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1 *NOTE: CORRECTIONS HAVE BEEN MADE TO TEXT IN THE STATEMENT*
2 *OF IAN BLACK (PAGE 11), AND THIS CORRECTED TRANSCRIPT WAS*
3 *POSTED TO THE PUBLIC WEBSITE ON APRIL 6 2011, REPLACING THE*
4 *VERSION POSTED MARCH 24. THE CORRECTIONS ARE VISIBLE IN THE TEXT.*

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6 UNITED STATES DEPARTMENT OF ENERGY AND BUREAU
7 OF LAND MANAGEMENT
8 SOLAR ENERGY DEVELOPMENT
9 PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT
10 (PEIS)
11 PUBLIC SCOPING MEETING

12

13 TUESDAY, MARCH 1, 2011

14 PHOENIX, ARIZONA

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1 A P P E A R A N C E S

2 LINDA J. RESSEGUIE

3 Bureau of Land Management

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5 JULIE DECKER

6 Bureau of Land Management

7

8 JANE SUMMERSON

9 US Department of Energy

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11 HEIDI M. HARTMANN

12 Argonne National Laboratory

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C O N T E N T S

Public Scoping Meeting, 3/1/11

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1 P R O C E E D I N G S
2 P H O E N I X , A R I Z O N A , T U E S D A Y , M A R C H 1 , 2 0 1 1

3 7:42 P.M.

4 MR. DAHL: And I already have the documents.

5 Hi, I'm Kevin Dahl. I'm the Arizona program
6 manager for National Parks Conservation Association.
7 For 90 years, we've been the leading voice nonprofit
8 organization advocating for the National Parks system,
9 a sister organization of the fine organization, the
10 Bureau of Land Management. And thank you, kudos. And,
11 to the Department of Energy, great job. Proactive on
12 the solar; that's exactly what we need.

13 It would be great for us to find the most
14 suitable lands to develop as quickly as possible. And
15 those would be the ones that -- that have the least
16 possible conflict, because conflict means conflict and
17 lawsuits and more expense. And so the idea of these
18 solar energy zones are fantastic. Don't understand why
19 that's not the preferred choice.

20 There are a few minor problems in California
21 and Nevada. In Arizona the three ones that have been
22 selected look great from a National Parks standpoint.
23 The detail of the work that went into them is so
24 incredible. For example, Gillespie, apparently, the
25 only impact to any of the National Parks units in

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1 Arizona would be an occasional walker on the De Anza
2 National Historic Trail might see a glimpse of the
3 panels if the sun is exactly right, it seems like to
4 me.

5 If -- if these areas don't provide enough,
6 perhaps in combination with the other projects the
7 Arizona BLM is doing, there might be some other
8 degraded lands that would be appropriate. But 22
9 million acres on the solar development? That's --
10 that's way too coarse of an exclusion. It'll be a
11 free-for-all, finding the best locations on those 22
12 million acres.

13 For example, in Arizona, that includes all of
14 the Arizona Strip, up to and adjacent to the Grand
15 Canyon National Park. It includes the House Rock
16 Valley. It's beautiful there. So many people
17 traveling within Arizona just love those open spaces,
18 and I think that's inappropriate for industrial
19 development.

20 If you go down that route, we have to have
21 some refinement. There is just way too many areas that
22 are inappropriate.

23 From a National Parks standpoint, we were
24 thinking there should be maybe at least a 15-mile
25 buffer. But, when we're talking about the Grand Canyon

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1 and Petrified Forest, where the vistas are larger,
2 large and vast, that perhaps the best thing would be
3 to, in each case, consult with the local supervising
4 land manager, which is probably what you should do with
5 the -- all the exclusion areas.

6 I noticed Ironwood Forest National Monument
7 is appropriately excluded. But there's a section to
8 the west of it that would be part of the developable
9 land. So the development would have to go through your
10 monument to -- to service those. There's no other
11 access, except perhaps in the Tohono O'odham nation.
12 So, again, it -- it seems like the preferred
13 alternative is -- is not the best. But your solar
14 energy zones are a great way to go.

15 Also, you know, we really need to start doing
16 a better job of consulting with Native American
17 nations. You know, all legal compliance for these
18 developments must occur, and we should be thoughtful
19 about building relationships that help build trust with
20 our first Americans rather than compromise the little
21 trust we have. And that includes -- you know, perhaps
22 cooperative projects on tribal lands is appropriate.
23 Thank you for this opportunity to speak. Go solar.

24 MR. MULLANY: Hello, everyone. I'd like to
25 thank you all for the opportunity of speaking here

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1 today. My name is Hugh Mullany. I'm representing
2 Lumcloon Energy, which is -- it's an Irish company with
3 its offices in Tullamore. And we have an interest in
4 developing some sort of utility-scale sort of project.
5 That's why we're here today.

6 The fact that we are a generation development
7 company, we do some solar tech research, as well. And
8 we do some projects, which, for example -- in
9 collaboration with Tybee. If Tybee would have
10 developed wind following gap plants in Ireland, for
11 instance. And we're also -- In terms of our solar
12 research, we're specifically looking at air-cooled
13 condensing, improving the -- the efficiency of the
14 actions we choose for water use for plant technology.

15 Really, why we're here today is primarily to
16 listen and learn and just to introduce ourselves. We
17 understand that this is the start of a process, working
18 with the communities here, that there will be further -
19 - after the lands have been identified and the
20 appropriate application process, there will be further
21 processes in introducing ourselves to the community. So
22 it's just important that we just make our faces known
23 and just say hello to everybody.

24 What Arizona is, in particular, is central
25 access in terms of the solar community. And, as well

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1 as that, we also -- we would commend the focus of this
2 -- this process, as well. The more refined and the
3 tighter you get the process, the less issues that there
4 are with community interaction later on. When you open
5 it up very wide, it becomes quite difficult to manage
6 that process, as we find in our own experience in
7 generation development in the past, as well.

8 So, just very broadly, we'd just like to
9 commend the process that allows the U.S. organizations
10 and citizens to -- to decide the appropriate use, use
11 of their own land. And, really, from that point on,
12 it's our job then, once the land is identified, to come
13 up with the right technology at the right price with
14 the right investment for Arizona thereafter. That's
15 really all we have to say, and just to say thank you
16 again. Thank you.

17 MR. VENABLE: Hi. I'm Gil Venable. I'm a
18 former assistant dean of the ASU College of Law, and I
19 currently serve as the environmental justice chair for
20 the Palo Verde group of the Sierra Club. These are my
21 own comments and do not necessarily reflect the views
22 of ASU or the Sierra Club.

23 Generally, the idea of siting solar projects
24 on BLM land in Southwestern Arizona is a good one.
25 Solar energy development is a big part of the solution

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1 to the challenge of global climate disruption and
2 replacing our dependence on foreign fossil fuels.

3 The key is in the details. I commend the
4 Bureau of Land Management for its decision not to process
5 applications for development on lands within the
6 National Landscape Conservation System, wilderness
7 areas, or inside the areas of national monuments,
8 national conservation areas, as well as scenic views,
9 national historic and scenic trails, and
10 environmentally sensitive lands, including those
11 managed by our counties.

12 I would encourage the Department of Energy to
13 adopt a similar criteria.

14 Now, I would also encourage both agencies to
15 extend this policy, not only to the actual lands --
16 protected category of lands -- but to visual impacts
17 from these sensitive lands. I would also encourage the
18 addition of another category of land in that, that
19 protected list, in that, in -- in our desert areas;
20 it's the riparian areas. They have such value for
21 birds and mammals and are so rare that riparian areas
22 should not be utilized for solar projects.

23 The -- In -- in Arizona the key wildlife
24 corridors have been studied by the Arizona Game and
25 Fish Department and others and mapped out, so that we

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1 know of areas which are our key corridors for wildlife.
2 These corridors should not be blocked by solar
3 projects.

4 Obviously, habitats for endangered species
5 should be avoided and protected. But we should also
6 consider the ordinary species of the desert in these
7 projects. Rather than going in and just scraping the
8 land bare, the solar facilities should be mounted on
9 the natural terrain, so that the natural wildlife,
10 including reptiles and birds and mammals, are able to
11 remain in the area without being disturbed.

12 Design should take into account the eventual
13 replacement or disassembly at the end of the project's
14 life, so that the desert is restored to its natural
15 condition when the project is no longer needed. There
16 should be a bond posted for that purpose, just as in
17 mining projects.

18 Generally speaking, solar facilities should
19 parallel existing transmission line corridors.
20 Obviously, you have to get the energy in. And in those
21 areas there's already been a visual disturbance by the
22 transmission lines.

23 We should not go on the assumption that BLM
24 lands need to be used for solar projects. We should be
25 looking at the broader picture and considering private

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1 lands, as well, particularly lands that are already
2 grossly disturbed, such as abandoned mining sites and -
3 - and areas where agriculture was attempted but failed
4 and the land is already disturbed.

5 The proposal is an exciting one, and I look
6 forward to seeing solar facilities as they're developed
7 in Southwestern Arizona. Thank you.

8 MR. BLACK: Good evening. I represent enXco
9 Development Corporation. We're a leader in solar and
10 wind throughout the Southwest and across the country.

11 This document is 11,000 pages; I can attest
12 to that. Me and two of my colleagues have read much of
13 this document in the last month.

14 And, based on that, we have several discrete
15 issues we'd like the BLM to focus on, some issues of
16 concern: First is visual resource management
17 restrictions; second is -- are desert wash
18 restrictions; and, finally, the co-location policies.

19 In terms of visual resource management
20 limitations within the SEZ's, we believe these are too
21 restrictive. They fail to balance with the EOI and
22 national solar energy priorities.

23 Specifically, with the draft PEIS, 20 percent
24 of all SEZ's would be off limits as a -- off limits as
25 a result of class-two BLM designations recommended to

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1 mitigate potential initiatives. Another 12 percent
2 would be subject to class-three designations, which
3 would have a similarly restrictive effect on the
4 achilles heel of solar panel.

5 This is most apparent with regards to the
6 largest of the 24 SEZ's, the Riverside East SEZ.
7 Class-two BLM restrictions will prohibit development of
8 over 40 percent of the SEZ. Another 10 percent would
9 be subject to class-three designation.

10 BLM guidelines provides that VRM classes must
11 balance visual resource inventory values with land-use
12 priorities. The SEZs are an expression of the
13 national and DOI energy land-use priorities.

14 Categorically prohibiting solar
15 development in 20 percent of all the SEZs, in general,
16 and 40 percent of the largest SEZ's, in particular,
17 fails to strike this balance.

18 We've -- we've thought of an approach and a
19 balanced approach that would help the -- the final
20 PEIS. By mitigating the visual effects of solar
21 development in our class-four BLM designation, rather
22 than prohibit it altogether under class two, we believe
23 that it's a much more balanced approach.

24 And, as an example, impact with this Joshua
25 Tree National Park within the Riverside SEZ's could be

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1 reduced by 40 percent by limiting solar development in
2 this vicinity to PV and trough technologies lower than
3 seven meters in height. Such mitigation, in conjunction
4 with the general visual design standards proposed in
5 the PEIS, should be sufficient and should obviate the
6 need to prohibit developments of foreign mitigation.

7 Given the DOI's energy priorities, the BLM
8 should also consider off-site visual offset -- off-site
9 visual offset mitigation at the programmatic level.
10 Such withdrawals are -- are land enhancement actions
11 and, instead, will prohibit a class-two designation.
12 As BLM is aware, the agency has issued detailed
13 guidance on the use of off-site visual offset at the
14 project level, and this guidance would apply equally
15 well to a programmatic level analysis.

16 The desert wash limitations are overly
17 restrictive and internally inconsistent with BLM
18 policies. The proposed general design features would
19 prohibit the installation of solar facilities and
20 components within natural drainages (?).

21 The SEZs have specific design limits
22 requiring avoidance against washes whenever practical.
23 These limitations are infeasible. Washes pervade the
24 western desert like capillaries under our skin. Large-
25 scale solar installations -- installations simply

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1 cannot avoid them.

2 The PEIS needs to acknowledge this fact and
3 address desert washes in the same manner it addresses
4 impacts to other habitats that are widespread
5 throughout the area directly affected, namely by
6 recognizing that the widespread presence of desert wash
7 habitat makes avoidance infeasible in most instances
8 and will instead require a comprehensive mitigation
9 strategy by the developers, consisting of other
10 measures, such as predisturbance surveys, avoidance or
11 minimization of impacts to occupied habitats where
12 feasible, and compensatory mitigation. At a minimum,
13 such a policy should apply within the SEZs because of
14 national energy priority's involvement.

15 Finally -- and I hope I'm not getting
16 anywhere near the five-minute limit -- is the PEIS
17 needs to propose more about the co-location policies.
18 A number of the panelists here have referred to visual
19 impacts. We are very concerned with those, as well, as
20 a developer.

21 What we find is, within the SEZs, is that
22 the clustering of solar energy projects is very dense,
23 especially when -- within the higher resource areas.
24 This density of projects creates intense competition
25 over the existing generation, tie-line routes, between

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1 the projects in one or two transmission corridors that
2 they are adjacent to or can connect to.

3 The draft PEIS contains broad aspirational
4 data encouraging co-location of generation tie-lining.

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5 But developers are inherently competitive and
6 secretive. The PEIS, if it wants to accomplish co-
7 location, needs to go further by proposing policies and

8 grant stipulations that require generation tie-lining.

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9 to be planned and designed to allow other adjacent
10 projects to use them, as well.

11 As an example, fast-track projects may be a
12 year or two years ahead of other projects. And, during
13 their EIS evaluation, cumulative impacts of future
14 projects are not being considered.

15 Such direct policy would -- would also need
16 to generally specify procedures for contractual
17 allocation of shared rights and obligations, the land
18 as well as the physical infrastructure on that land.

19 The PEIS should also explain why policies would not
20 trigger a connected action from NEPA, specifically the

21 review of multiple projects using the same generation tie-line.

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22 We believe that the NEPA handbook
23 provides very clear guidance on case law and why this
24 is easily avoidable.

25 These are our three general comments, and we

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1 appreciate the opportunity to speak this evening.
2 We'll also submit these same comments in writing before
3 March 17th. Thank you very much.

4 MR. DOWDY: Good evening. I -- I don't think
5 I've ever followed an Ian before, in making comments.
6 I -- I'm from the Arizona Wilderness Coalition. I'm
7 conservation outreach associate. And we were founded
8 in 1979 and have worked extensively in wilderness and
9 protecting wild lands and waters throughout the State,
10 especially in 1984, the Great Wilderness Act of 1984,
11 and also the Arizona Desert Wilderness Act of 1990.
12 We're very interested in the -- the conservation of
13 wild lands throughout the State.

14 First, I want to thank the BLM for the
15 opportunity to provide input today; we're -- we're very
16 glad to do that. We appreciate the public process, and
17 we are actually very interested in seeing progress made
18 toward a sustainable-energy future.

19 And there has been a great history of
20 cooperation between the BLM and land conservation, in
21 general. And we appreciate that. We've worked very
22 closely in the past, our organization, with various
23 local BLM offices and State offices. And we are looking
24 forward to collaborating, also, in the future.

25 It's also important to note that the BLM

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1 currently manages 1.4 million acres of wilderness
2 throughout the State of Arizona and we -- they've done
3 a great job, and we appreciate that.

4 We really do support the alternative energy
5 program; I think, largely, the conservation community
6 does. And we think it's really important to identify
7 lands that are most suitable for sustainable-energy
8 development.

9 The BLM, of course, being the managing agency
10 for so much land in the State, does have responsibility
11 to help guide this. And we -- we're glad to see the
12 PEIS moving forward, and we're very excited to provide
13 -- provide comment.

14 We do think, though, it's important that the
15 BLM encourages a sustainable approach, that they look
16 more at a very focused approach to identifying the
17 lands that are most suitable for development. We think
18 that's very important. And for that reason we support
19 the solar energy zone alternative above the others, as
20 we feel like it does a much better job of identifying
21 lands that are most suitable and limiting the impact to
22 others.

23 Conversely, we oppose the solar energy
24 development program alternative. We feel like 4.5
25 million acres throughout the State is -- doesn't do a

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1 good enough job of -- of -- of showing developers where
2 the most appropriate lands are and lands that have the
3 least -- least negative impact on various resources. A
4 lot of -- a lot of our public lands are used for
5 recreation -- hunting, livestock grazing -- and, of
6 course, have a lot of valuable habitats, which we think
7 is important to conserve.

8 We have provided to the BLM some files in our
9 comments that show lands, that have been identified for
10 their wilderness characteristics, that we feel like
11 need to be conserved. There is almost -- about half a
12 million acres of lands, that are identified under the
13 solar energy development program alternative, that are
14 in conflict with lands that have been inventoried by
15 wilderness groups such as ours, that we feel are -- are
16 suitable for conservation.

17 So, just in summary, we support the solar
18 energy zone alternative. It does identify almost
19 14,000 acres of land that's -- that's suitable for
20 development. We do have some comments about some of
21 the details of these three particular SEZs. But,
22 generally speaking, we feel like it's a much better
23 approach.

24 Also, we recognize that there seems to be
25 only a need for about 23,000 acres of solar energy

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1 development over the next 20 years. With -- By looking
2 at the 13,000 acres in the SEZ alternative and also the
3 8,000 acres that are currently in the fast-track
4 permitting process throughout the State, we feel like
5 it's -- it should be quite easy to get enough land for
6 the foreseeable forecast of -- of solar energy needs
7 throughout the State of Arizona.

8 Recently we were presented the -- the project
9 that the State office is looking at, called Restoration
10 Design, which identifies lands that are most suitable,
11 lands that have large -- sometimes been impacted
12 already, and also lands that are in appropriate
13 locations for development. And we think that is a
14 great way to move forward and identify additional solar
15 energy zones if needed.

16 And, again, we look forward to continued
17 collaboration with the BLM. We really do appreciate
18 the opportunity to comment in this way and, also, the
19 support that we've had in the past and the good
20 relationship that we have as we move forward to protect
21 wild lands and waters throughout the State.

22 Thank you.

23 MR. CLARK: Hello. That's sensitive.

24 Well, my name is Matt Clark. I'm the
25 Southwest representative with the Defenders of Wildlife

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1 in Tucson. Founded in 1947, Defenders of Wildlife is a
2 nonprofit organization with more than a million members
3 and supporters across the nation, and we are dedicated
4 to the protection and restoration of wild animals and
5 plants in their natural communities.

6 Thank you for this opportunity to present our
7 thoughts and -- initial thoughts and impressions
8 regarding the solar PEIS.

9 With the PEIS being only 11,000 pages, you'll
10 be glad to know that I've shaved my comments down to
11 only four pages. So, you know, the -- the BLM has done
12 -- attempted a monumental feat with this document. And
13 it does represent a huge effort and an important step
14 forward, particularly as it proposes to focus the land
15 development in fewer places with, hopefully, fewer
16 wildlife impacts and focusing limited public and
17 private resources on projects with a higher likelihood
18 of success.

19 However, the document falls short in a number
20 of areas, and the preferred alternative seems
21 inconsistent with the "Smart from the Start" concepts
22 that Secretary Salazar and BLM Director Abbott have
23 publicly supported. We believe, though, that, working
24 together, this can be remedied.

25 To reach the 80 percent reduction in

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1 greenhouse gas emissions by 2050 and avoid the worst
2 effects of climate change, we will need to maximize the
3 enormous renewable-energy potential in the U.S. And
4 our public lands can help us reach that goal.

5 But, because of the size and nature of many
6 large-scale renewable-energy projects, care must be
7 taken to ensure that the places chosen for development
8 will result in the least impact to wild places,
9 important habitats, ecosystems, cultural and historic
10 resources, and other important aspects that we all
11 derive from our public -- our public lands.

12 So, in an effort to flag areas that will
13 generate significant controversy, the environmental
14 community has developed this list of criteria for areas
15 to avoid in siting renewable energy projects: As has
16 been discussed earlier, proposed wilderness areas;
17 national monuments; and citizen group wilderness
18 inventory areas, that were just discussed by Ian, here
19 in Arizona and in other western states; locations that
20 support sensitive biological resources, including
21 federally designated and proposed critical habitats,
22 significant populations of Federal or State treasures
23 and endangered species, significant populations of
24 sensitive, rare, and special-status species, and rare
25 and endangered plant communities.

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1 An example. I don't know if -- if you can
2 put that up, that -- that map up there. And I don't
3 know if you'll be able to see the map from where you're
4 sitting, but it just gives you an example of the
5 species that will be impacted here in Arizona.

6 This is a map of -- that I created of -- a
7 map, Sonoran Desert tortoise habitat, which is in
8 purple, kind of silver purple. And that's overlaid
9 with the BLM's preferred alternative, which is in
10 orange.

11 And then you can see the -- the black areas
12 outlined are the solar energy zones, the more discrete
13 areas. And in Arizona those are here (pointing).

14 So the point -- and -- and the green areas,
15 the kind of connective areas that you see there, are
16 the modeled wildlife linkages that Northern Arizona
17 University has done in conjunction with State Game and
18 Fish, ADOT, and others. And the point being that, if
19 we don't want the Sonoran Desert Tortoise to be in the
20 list of species headed towards extinction, we need to
21 be very careful where we develop solar energy such that
22 it doesn't -- not only destroy habitat but prohibit the
23 species from having a connected metapopulation that
24 will allow it to -- to persist into the future.

25 Other examples that -- for exclusion: Lands

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1 purchased for conservation, including those conveyed
2 back to the Federal Government; and biological wildlife
3 linkages, as described; National Historic Register
4 eligible sites and other known cultural resources;
5 locations directly adjacent to National or State Park
6 units.

7 And locally, here in Arizona, we're
8 recommending that lands in Pima County, Sonoran Desert
9 conservation land, the conservation land system, be
10 removed from further consideration. Also, lands in the
11 San Pedro River basin, particularly right adjacent to
12 the National Riparian Conservation area that have been
13 identified, should be removed from further
14 consideration. Lands on the Arizona Strip, House Rock
15 Valley, and the Arizona modeled wildlife linkages, as
16 mentioned, should all be eliminated from further
17 consideration.

18 And, with regard to the preferred
19 alternative, which is four and a half million acres in
20 Arizona, we believe that this option would really do
21 nothing to solve the problems of how the Interior
22 Department does business today with regards to solar
23 energy development. And, in opening up this larger
24 amount of acreage, according to the BLM's own study, to
25 reach our clean energy goals, it would -- In attempting

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1 to do that, it would create the same sort of gold rush
2 mentality that's been driving solar energy development
3 over the past year or so and would likely lead to
4 insufficient and inconsistent environmental reviews,
5 resulting in big impact on our wildlife and natural
6 lands and more of the same uncertainty for project
7 developers, including slow-downs in cost and
8 modifications to lessen the project's impact.

9 And so we believe we cannot continue to
10 develop solar energy on a project-by-project basis,
11 either. And to do so would certainly result in greater
12 impacts on the environment in the West. And this also
13 would lead to uncertainty, conflict, and delays.

14 So we -- we, too, are in support of the zone,
15 the alternative solar zone. We believe that -- that
16 the sites in Arizona, for the most part, avoid a lot of
17 conflicts. And there should be a process for
18 identifying new solar zones. And I think that the
19 restoration design energy project here in Arizona is --
20 is applying some principles that could help us to get
21 there in terms of screening sites that are appropriate.

22 And, with the zoned approach, we believe
23 that, even though it's done with a more-detailed
24 analysis, we still believe that it needs to conduct a
25 more thorough environmental review of the total impact

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1 on wildlife; water, in particular; habitats; and
2 cultural sites.

3 And then we wanted to make sure that the
4 zones -- okay -- are, in fact, the right places for
5 industrial development. And so it's -- it's important
6 not only to -- to figure out which areas to exclude,
7 but also which ones are most appropriate in terms of
8 location, access to transmission and load centers, and
9 things like that.

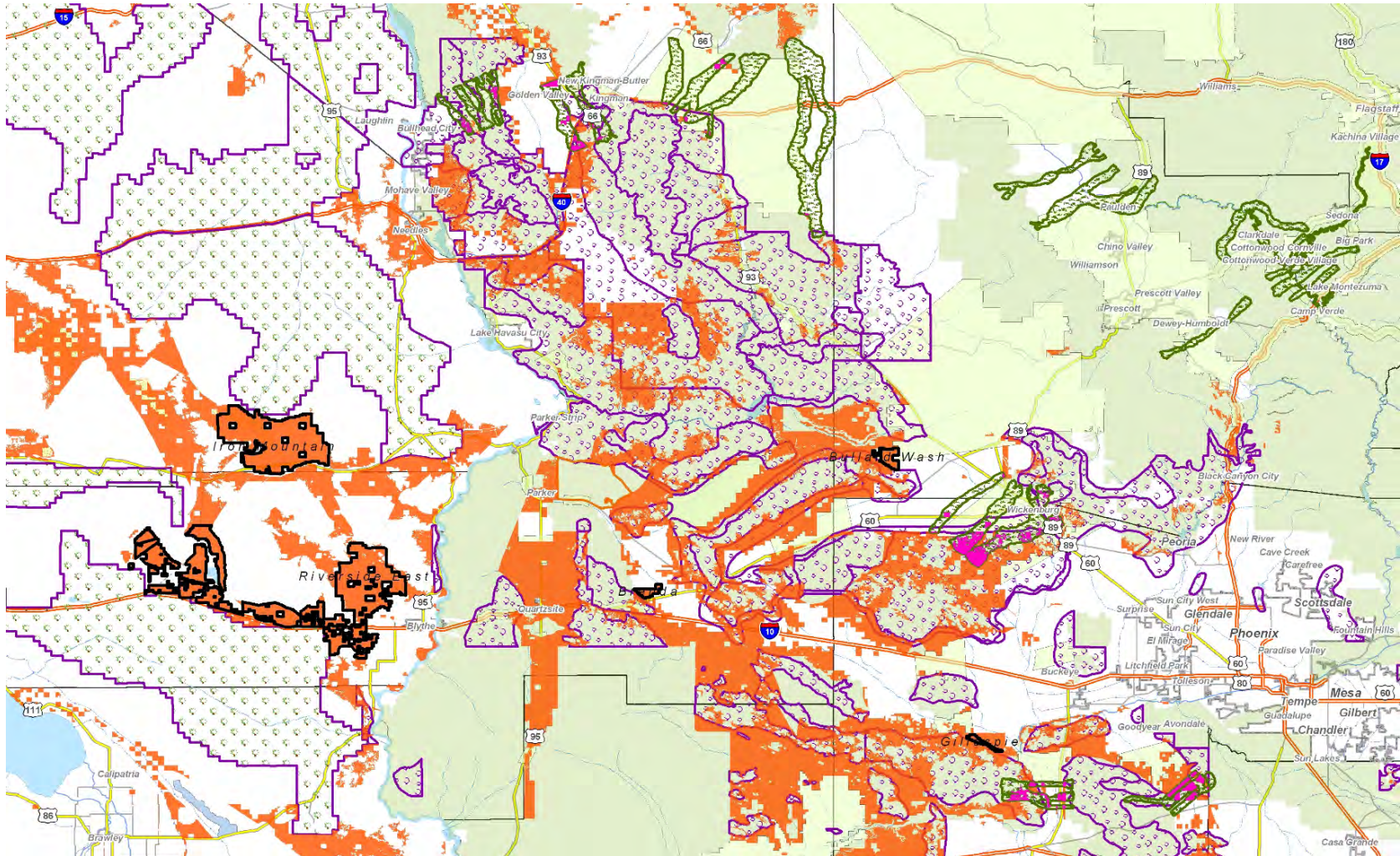
10 And, lastly, we want to see that the zoned
11 approach lays out clear guidelines for how projects
12 should be built, operated, and so that the potential
13 for harm to sensitive landscapes and wildlife is
14 avoided, minimized, and mitigated.

15 Thank you very much.

16 MR. ISRAEL: Good evening. My name is Howard
17 Israel, and I represent the International Dark Sky
18 Association,

19 IDA. One must wonder: What is the IDA doing
20 here relative to solar development?

21 Well, our major concern is light pollution.
22 Despite the fact that solar plants are under the sun,
23 they are lit at night for safety and security.
24 Therefore, our concern has to do with the potential
25 environmental impact of light pollution emanating from



Attachment for Presentation by Matt Clark, Solar PEIS Public Meeting, Phoenix AZ 3-1-2011

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1 these sites.

2 IDA is an educational organization that seeks
3 to preserve the natural night skies world-wide. Light
4 pollution is excessive and inappropriate. Artificial
5 light an -- is an increasing problem threatening
6 astronomical facilities, ecologically sensitive
7 habitats, all wildlife, energy use, as well as our
8 human heritage.

9 And now I'd like to give you a short course
10 on light pollution. I promise you, it will only take
11 two minutes. Let's talk about the four -- the four
12 components of light pollution.

13 Urban sky glow. If any of you have been to
14 the Grand Canyon lately at night, if you look to the
15 south, you can see Phoenix; you can actually see the
16 light glow from Phoenix. And, if you look to the
17 northwest, you can see the light glow from Las Vegas.
18 That's light glow.

19 Light trespass: Light falling where it is
20 not intended, wanted, or needed. How many in this room
21 have neighbors that keep their spotlights lit all night
22 long, shining into your bedrooms? I have a gentleman
23 in the back. This is light trespass.

24 Glare: Excessive brightness which causes
25 visual discomfort. High levels of glare can decrease

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1 visibility, especially in older eyes. Now glare, going
2 down the highway and somebody is coming towards you
3 with their brights on high, that's glare.

4 And, finally, clutter: Bright, infusing, and
5 excessive groupings of light sources, commonly found in
6 overlit areas. The proliferation of clutter
7 contributes to urban sky glow, trespassing glare. If
8 you've ever been to the top of South Mountain at night
9 looking over Phoenix, that is light clutter.

10 We're concerned about the potential for
11 improper lighting at these facilities and how it will
12 affect mammals, birds, reptiles, and insects. Folks,
13 these facilities will be lit at night, for safety and
14 security.

15 Let's talk a little bit about the effects on
16 wildlife, mammals, for example. The bright lights from
17 these facilities will cause these nocturnal mammals to
18 experience a loss of their night echo system. Examples
19 of these affected mammals are bats, raccoons, coyotes,
20 deer, and mice.

21 Let's talk about birds. Many species of
22 birds migrate or hunt at night. Their dependence on
23 darkness makes them extremely vulnerable to bright
24 lights in areas that are naturally dark. Birds can be
25 drawn to light sources and become fixated on the beam.

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1 This confusion causes a variety of negative effects,
2 such as, over a hundred million birds a year throughout
3 North America die in collisions with lighted buildings
4 and towers. Not wanting to fly back into the dark,
5 they continue to fly in the light beam until they are
6 exhausted, fall, or become prey. The artificial lights
7 can also cause migrating birds to wander off course and
8 never reach their natural destination.

9 Reptiles. Lots of reptiles in the desert.
10 Nocturnal reptiles can become disoriented by the
11 artificial lights invading their homes and experience a
12 change in their natural behaviors. These behaviors
13 might include appetite problems, resulting in decreased
14 weight; decrease in mating, resulting in diminished
15 populations; increased vulnerability to natural
16 predators and unusual ones like cars and humans.

17 Insects, finally. Moths and other insects
18 are attracted to artificial light and may stay near
19 that light all night. This activity around the light
20 expends too much energy and interferes with mating and
21 migration, causing operation extinction. It makes them
22 easy prey for bats and other nocturnal creatures,
23 further reducing their numbers. Impacts all species
24 who rely on insects for food and pollination.

25 And, finally, the most important point that

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1 I'd like to make about light pollution is the effects
2 on astronomy. Light pollution is a serious problem for
3 most amateur and professional astronomers. Located
4 just a few miles from the proposed Brenda site is an
5 area used by hundreds of amateur astronomers throughout
6 the Phoenix and Tucson area for deep-sky viewing.

7 Consider this: We have to travel over one
8 hundred miles to get away from the lights of Phoenix.
9 This area will be located just a few miles from Brenda.
10 Any extraneous light from proposed solar energy plants
11 will have a great impact, not only on amateur
12 astronomy, but quite possibly on professional
13 observatories throughout Arizona located hundreds of
14 miles away. Did you know that Arizona hosts the most
15 astronomical observatories in the world?

16 Light pollution to astronomers is analogous
17 to having a sewage treatment plant located in the
18 middle of a residential neighborhood. Excess man-made
19 light being emitted into the night does enormous
20 environmental harm and wastes energy.

21 It is of utmost importance to protect the
22 natural sky to avoid the adverse effects of light
23 pollution by advocating for intelligent and responsible
24 lighting to protect the night-sky quality, as well as
25 astronomical observations, wildlife conservation,

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1 together with the maintenance of the integrity of
2 nighttime landscapes and cultural heritage scenarios.

3 Ladies and gentlemen, preventing light
4 pollution is the rare issue that costs less to solve
5 than to let it continue. So let me give you a
6 solution. We urge the designers and contractors of the
7 solar panel facilities to consider the use of fixtures
8 that will eliminate light pollution while providing
9 safety and security.

10 Formed in 1988, the International Dark Sky
11 Association is the authoritative voice on light
12 pollution. IDA educates lighting designers,
13 manufacturers, technical committees, and public about
14 light-pollution abatement.

15 We recognize that the best way to accomplish
16 our goal of protecting and restoring our natural light
17 is to examine the fixtures that are being manufactured
18 today. We have developed a program that is called "the
19 fixture seal of approval."

20 It's a nonprofit program, and what we do is
21 we evaluate every single fixture being manufactured
22 today. And, if these fixtures meet our criteria in
23 terms of eliminating light pollution, they get our
24 fixture seal of approval.

25 We appreciate the proposed action of this

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1 PEIS to develop and implement the new solar energy
2 program that would facilitate environmentally
3 responsible utility scale solar energy development by
4 establishing environmental policies and design features
5 related to the utility scale solar energy development,
6 especially in Arizona.

7 If the International Dark Sky Association can
8 be of any assistance in these efforts, please do not
9 hesitate to call upon us. Thank you.

10 MR. SOLEM: My name is Richard Solem, and I'm
11 just here as a private citizen. Although, the reason
12 I'm here is because I got an e-mail from Defenders,
13 from Matt -- although, probably, I don't know how many
14 people did -- to come here and say something. What is
15 your opinion about what is going on with this solar
16 energy project?

17 Well, I'm in support of the solar energy
18 zones alternative. And all I'm going to do is give you
19 a simple case example.

20 On the Defenders of Wildlife site, they had
21 an example of something called East Clanton Hills. Now
22 I said: Well, I'm going to find out what's going on
23 here.

24 So I'm going to do a small show-and-tell to
25 see what -- show what you I found.

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1 First of all, the first thing I found when I
2 looked up -- I took BLM's map, and I opened it up, and
3 what you'll find, wandering eyes, is here. But the
4 East Clanton Hills are right here in the middle of this
5 map, okay? This is a scale of one to 100,000, so each
6 one of these little blocks here is a mile.

7 Well, it so happens that the East Clanton
8 Hills are abutting, touching with only a wash in
9 between, the Eagletail Mountains Wilderness. Now, I
10 don't know how many of you know what the Eagletail
11 Mountains Wilderness is, but it's such an important
12 area. It's a wilderness that was carved out of the
13 Eagletail Ranch, a very large ranch in Arizona. And
14 it's a large wilderness, and it preserves everything,
15 habitats of all kinds. It preserves Indian artifacts,
16 all sorts of different types of things.

17 This is the Eagletail Mountain ranch, okay?
18 Now, the wilderness was carved out of this. And the
19 ranch actually is much bigger than this; it's huge,
20 probably twice as big as what you see here. But they
21 carved it out of the center part. And what I find is,
22 here, on a boundary, right within -- virtually touching
23 the wilderness -- and then you look on the map that
24 Matt put up here. The areas that would be impacted if
25 you use anything but the zones, the three zones that

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1 are listed, would be all through that area. So
2 potentially -- and I'm going to talk in this sense,
3 tortoise habitat; we'll talk about that.

4 The East Clanton Hills are on this
5 topographic map called Nonsuch View. Okay, if you
6 follow the terrain going right south to the bottom of
7 the -- at Payton Wells, the bottom of that point that
8 we have in the wilderness, you have a kind of low area
9 there. Suddenly, you cross the wash, called Deadman
10 Wash, and up you go into the Clanton Hills area.

11 Now, the richest tortoise habitat is going to
12 be the bajada; it's the slope coming down
13 there. So the lower part of the bajada, under the
14 criteria you have here with the five degrees would be
15 developable, totally developable. Now, anything in
16 tortoise habitat that you're even near is doomed for
17 them.

18 I don't know how long any of you have been
19 here in Arizona. But I've been coming out since '53,
20 and I remember when the Phoenix Mountain Preserve, that
21 whole range, was something like this Clanton Hills
22 area. It had the same, almost the same, rise -- maybe
23 not as high but the same rise from where you stand here
24 at the bajada, at the bottom part.

25 Okay, that area used to be filled; it was a -

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1 - a virtual wilderness. Can you imagine that, in '53,

2 Phoenix Mountain Preserve being a wilderness?

3 Tortoises everywhere. All kinds of things. I mean,

4 incredible. All kinds of Colorado -- Colorado River

5 Toads. Things you don't see any more.

6 Why don't you see them? People came.

7 They've destroyed them. Now it's a sterile place. You

8 can go and see views, but what do you really see? And

9 this is an area right next to the wilderness. It's not

10 really protected.

11 Now, I understand that citizens' study groups

12 have gone into these areas, and they have tried to

13 decide what the mosaic of the ecology is and what

14 species are there and so forth and how they need to be

15 protected, but it hasn't been done. This has not been

16 done by BLM or anybody. It's done by public nonprofit

17 people.

18 And I think that, just as a citizen, if

19 that's one example of something that could be heavily

20 impacted, then how many other places do we even have

21 time to talk about? I mean, blow them up to see what

22 they really are, what's really going on there, instead

23 of abstract, abstract, abstract.

24 This is just something, in me, that I saw

25 when I was a child coming here. And I can see it

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1 happening again, you know, another -- I won't say it's
2 a sacrifice zone that you have in every generation,
3 with a new kind of energy, but it's something like that
4 because we have the ability to obliterate everything
5 now if we want to.

6 So that's why I'm glad you have the
7 alternative of the solar energy zones. To me, that is
8 the winner.

9 Thank you.

10 MS. DEWITT: Hello. My name is Rebecca
11 Dewitt. I am with the Sierra Club, but I'm also the
12 secretary for the Arizona Green Party, a political
13 party here in Arizona and across the country.

14 I don't know if I could add any more to what
15 everyone else has said. They've all been very eloquent
16 and passionate and everything, and I think it's just
17 wonderful that you guys have given us this opportunity
18 to speak.

19 I guess, from my standpoint, having solar
20 energy here is a wonderful benefit to our economy.
21 It's something that's very needed. It's also a
22 sustainable-energy source, which is probably one of the
23 wisest things we can do. And it's a good fit for our
24 climate.

25 I guess I would put my vote in for the solar

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1 energy zones, as well. I think it's a good fit for
2 both sides. It is a benefit to the people who care
3 about the environment, the wildlife, the cultural
4 aspects of the land that we have here that's so unique.
5 And it's also a benefit to the -- the companies who
6 want to put in their developments. It gives them the
7 option to know exactly what's already been imbedded, so
8 there won't be any legal battles; there won't be a lot
9 of outcries from the public. And I think it's a good
10 balance between the two. So that's where I think it
11 would -- the best benefit would be.

12 And, in the interest of time, I'll -- I'll
13 leave it there. But I think that makes the most sense
14 for everybody and that would be the least conflict,
15 like has already been said, so thank you.

16 MS. BAHR: Thank you for the opportunity to
17 address you this evening. My name is Sandy Bahr. I'm
18 the chapter director for the Sierra Club's Grand Canyon
19 chapter, which is the Arizona chapter.

20 The Sierra Club has been around since about
21 1892. It was started by John Muir, who recognized that
22 when you try to pick out anything by itself, it's
23 hitched to everything else in the universe. And I
24 think that that's kind of what we're seeing with this
25 process, which is why it's so important to identify

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1 areas that are appropriate for solar development.

2 We'll be submitting detailed written comments
3 with our environmental partners. And there will --
4 Those comments will include Arizona-specific comments.
5 But I -- I did just want to provide a few, general
6 comments here this evening.

7 First of all, the Sierra Club strongly
8 supports investing in renewable energy and energy
9 efficiency because we think it's critical to address
10 these, the greatest challenge that we face as a people,
11 and that's global climate disruption. We also have a
12 long, long history of supporting protection of public
13 lands and have advocated strongly for protection of
14 those lands throughout the country and here in Arizona.
15 We don't see those two things being mutually exclusive.
16 We can identify areas for siting solar appropriately
17 and protect our important wild lands and wildlife.

18 That's why the Sierra Club is supporting the
19 solar energy zones alternative. We don't think the
20 solar development program alternative is necessary.
21 It's very broad, it's not targeted, and it will not
22 address the issue of reducing -- reducing conflicts.

23 The success of the Bureau of Land
24 Management's solar energy program really depends on
25 developing policy and guidelines that will guide

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1 projects to the most appropriate locations and limit
2 the environmental impacts, as well as reduce some of
3 the obstacles. Again, the solar energy zones
4 alternative can -- can help to do that.

5 The BLM needs to help ensure that appropriate
6 -- appropriate solar energy zones are identified and
7 designated, that solar projects are actually guided to
8 those zones, and then also have a process for
9 identifying and designating new zones as appropriate.

10 We -- we know that the -- the solar energy
11 zones in Arizona are -- are smaller, especially in
12 light of the extensive solar energy resources that we
13 have. But we think that there are opportunities for
14 looking to add, perhaps using the restoration design
15 energy project that BLM is working on as a guide. That
16 project focuses on identifying disturbed lands and
17 lands that are on the BLM's list for disposal as
18 appropriate for solar development. So we think that
19 that might provide an opportunity for additional solar
20 energy zones, as well.

21 I did want to note that the Sierra Club has
22 supported several utility scale solar projects in
23 Arizona already. Those are projects that have
24 primarily moved forward with very little controversy.
25 They are located on agricultural lands; and I think

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1 that that, in -- in itself, tells an important story.

2 Just a couple of other things I wanted to
3 touch on. We -- we shouldn't talk about Arizona without
4 mentioning water. And we think that the BLM really
5 needs to look at the impacts of development on water
6 resources and looking to, where possible, prioritize
7 low-water-use technologies and -- and -- and actually
8 prohibit unacceptable impacts to our water resources.

9 The -- the final thing I guess I wanted to
10 mention is that there are three solar energy zones in
11 Arizona, and we will be providing specific comments on
12 those, including recommending some boundary revisions.
13 And, just for example, on the Gillespie solar energy
14 zone, looking to focus development north of the Agua
15 Calienta Road would seem appropriate.

16 And, with that and in the interest of time, I
17 just wanted to thank the BLM for having this hearing
18 tonight and also for looking for a way to really be
19 active in identifying areas that are appropriate. We
20 think, if you focus in on those solar energy zones, you
21 will get there. But, if you continue to move down this
22 road of just very broad swaths of land where there are
23 a lot of conflicts, we don't think you will get there.
24 And -- and, really, this is too important not to. So,
25 again, we encourage you to look at focusing the

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1 approach.

2 Thank you.

3 MS. SPRAGUE: Thank you. My name is Tiffany
4 Sprague. And I am a resident of Phoenix, Arizona, and
5 I'm also a big proponent of solar energy. Personally,
6 I believe that we should be focusing on dry solar
7 instead of developing other programs, but I do realize
8 that that's not within the scope of this meeting.

9 So, first, I wanted to say: Thank you very
10 much for going through this process and for having this
11 meeting tonight. I am very impressed with the amount of
12 detail that is provided in the PEIS.

13 I have noticed a couple of things that are in
14 error, such as special-status species that are not
15 listed as such in the document. These are species that
16 have been recognized by the BLM or the Arizona
17 Department -- or Arizona Game and Fish Department,
18 pardon me. But these will be provided in more detail
19 in further comments.

20 I am a proponent of the solar energy zones
21 alternative. As with any development, we need to be
22 careful to minimize impacts to our public lands. These
23 are lands that are important for wildlife, for people,
24 and for their own intrinsic values. They provide
25 habitats, clean air, clean water, and outstanding

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1 recreational opportunities, and so much more. So I
2 believe that we need to completely avoid sensitive
3 lands. We need to avoid areas that are used or
4 important for special-status species. And we need to
5 avoid any wildlife movement corridors and also
6 waterways, including desert washes; these are critical
7 for effective ecologic -- ecological processing or
8 functioning.

9 I believe that, in order to catalogue all of
10 the different resources and get an understanding of
11 what is in these lands, thorough studies need to be
12 done. And, by "thorough," I mean that these need to be
13 done throughout the year, preferably for a number of
14 years, at different times of the year and also at
15 different times of the days, so that you can get a feel
16 for the plants and animals that are in these areas and
17 that might only be present at certain times during the
18 year or active during certain times during the day or
19 night.

20 I really believe we should be focusing on
21 areas that are -- are already disturbed, such as mining
22 or agricultural lands, that are not likely to be
23 restored to their original condition. And, regardless
24 of where development occurs, we must provide mitigation
25 options in order to minimize the damage.

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1 And, finally, I advocate for dry, clean
2 technology wherever feasible. As we know, water in the
3 desert is very scarce, and we should not further
4 exacerbate this problem through solar energy
5 development.

6 So thank you for the opportunity to comment.

7 And, as Kevin Dahl says, go solar.

8 MR. GRENARD: I'm Mark Hayduke Grenard. I'm
9 a resident of Phoenix and a member of the Sierra Club.

10 And I just want to echo everybody who praised the zone
11 alternative and to look at disturbed lands first. And,
12 since there's already been 13,000 acres designated and
13 you only need 22,000 and you have 8,000 additional
14 acres already fast-tracked, that will meet the
15 requirements, and you don't need the four and a half
16 million acres.

17 And that's the end of my comment.

18 MR. QUIGLEY: Thank you. My name is Mike
19 Quigley. I am the Arizona Wild Lands campaign
20 coordinator for The Wilderness Society.

21 First, I'd like to thank the BLM and their
22 partners for having this meeting and giving us the
23 opportunity to be heard. We would also like to applaud
24 the BLM for taking the opportunity to develop
25 alternative energy resources on our public lands. We

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1 feel that this is a necessary step towards making
2 progress on our goal to alter climate change.

3 That said, we also believe there are some
4 places where commercial-scale solar development on
5 public lands is appropriate and some places where it is
6 not. So we strongly support the solar energy zones
7 alternative.

8 Further, we also support a process for
9 identifying additional solar energy zones, especially
10 in Arizona. We would urge that these areas take into
11 account prioritization of ground fields and already
12 disturbed lands and exclude lands with high
13 conservation value, including lands that have
14 characteristics worthy of special protective
15 designations like "national conservation area" or
16 "wilderness" and also looking at analyses done by
17 private citizens and other organizations in the State.

18 We strongly support the solar energy zones
19 approach because we believe more diligence now will
20 shorten the overall project time lines by avoiding
21 potential future conflicts. We feel that we can't
22 afford to make the same mistakes with solar energy that
23 were made when we opened our public lands to mining and
24 oil and gas drilling.

25 The solar energy alternative provides much

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1 more directed and -- and clear guidance. And, as such,
2 we believe it's an important early step, indeed, a
3 "Smart from the -- from the Start" step to a national
4 renewable energy program that guides development to the
5 most appropriate areas. We feel that, by carefully
6 designing and siting solar projects on the front end of
7 the process, we can more quickly get more renewable
8 energy to consumers at a lower cost and at the same
9 time minimize the impacts to water, wildlife, habitats,
10 and other national valuable resources.

11 Again, we'll be providing written comments
12 with our conservation partners, as well, by the March
13 17th deadline. We look forward to continuing an
14 engagement both with this process and with individual
15 companies as they bring forward site-specific projects
16 in Arizona.

17 Thank you again for the time to talk this
18 evening.

19 MR. VAALER: Hello. My name is Jim Vaaler,
20 and I am with the Sierra Club. However, I'll be
21 speaking for myself this evening. I'd like to thank
22 you for the opportunity to speak.

23 I think, when solar development sites are
24 located on public lands, it needs to be in the areas
25 where there are no conflicts with wildlife and wildlife

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1 corridors, no conflicts with archeological sites,
2 obviously wilderness. Also, agency- and citizen-
3 proposed wilderness study areas should be, I think, off
4 limits to solar sites.

5 A few days ago I -- I had an opportunity to
6 go out to the Bullard Wash site and actually walk
7 around out there. I -- My preconceived notion about
8 this area, as well, was that it might be kind of an
9 overgrazed area, not too -- not too interesting.

10 But, much to my surprise, I got out there,
11 and I -- me and a couple of others walked about four
12 miles out there doing two rather crude transects. And
13 I found, just in that -- that brief walking around
14 there, two archeological sites. I -- I found what's
15 called a -- a pot bust; that is a broken vessel of
16 Hohokam pottery. And then another site that contained
17 a couple of shards. So -- so I know there's a lot of
18 archeology out there.

19 The area was also a very beautiful
20 transitional area from the Mohave to the Sonoran,
21 featuring mostly Mohave but also some saguaro cacti out
22 there. The area, as I said, was not heavily grazed. A
23 lot of wildlife values were observed. I saw a raptor
24 nest in a saguaro, badger burrows, and a wide variety
25 of floral species were recorded out there.

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1 But I guess my main concern with the Bullard
2 Wash site is that my understanding is that this is
3 going to be basically a scraped-earth policy out there,
4 where they go in there and remove all the vegetation
5 from the site. And I was wondering if that is really
6 necessary.

7 My understanding is that the reason they're
8 doing this is just in case a fire would crop up and
9 burn down the solar site. So I was out there looking
10 around for signs of burned vegetation, burned Joshua
11 trees. I saw nothing that indicated any history of
12 fire out there. So I guess, in closing, I'll -- I'll
13 encourage the BLM to use a very light touch on the land
14 and encourage the companies to do likewise, I think.

15 And thank you again for the opportunity to
16 speak.

17 MR. WELSH: Thank you for the opportunity to
18 make some comments. My name is Frank Welsh, from
19 Phoenix, Arizona. I belong to the Audubon, Sierra,
20 herbalogical society, civil engineering societies,
21 Republican Party, et cetera.

22 I would like you to consider something that
23 hasn't been mentioned yet. We talk about disturbed
24 areas. Arizona has the largest continuous disturbed
25 area, almost all the way across the State. It's called

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1 the Central Arizona Project canal. And it will be
2 protected in these solar plants you put inside, in that
3 the right-of-way of the canal would be protected, and
4 that would take care of our dark skies problem.

5 Let me note, too, that that power to pump
6 that water uphill over a thousand feet, all that CAP
7 water, that power comes from the Navajo Power Plant
8 located in Northern Arizona. That power plant could be
9 replaced, for instance, by solar powered methodologies.

10 Other disturbed areas: I would include the
11 Salt River Project canals and all the irrigation
12 district canals, abandoned farm lands, of course.
13 Transmission lines should also be on disturbed land.
14 They can be as bad as the solar plant, itself.

15 Now, how you develop the land is every bit as
16 important as the where you develop it. Whether we
17 scrape the land and leave it totally bare -- I just
18 heard that was possibly for fire purposes -- that's one
19 way. Another way is to leave the vegetation as it is
20 and build around the vegetation. Developers have
21 already found that that's possible with golf courses
22 and so forth.

23 I would also like to reaffirm the comments
24 that were made about no riparian areas should be
25 disturbed. And that includes the whole floodplain. If

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1 you want your solar plants washed out, put them in a
2 floodplain. We have hundred-year floods every couple
3 years out here.

4 Now the question becomes -- Oh, let me note,
5 too, that, when we talk about disturbed and undisturbed
6 land, we live in a desert. As the song said, the
7 desert is like an ocean. Most -- Many of our critters
8 are found underground. So when you have people out
9 looking at certain areas, they should be aware of this,
10 that some endangered critters actually live
11 underground. Most of the time you won't even see them
12 if you go out in the daytime.

13 As far as energy goes -- Oh, let me add, to
14 the disturbed land, the whole City of Phoenix is a
15 disturbed land. How about solar rooftops? I have yet
16 to see a study to show how much energy can be produced
17 by solar -- by solar, when every rooftop in Phoenix --
18 And think of what that would save us in transmission
19 lines. As far as I know, there have been no studies
20 along that line, but it's about time we started.

21 Now, when it comes to water, the CAP canal
22 has another advantage. Gee, it's carrying the water.
23 We don't have to worry about the water; it's right
24 there in the canal. You might have to get a permit from
25 the Department of Water Resources, but, still, it's

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1 there.

2 Now, along the same lines, you don't need
3 water for solar. I have visited and I've -- well, I've
4 visited -- I've attended speeches by Stirling Engines,
5 showing how they don't require any water, except to
6 wash down the solar panel once in a while. So that's
7 something that should be -- The type of development is
8 every bit as important, again, as where it's developed.

9 Let me see what else.

10 Well, one of my big -- this -- There's
11 possibly something that should be considered. But are
12 we building solar plants for California's energy with
13 Arizona water? I hope you'll think about that. I
14 don't know whether the Federal Government can get
15 around Arizona water rights or not. But I would like
16 that to be a consideration.

17 Thank you very much. I am glad the
18 Department of Energy is here because a lot of this has
19 to do with energy. Let's look at the CAP canal and how
20 we waste that energy.

21 Thank you very much.

22 MR. GORSEGNER: Well, with any luck I'll be
23 the last one tonight. My name is Eric Gorsegner. I'm
24 the associate director with the Sonoran Institute. We
25 are based in the Inter-Mountain West and engage on

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1 sustainability issues, smart-growth types of things,
2 which leads us to the promotion of conservation but
3 also to the promotion of the development of a robust
4 and healthy solar industry.

5 I did not prepare any comments tonight, and
6 so I was taking little margin notes, and now I'm going
7 to have to figure out what I wrote. So I don't want to
8 repeat what other speakers said. But there were things
9 that I thought were -- were key, and I wanted to kind
10 of hone in on them. And we will be submitting
11 comments, as well, so you'll get those.

12 I think some of the points mentioned by Mr.
13 Dowdy and Mr. Quigley, Ms. Bahr, Mr. Israel, and
14 others, bear some reenforcement. The notion that the
15 zones plus should go -- that's -- it's -- it almost
16 shocks the consciousness, to think that that could be
17 the alternative we're -- we're left with here.

18 We are much more in favor of perhaps an -- an
19 expanded solar energy zone approach. Right now there
20 are three; I think there could be three times that
21 many.

22 And one thing that has not been discussed
23 tonight is what happens with existing applications that
24 are out there. Yes, a lot of them were speculative. A
25 lot of them -- And, certainly, a lot of them did not

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1 make sense. But there are many out there that are on
2 some very good sites, where you have disturbed land
3 that meet a lot of the criteria that previous speakers
4 have talked about. So there needs to be some way to
5 fit those into the analysis. And I don't know that
6 that's been developed yet.

7 Additionally, with the SEZ's, you have the
8 economy as a scale. I mentioned that we're interested
9 in sustainability. Well, a big part of sustainability
10 is economic sustainability. And any place where the
11 environment goes, the economy is not far behind. With
12 -- with the SEZ's you have consolidation of Intertie
13 requests. You have the opportunity to build critical
14 infrastructure that's shared infrastructure and -- and
15 lower the cost. And it kind of takes a master plan to
16 do this, just the same way cities and counties do, to -
17 - to county zoning, to city zoning.

18 Also, we haven't talked about the outreach
19 process. I don't think that the entire burden of
20 reaching out to the affected stakeholders and parties
21 should fall on the BLM. And -- and I want to point to a
22 positive example, which is avenue goes solar, who
23 initiated a series of open house meetings and other
24 meetings to actively engage NGO's stakeholders, others
25 who were involved in that project. And it really made

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1 it a lot easier for them. I think, to the extent that
2 anybody who's applying for a permit on BLM does that
3 and does not rely on BLM to do all the outreach, it
4 makes this a lot easier process.

5 Some have mentioned citizens-proposed
6 wilderness -- or conservation. There needs to be a way
7 to determine how to fit that into this. I don't know
8 that that's been determined yet, but there are a lot of
9 areas in the State where groups of citizens, self-
10 initiated, have volunteers out on the ground with GPS
11 units, and they're doing sophisticated land inventories
12 and some very impressive work. That needs to be taken
13 into account.

14 A couple of other small little things. The
15 one thing that Mr. Israel didn't mention in his
16 discussion about dark sky is the economic impact, and I
17 believe the economic impact to Arizona of that industry
18 is somewhere just south of two million -- two billion
19 dollars. And, when you think of what's going on right
20 now in terms of what all we're trying to do with jobs
21 bills and trying to jump-start the economy, it occurs
22 to me that trying to protect what we have here and
23 safeguard that should be one of our primary goals. And
24 just by doing some design in the way we -- we construct
25 these things to reduce the -- the night impacts would

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1 be immense.

2 And I think that concludes it. So I thank
3 you. And, again, I compliment the BLM and the DOE for
4 the enormous amount of work that's gone into this. And
5 your staff is excellent. Thank you.

6 MS. BLACKMAN: My name is Barbara Diers
7 Blackman. I'm a citizen of Phoenix, Arizona. And I
8 only have one small thing that concerns me, and that is
9 about the solar zones. And that is, whether the
10 companies that come in to develop -- to develop solar
11 projects would be required to file an environmental
12 impact statement on how their project will impact each
13 place that they develop, regardless of whether you've
14 already designated it as a zone.

15 And I admit I am blundering into this hearing
16 only marginally prepared, having not read all 11,000
17 pages. So that's my comment. I would like to make
18 sure each solar company that goes into these zones is
19 responsible and shows how -- how they're going to
20 impact the area.

21 MR. BENALLY: My name is Norman Benally, and
22 I'm from Black Mesa. That's in Northern Arizona, where
23 all this energy -- the lights, the energy -- comes
24 from. I grew up right next to a coal mining operation,
25 so -- so I really do support this solar project

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1 undertaken by the Department of Energy and the BLM.

2 And, since the New Year's, since January, we

3 -- a number of us from the reservation have been

4 meeting with the energy companies that own the power

5 plants and coal mines and wanting to see if they have

6 proposals on the table, as far as transitioning from

7 coal-burning power plants to a more efficient

8 alternative energy like solar and wind, wind turbines.

9 And they don't have really anything exciting so far,

10 and -- But we continue to meet with them.

11 And -- and on our reservation, the Navajo

12 Nation has created a green commission, which is to

13 start looking at alternative energy development, solar

14 being one of the big ones, and using reclaimed lands

15 and some of that Redwood-lined area as kind of, like,

16 site-specific areas to start developing for alternative

17 energy.

18 And I really support this idea of expanding

19 alternative energy to BLM lands because we're -- we're

20 sick and tired of producing energy for the Southwest.

21 We're not going to continue to be the bad reach for

22 that, for the Southwestern cities. And we're really

23 sick and tired of it.

24 I mean, I -- I grew up around the Peabody

25 coal mining operation. And the people that live in the

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1 Four Corners area, that live near the APS power plant
2 and that live near the Navajo generating stations, are
3 really sick and tired of that pollution that it
4 produces.

5 And -- and really Phoenix and all of the
6 Southwestern states, really, even the Federal
7 Government, really needs to look at this alternative
8 energy development because we're really pushing to shut
9 these coal mines down and the power plants down. We're
10 looking at today; like, tomorrow would be the perfect
11 day to do it. We're not looking at 20 years down the
12 road. We want -- we want to get rid of these
13 polluters, the sooner the better.

14 And I really appreciate the -- you guys
15 bringing this public hearing to give me an opportunity
16 to express my view, as well, because I think what -- A
17 lot of the grass roots people that I work with on the
18 reservation and across the country really support this
19 alternative energy development, especially in Arizona.

20 And I -- I have served on the board of
21 directors, for a national group called the Citizens
22 Coal Council, for almost ten years and have seen the
23 impacts of -- that coal mining does, the damage that it
24 does, and the power plants that create a lot of the
25 problems as far as health and cultural-resource

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1 destruction.

2 And we really need to look at this more
3 seriously and expedite the process. Instead of looking
4 20 years down the road, I really would like to see it,
5 this process, move along a lot faster, like, ten years
6 maybe.

7 That would be -- because we -- we have --
8 We're pushing for solar development on our reservation;
9 the grass roots people are, not the tribal government.
10 The tribal government has some other plans that the
11 energy people are making plans for them, and we don't
12 support that. But we really want to push this
13 alternative-energy development.

14 And I see, from the presentations, that you
15 guys are looking at the same challenges that we're
16 looking at on our reservation. And I figured I would
17 just borrow some of your ideas once you're done with
18 the EIS, and we would go from there.

19 So that's what I have. Thank you.

20 MR. SPRAGUE: My name is Scott Sprague, and
21 I'm actually a wildlife biologist. I'm here just as a
22 private citizen.

23 I haven't actually gotten the chance to
24 review the draft, so it's possible that the mitigation
25 section already addresses my comments. But I just

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1 wanted to -- to put a plug in for incorporation -- for
2 incorporation of movement studies for some minimum
3 number of focal species. There's an opportunity here
4 for -- an amazing opportunity for pre- versus post-
5 analysis, which would allow for adaptive management
6 improvement of mitigation strategies for any successive
7 installations.

8 That's pretty much it. Thank you very much.

9 (Whereupon, at 9:04 p.m., the
10 proceedings were adjourned.)

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1 STATE OF ARIZONA)

2 : SS.

3 COUNTY OF MARICOPA)

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5 I, Karen Saari, a Certified Shorthand Reporter for
6 the State of Arizona, do hereby certify:

7 That I reported stenographically the proceedings
8 had and testimony adduced at the proceedings held in
9 the foregoing matter on the 1st day of March, 2011;
10 that my stenotype notes were later transcribed into
11 type-writing under my direction; and the foregoing 51
12 pages contain a true and complete record of the
13 proceedings had and testimony adduced at said hearing.
14 Dated at Phoenix, Arizona, on the 14th day of March,
15 2011.

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Karen Saari

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Certified Reporter No. 50842

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For the State of Arizona

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