41:19 set (6) 9:18;14:7;64:7;83:4; 90:9;93:6 setback (7) 9:14;78:13;82:19; 83:11;88:18,20;89:1 sets (1) 22:20 setting (2) 59:6,7 seven (3) 22:1;93:1;94:13 shadow (1) 84:15 shall (24) 14:11,14,17,21; 74:21;75:1,3,7;78:19, 22;79:1,5;83:13;89:12; 91:19;93:10,13,17,22; 94:8,14,20,23;95:5 shards (1) 26:19 sheer (1) 69:16 sheet (1) 26:21 shelf (1) 42:19 shift (1) 36:11 short (4) 36:7;46:13;66:5; 67:14 shortly (1) 45:8 shoulder (1) 48:18 shovel (1) 54:14 show (6) 7:20;21:21;22:6; 52:9;76:14;89:2 showed (2) 28:9,23 showing (8) 6:21,23;73:15,16; 76:5,7,8;80:22 shown (1) 27:12	shows (2) 23:15;78:16 side (13) 12:2;31:17,21;39:14; 52:1;64:14;67:17,21; 76:19;77:19;83:5; 91:16;92:7 sides (4) 8:18;74:6,7;77:18 sign (2) 65:11;84:3 signal (1) 84:23 signed (2) 53:10;92:8 significant (11) 14:4;16:22;17:18; 36:13;37:21;38:6;45:9, 19;56:2;61:5;88:2 significantly (3) 11:11,19;20:5 silicon (1) 26:12 silty (1) 32:12 similar (10) 8:10;14:3;24:17,22; 25:6;60:14;61:9;74:14; 78:6,7 simply (2) 37:17;70:3 single (7) 8:21;11:10,18;21:1, 9;47:17;68:23 sit (2) 21:14,18 Site (60) 7:4,11,15,19;9:1,3; 10:1,4;12:16;13:11,17; 16:7;18:18;22:17,18, 21;23:12,19;28:11,20, 23;29:2,4;31:16;33:1, 5;34:8,20;47:10;48:14; 50:1,7;51:18;56:13; 60:21;63:15;67:14,17; 68:1;73:17,18,18,21; 74:9,12,14;76:8,11,14; 77:23;78:1,4,16;85:2,5, 21;89:9;90:21,22;91:1
	S			
safe (2) 12:16;88:21 safety (6) 9:9;25:19;81:20; 84:20;85:14;95:10 Same (15) 25:9,9;26:13;27:5, 10;34:11;35:22;36:2,		self-sufficient (2) 26:3;27:22 sell (1) 55:9 send (1) 26:5 sense (4) 45:22;46:8;54:4,12 serious (1)	show (6) 7:20;21:21;22:6; 52:9;76:14;89:2 showed (2) 28:9,23 showing (8) 6:21,23;73:15,16; 76:5,7,8;80:22 shown (1) 27:12	sites (2) 48:20,21 sits (2) 22:14;26:4 sitting (1) 23:6 situation (1) 72:5 six (5) 21:19;38:5;79:5; 92:14;94:8 sizable (1) 45:1 size (9)

<p>22:17;25:9;29:1,2,4; 40:5;41:12;43:2;68:8 sizes (3) 41:17;46:19;47:2 skis (1) 40:14 slightly (1) 36:9 slope (2) 32:4,8 slow (1) 34:16 slowly (1) 21:12 small (4) 45:5;57:23;69:21; 73:18 smaller (3) 28:13;70:9,13 soak (1) 20:18 Soil (16) 7:2,3;8:23;21:20; 26:15;28:15;30:7,9; 35:11;38:19;60:7; 73:20;74:8,10;76:10; 78:1 soils (5) 13:17;32:10,11,17, 21 Solar (106) 6:1,6,8;7:21,23;8:5, 7:9;12:15,19,21;10:2,4, 6,10,16;11:12,20;12:8, 12;13:18;14:3,13,20; 15:1;16:1,11,14;17:3,8, 10,12;18:17,21,23; 19:5,7,17,22;20:1,2,7, 11,12,14;21:4;22:7,12, 14;24:15,19,19;25:13, 21;26:2,6;27:8;28:7; 29:13;30:22,35;17; 37:18;39:20;42:8; 52:14;53:8,20;54:1; 55:10,11,19;56:2,11, 12;57:10,23;59:2; 62:15,17,23;63:1,4,13, 22;64:11,22;65:5,17; 66:10;67:9;68:20;69:3, 4,10,14;70:4,7,11,19; 73:2,3;75:6,15,16;79:4, 8 soliciting (1) 66:8 solidified (2) 53:14,18 solids (2) 34:19,19 somebody (3) 26:5,5;64:9 sometime (1) 19:20 sometimes (7)</p>	<p>36:20;44:19;45:3; 61:11;71:13,15;72:1 somewhere (1) 55:23 soon (1) 24:12 sort (4) 21:22;22:14;23:4; 48:15 sound (5) 27:2;82:9,12,15; 94:17 source (3) 27:23;68:23;69:12 sources (2) 27:8;53:16 south (15) 8:15,20;18:7;32:2; 67:17,21,22;74:3; 76:19,22;77:3,4,9,19; 80:12 southeast (4) 8:5;32:6;73:5;76:21 southwest (4) 6:9;7:22;77:5,11 space (4) 16:17;38:7,12;83:21 spaces (1) 36:5 spacing (3) 37:22;46:19;47:4 speak (3) 58:2,17;70:10 spec (3) 43:16,21;44:7 special (21) 6:7;9:8;11:3,13; 12:21,23;13:7;60:1,3; 73:3;74:20;75:16; 79:15;81:18,19;88:6; 90:1;92:15,16;93:1,7 specialize (1) 49:13 species (4) 7:10;86:5;89:19; 94:9 specific (7) 17:4;18:18;42:17,17; 56:20;63:20;67:1 specifically (2) 16:10;17:12 specifics (1) 10:1 specked (2) 42:13,21 speed (1) 87:5 speeds (1) 87:4 spell (1) 68:16 spend (1) 17:19</p>	<p>spending (2) 17:20;29:18 spent (1) 28:3 spirit (2) 66:23;67:2 spot (3) 24:18;33:22;54:23 spread (2) 36:21,22 staff (17) 6:4;8:9,10;9:7;14:6; 15:20;16:18;20:21; 62:5;67:4;72:22;73:19; 74:1,15,18;81:10;93:5 staff's (1) 17:1 stage (6) 21:3;28:16,17;32:16; 42:14;86:10 stages (2) 31:6,11 stamped (1) 56:7 stand (1) 35:1 standard (16) 9:11;11:7,15,23; 12:16;13:1,9;79:8; 81:21;85:16;88:10; 90:4;91:8;92:3,17;93:4 standards (18) 9:14;14:7;15:1; 66:18;67:4;74:14,19, 20;78:6,7,11;81:17,18; 83:16;88:23;93:6,7,19 standing (1) 42:4 standpoint (1) 26:2 stands (1) 35:11 start (2) 28:7;33:9 started (2) 18:2;49:10 state (15) 16:19;21:8;24:3,17; 52:15;53:4,6,7,16; 57:17;60:16;61:12; 69:11,17;87:23 stated (1) 66:6 states (14) 13:1;19:16,18;30:22; 44:4;54:1;82:20;84:11, 19;86:2,16;87:20; 89:13;92:18 statewide (1) 61:14 station (2) 85:1,4 stay (2)</p>	<p>59:14;72:20 stays (2) 26:20,21 steel (1) 21:18 step (1) 54:21 steward (1) 16:18 sticking (1) 70:2 still (9) 25:2;39:22;42:6; 43:9;48:6;51:3;55:16, 19;58:21 stipulation (2) 24:6;93:9 stipulations (7) 14:9;17:5;66:13; 67:5;78:11,18;93:9 storage (1) 32:19 storm (12) 12:6;14:12;25:18; 31:17;35:6,8;36:14; 37:1;38:13,20;74:22; 78:20 storms (1) 36:13 story (1) 46:12 straight (2) 39:16;77:6 strategy (1) 57:16 stream (3) 54:13,17,19 street (3) 7:13;8:7;25:8 streets (2) 12:15;92:3 STREICKER (16) 6:2;15:6,9,13,16,17; 30:1;44:3,8;50:16,22; 58:20;61:7;65:12; 66:16;72:17 S-T-R-E-I-C-K-E-R (1) 15:17 strips (1) 91:16 strong (1) 27:8 strongly (1) 67:3 structural (2) 10:9;25:17 structures (1) 79:22 struggle (1) 59:8 students (1) 29:12 studies (3)</p>	<p>85:23;86:5;87:9 study (9) 85:22;86:3,18;87:11, 13;89:19,22;94:9,11 stuff (1) 40:23 styles (1) 21:2 SU-18-02 (2) 79:12,14 SU-18-03 (2) 5:23;6:6 SU-18-04 (2) 72:22;73:1 SU-18-05 (2) 75:13,14 subdivision (1) 59:22 subject (7) 12:4;13:19;76:20; 77:4,10,12,14 submit (3) 85:17;86:17;90:15 submitted (17) 10:18;11:1;14:21; 38:22;71:20;75:8;79:6; 82:10;83:20;86:23; 87:16;89:20;93:18,22; 94:1,10,15 subscribe (2) 64:10;65:4 subscribed (1) 64:22 subscriber (3) 63:21;64:1,8 subscribers (4) 63:11,13,19;64:5 subscription (2) 62:17;64:20 subscriptions (3) 64:13,18;65:7 subsides (1) 54:11 subsidy (1) 54:11 substantial (1) 60:11 substantially (2) 11:6;88:9 substation (2) 79:20;82:8 subsurface (2) 33:6;47:12 successful (1) 55:11 suitable (2) 90:6,7 summary (1) 31:9 sun (8) 9:23;14:1;21:11; 37:2,9;52:22;53:1,4 sunburn (2)</p>
--	---	---	--	--

<p>55:16,18 sunlight (4) 20:13,19,20;55:20 sunnier (1) 55:21 sunshine (3) 52:21;54:2;55:13 SUP (2) 44:3,9 super (1) 21:12 support (2) 45:2,3 sure (8) 5:1;35:3;41:3;42:15; 48:6;49:14;50:12; 59:11 surface (11) 31:11;32:3;34:3,5,6, 10,12;36:1,5;38:10; 40:6 surrounded (2) 74:5,7 surrounding (8) 8:17,18;11:14;77:17; 81:14;85:9;88:11;90:2 survey (3) 47:2;86:8,12 surveys (6) 49:13,17;86:7,9,11, 13 suspended (1) 34:19 swear (3) 15:12;18:2;50:19 sworn (5) 15:13;18:3;30:15; 51:3,7 system (27) 9:22;10:1,3;13:11; 17:16;21:7;27:21,21; 33:2;37:7,8;45:14,23, 23;46:9,20,23;47:4,13; 48:5;51:23;56:18;57:1; 79:16;80:3;81:23; 82:18 systems (5) 10:9;21:18;23:13; 58:1,2</p>	<p>63:2;64:2;70:14,23; 71:4 tapping (1) 68:9 tariff (3) 56:6,10;58:21 tasked (1) 69:22 taught (1) 55:17 tax (5) 17:21;28:5;59:12; 60:11;88:2 Taylor (6) 4:19,20;5:20,21; 55:22;57:18 teams (1) 47:22 technologies (1) 45:21 technology (2) 42:10,18 telecommunications (1) 84:16 television (1) 95:1 tempered (1) 26:17 template (1) 66:11 temporary (3) 59:19;60:6,10 ten (5) 21:19;28:12;36:10; 43:1;95:5 ten-mile (1) 90:20 tension (1) 42:6 term (4) 26:17;43:7;54:11; 60:5 termed (1) 64:16 terminated (1) 7:10 terminology (1) 40:15 terms (4) 65:16,23;66:1;67:1 Terra (2) 24:23;25:10 terrain (1) 24:23 territory (1) 64:9 testimony (2) 50:23;51:4 texture (1) 55:3 Thacker (1) 90:23 Thanks (1)</p>	<p>31:1 therefore (2) 7:9;46:1 thermal (1) 20:12 thin (1) 26:12 thinking (2) 41:21;71:3 third (4) 57:10;68:20;75:19; 83:7 though (2) 56:9;60:15 thought (9) 15:6;18:10,14;21:21; 25:2,11;48:1,3;53:8 thoughts (1) 49:10 thousand (2) 19:12,12 thousands (1) 61:4 threat (1) 57:19 threatened (1) 57:22 three (13) 14:14;18:11;32:10; 78:21;80:4;83:1,9,10; 89:5;90:1,10,11;93:17 three-fifths (1) 73:8 throughout (3) 9:23;21:11;85:10 throw (2) 61:21,22 thrusters (2) 59:3;66:19 thumb (1) 28:12 Thursday (3) 81:2,6;95:13 tile (25) 12:10;14:17;33:1,2, 15;44:16,18;45:10,11, 14;47:2;48:2,5;49:1, 12,13,17;50:1;51:21, 23;66:2,18;75:3;79:2; 91:10 tiles (3) 24:2;28:15;48:13 tiling (3) 45:21;48:15;51:13 tilt (3) 9:21;20:23;37:19 times (9) 26:8,9;55:17;72:16; 82:22;83:2,4,10;90:10 tip (1) 83:8 today (2) 56:17;61:2</p>	<p>together (6) 18:22;25:6;26:23; 38:19;60:16;69:19 tomorrow (6) 72:14,19,19;75:12; 79:11;95:14 tonight (7) 16:12;31:1;43:23; 58:21;72:11;81:4,7 top (3) 22:1;30:8;70:19 topics (1) 47:22 topography (2) 31:13;81:12 total (9) 9:3;29:15;34:18; 36:5;74:8,10;78:2; 82:22;83:2 totally (1) 70:22 touch (1) 59:1 toward (1) 77:4 tower (3) 83:15;85:3;91:12 towers (3) 83:8;85:2,2 Township (29) 6:10,12,22;7:1; 12:19;14:10;16:3; 28:11;61:11;73:6,7,15; 74:15;75:18,20;76:5,6, 15;78:9,10,15,19;80:7, 8,10,23;90:23;92:12; 93:14 townships (1) 92:5 track (1) 30:12 tracking (5) 9:22,23;21:1,9;37:2 tracks (1) 31:20 Trade (1) 58:6 traffic (3) 17:17;84:17;92:2 trailblazing (1) 16:16 trailing (1) 82:7 transects (1) 47:5 transformer (11) 10:13;22:10;27:4; 39:5,7,23;40:10,17; 42:1;43:10;56:18 transformers (4) 7:14;10:8;39:10; 79:19 transition (1)</p>	<p>18:15 transmission (4) 10:13;67:7;68:7; 83:7 TRC (1) 30:21 treating (3) 34:4;36:17;48:7 trend (1) 53:6 triggered (1) 94:4 true (3) 31:20;36:4,10 trust (1) 39:3 turbine (19) 79:17;82:1,5,14,21, 23;83:2,4,10;85:3; 87:3,4;88:4;89:1,9; 90:10;94:6,14,17 turbines (9) 14:3;82:6;83:3;88:5; 89:12,16;90:9;91:2; 95:3 turn (1) 51:16 Turner (43) 4:2,14,15,21;5:3,5, 15,16,22;6:3;15:3,8,11, 14;18:1,4,9;30:4,14,16; 35:2,10;50:11,14,17, 21;51:2,6,8,15;52:19; 54:16;59:1;62:2,8,13; 68:12;72:8,18;75:10; 79:10;81:6;95:12 TV (1) 83:22 Twin (1) 91:14 two (36) 8:11;9:12,21;14:10; 16:11;19:11;20:11; 21:1;22:16,18,20; 26:11;31:13;36:4; 38:21;39:2,22;40:1; 41:14,21;53:13;55:7; 60:21;63:2,3,3;68:8; 70:13;78:7,19;80:4; 87:23;88:6;89:6;90:19; 93:13 two-foot (1) 39:21 two-step (2) 38:16;39:1 two-story (1) 70:18 type (18) 16:2;18:17;21:7; 27:21;32:4;34:15,16; 35:7;40:23;41:12; 42:17;45:3;46:14; 51:18;57:2;62:17;</p>
T				
<p>talk (12) 15:4,5,23;16:13; 18:13,14,18;20:11; 28:6;37:14;59:10; 62:16 talked (3) 20:23;48:16;62:14 talking (18) 19:10;20:6,12,15,20; 22:19;23:16;42:2;45:4; 49:12,16;60:8;61:15;</p>				

<p>82:14;94:17 types (6) 20:11;21:18;26:11; 32:11;45:21;53:19 typical (1) 41:17 typically (3) 28:13;31:6;70:12</p>	<p>58:9;60:1,3,6;63:16; 73:3;75:16;78:6,11; 79:8,15;81:11,15,17, 18,19;82:3;85:16;86:7, 10;88:6,7,13;90:1,3,8; 92:5,9,11,15,17;93:1,8, 10,13,19</p>	<p>30:19 versus (2) 59:2,14 Vestas (2) 82:4;94:13 VI (2) 14:23;79:7 vicinity (3) 10:21;11:5;88:8</p>	<p>weed (2) 71:19;72:4 weeds (2) 71:13,14 weeks (1) 56:1 welfare (2) 9:10;81:21 west (10) 8:4,21;21:17;25:1; 30:19;75:20;76:19; 77:21;80:10;91:3</p>	<p>56:19 wiring (1) 22:4 within (11) 55:23;65:10;66:23; 83:9,15;84:2,85:3; 89:9,16;90:20,22 without (4) 27:20;42:22;46:20; 52:8 wonder (1) 62:15 wonderful (1) 60:3 words (2) 20:22;63:11 work (7) 16:1;26:6;30:13,21; 31:2;55:13;84:5 workers (1) 20:2 working (2) 83:11;92:4 works (2) 33:1;44:2 worries (1) 65:6 worth (1) 19:7 written (2) 92:11;93:13 wrote (1) 87:12</p>
U				
<p>ultimately (1) 38:13 ultraviolet (1) 55:13 under (14) 19:20;22:2;29:16; 31:19;35:19;38:10; 39:20;40:13,20;52:14; 62:20;63:1,12;94:5 underground (1) 39:21 underneath (7) 22:5;30:12;31:23; 35:17;46:4,6;70:18 understood (2) 49:18;54:14 Unfortunately (2) 69:15,18 uniform (1) 33:19 uniformly (2) 36:21,22 United (2) 30:22;86:2 units (3) 37:6,13;55:14 unless (1) 81:7 unlikely (2) 7:9;10:23 unsafe (1) 27:16 up (24) 13:22;27:15;34:2,18; 38:1,5;39:17;41:23; 45:15,18;46:16;48:1; 50:5,51:3;57:6;58:10; 64:7;67:4;71:8;79:17, 17;81:23;82:1;89:5 updated (2) 82:15;94:17 upon (1) 84:13 upstream (2) 46:6;91:16 uptick (1) 61:5 use (55) 6:7;8:18;9:8,14;11:3, 4,9,13,15,18;12:21,23; 13:7;14:23;21:8;29:6; 37:13;54:11;56:13;</p>	<p>used (6) 13:23;39:9;58:8; 74:3;77:2;88:11 user (1) 65:9 uses (5) 13:3;74:20;88:22; 90:6;92:20 USFWS (4) 86:6,20,23;87:7 using (2) 21:9;42:15 usually (1) 40:22 utilities (3) 11:21;29:10;91:6 utility (14) 10:13;29:7;40:2; 43:4;58:1,10,13;63:2,9, 18;64:9;67:13;68:1; 85:2</p>	<p>VII (1) 93:7 visit (2) 26:7,7 visits (1) 26:10 void (1) 40:20 voltage (1) 23:3 volume (2) 29:3;69:14 voluntarily (1) 65:23 vote (1) 81:6</p>	<p>Westgate (1) 62:12 wet (2) 28:15;37:19 what's (10) 20:4;36:14;42:10; 48:12;52:5;53:6;54:6; 59:12,13,13 whatsoever (2) 26:15;29:10 whereby (3) 26:17;27:21;42:19 whichever (1) 78:15 white (1) 27:12 whole (6) 20:8;38:3;40:12; 57:19;58:3,17 wholesaler (1) 52:5 who's (1) 26:6 wide (1) 57:22 width (3) 8:17;74:4;77:17 wildlife (5) 85:23;86:2;87:15; 89:23;94:12 willing (2) 55:8;65:23 wind (26) 14:1,3;16:15;24:18; 36:20;41:1;53:20; 60:15;61:10;66:11; 79:14,16,17;80:3; 81:22;82:1,18;84:21; 85:3;87:4,21;88:1,14; 89:8,9;91:15 windshield (1) 26:21 WINTERLAND (8) 68:14,14,18;69:2; 70:6,16;71:10;72:7 W-I-N-T-E-R-L-A-N-D (1) 68:19 wire (5) 40:1,21,22;41:12,22 wires (5) 10:8;39:12,13;42:5;</p>	<p>work (7) 16:1;26:6;30:13,21; 31:2;55:13;84:5 workers (1) 20:2 working (2) 83:11;92:4 works (2) 33:1;44:2 worries (1) 65:6 worth (1) 19:7 written (2) 92:11;93:13 wrote (1) 87:12</p>
V				
<p>V136 (2) 82:4;94:13 valuation (2) 16:4;59:11 value (5) 9:6;14:4;61:13; 74:12;78:4 values (2) 11:6;88:9 variation (1) 32:19 variety (2) 31:3;45:15 various (2) 30:22;61:11 vault (4) 40:5,7,13;41:21 vaults (3) 39:8,9;42:2 vegetated (1) 91:16 vegetation (3) 34:16;71:19;77:16 verify (2) 83:18;86:3 Veriotti (21) 16:6;30:2,15,18,19; 33:20;34:1,23;35:5,14, 18;36:3;37:5;38:16; 39:15;41:11;44:21; 46:11;51:17;67:10,20 V-E-R-I-O-T-T-I (1)</p>	<p>W</p> <p>wager (1) 61:3 waiting (1) 23:14 wants (2) 55:8;61:5 warrant (1) 54:3 washing (1) 91:17 watch (1) 21:14 Water (19) 7:2;12:7;14:12; 25:19;29:9;31:12,17; 32:15;35:6,9;36:1,21; 38:7,14,21;73:20; 74:22;76:10;78:20 waterhemp (1) 71:16 waterways (2) 91:18,19 way (20) 14:4,4;15:21;21:10, 11;27:18;31:7;34:7; 39:19;40:16;45:16; 46:21;48:2;56:15;57:2; 60:4;69:13;70:3,4; 91:21 ways (1) 9:21 weather (1) 57:1 WECS (3) 81:23;83:15;93:20</p>	<p>W</p> <p>wager (1) 61:3 waiting (1) 23:14 wants (2) 55:8;61:5 warrant (1) 54:3 washing (1) 91:17 watch (1) 21:14 Water (19) 7:2;12:7;14:12; 25:19;29:9;31:12,17; 32:15;35:6,9;36:1,21; 38:7,14,21;73:20; 74:22;76:10;78:20 waterhemp (1) 71:16 waterways (2) 91:18,19 way (20) 14:4,4;15:21;21:10, 11;27:18;31:7;34:7; 39:19;40:16;45:16; 46:21;48:2;56:15;57:2; 60:4;69:13;70:3,4; 91:21 ways (1) 9:21 weather (1) 57:1 WECS (3) 81:23;83:15;93:20</p>	<p>W</p> <p>wager (1) 61:3 waiting (1) 23:14 wants (2) 55:8;61:5 warrant (1) 54:3 washing (1) 91:17 watch (1) 21:14 Water (19) 7:2;12:7;14:12; 25:19;29:9;31:12,17; 32:15;35:6,9;36:1,21; 38:7,14,21;73:20; 74:22;76:10;78:20 waterhemp (1) 71:16 waterways (2) 91:18,19 way (20) 14:4,4;15:21;21:10, 11;27:18;31:7;34:7; 39:19;40:16;45:16; 46:21;48:2;56:15;57:2; 60:4;69:13;70:3,4; 91:21 ways (1) 9:21 weather (1) 57:1 WECS (3) 81:23;83:15;93:20</p>	<p>Y</p> <p>yards (1) 79:21 Yates (2) 80:8;90:23 year (11) 20:3;26:8,9;28:3; 29:5;35:11;52:21; 60:20,21;63:16;86:21 years (13) 18:20;19:20;33:3; 43:1,8,9,11;47:7,8; 51:13;80:4;89:5,6 Yellow (1) 19:16 yield (2) 21:10;54:2</p> <p>Z</p> <p>ZBA (1) 95:16 ZIEGLER (11) 62:11,11,14;63:6; 64:17;65:9,17;67:7,18; 68:3,11 zigzag (1) 48:2</p>

Zimmerman (1) 5:17	18:7;77:17;80:7; 86:13	257.9 (1) 78:3	3rd (2) 6:11;73:6	89.6 (1) 8:23
zone (1) 60:1	19 (2) 80:7;90:22	258.6 (1) 9:4	4	9
zoning (28) 6:23;8:17;13:10,14, 21;14:8,22;17:3;21:5; 28:20;60:2;67:5;73:16; 74:19;76:7;77:17;79:7; 80:5;81:14;82:19; 85:16;87:14;88:19; 89:23;90:14;93:8,19; 94:12	2	259.4 (1) 74:11	4 (3) 29:16;80:7,9	9 (3) 80:7,9;86:14
zoom (1) 38:4	2.2 (1) 19:9	26 (1) 80:6	4,922 (1) 79:22	90.4 (1) 74:10
1	2.3 (1) 29:16	260,000 (1) 20:2	4.6 (2) 82:5;94:13	95 (1) 49:23
1 (1) 86:12	2/5ths (1) 6:13	27 (1) 82:6	40 (3) 43:8,9;63:22	95.5 (1) 78:1
1,500 (2) 83:1;90:9	20 (15) 6:16;18:20;22:17; 28:11;38:5;43:11; 51:13;55:2,2;70:14; 71:1;73:11;75:23;80:7, 16	28 (2) 80:8;86:12	5	950 (1) 12:1
1.1 (2) 82:22;83:4	20 (15) 6:16;18:20;22:17; 28:11;38:5;43:11; 51:13;55:2,2;70:14; 71:1;73:11;75:23;80:7, 16	29 (1) 80:8	5 (2) 6:10;73:6	
1.5 (1) 19:7	200 (4) 9:2;74:8,9;78:2	3	50 (2) 19:23;33:3	
1.7 (1) 91:1	2009 (6) 86:7,7,8,9,9;87:19	3 (2) 75:19;80:9	500 (1) 82:22	
10 (4) 22:17;75:18;80:7,9	2010 (4) 20:5,8;86:8,8	3.45 (1) 82:4	50-foot (1) 78:13	
100 (6) 9:1;32:4;33:3;39:3; 74:10;78:1	2014 (1) 18:19	3.5 (1) 94:13	550 (2) 79:18;82:1	
100-year (1) 36:14	2016 (4) 19:23;53:11;86:10, 11	3/5ths (1) 75:21	58 (3) 79:17;81:23;82:6	
1100 (7) 6:12;12:2;28:9; 31:23;51:11;54:23; 73:8	2017 (6) 86:11,12,13,13,14,15	30 (4) 43:9;56:15,21;80:8	6	
12 (2) 10:17;22:3	2018 (4) 6:16;73:11;75:23; 80:16	30,000 (1) 29:18	6 (1) 95:13	
13 (2) 80:6,12	208 (1) 82:2	300 (3) 9:4;74:11;78:3	60 (1) 58:8	
14 (2) 6:10;73:5	20-acre (2) 22:18;71:4	3075 (1) 68:15	600 (1) 75:22	
14,000 (1) 60:20	21 (1) 80:7	30-foot (1) 32:7	60603 (1) 18:8	
15 (1) 43:11	22 (1) 75:18	31 (1) 80:8	60606 (1) 30:20	
150 (3) 15:18;23:7;27:3	2200 (1) 75:20	32 (1) 80:8	66 (1) 80:11	
150-foot (1) 27:11	2242 (1) 62:11	320 (1) 29:3	7	
16 (1) 80:9	22825 (1) 68:15	3200 (1) 80:11	7 (4) 72:19,20;95:15,15	
162 (1) 78:2	23 (2) 6:10;73:6	33 (1) 80:8	7.7 (1) 36:14	
169 (3) 9:1;74:8,9	230 (4) 9:4;30:19;74:12; 78:3	34 (1) 80:8	70 (2) 20:6,8	
17 (4) 8:16;74:4;80:7; 87:19	2300 (1) 80:13	3400 (2) 6:13;73:9	72 (1) 58:9	
18 (4)	24 (2) 36:15;80:6	34292 (1) 51:10	8	
	24-hour (1) 84:7	35 (1) 13:23	80 (1) 78:14	
	25 (5) 20:3;29:20;53:15; 69:12;80:6	350.433 (1) 79:8	803 (1) 32:7	
		350-43 (1) 14:23	840 (1) 32:6	
		350-56 (1) 93:7		
		36 (1) 80:6		