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UNITED STATES OF AMERICA

U.S. NUCLEAR REGULATORY COMMISSION

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PUBLIC MEETING TO DISCUSS PRELIMINARY SITE-SPECIFIC
RESULTS OF THE LICENSE RENEWAL ENVIRONMENTAL REVIEW FOR
PALO VERDE NUCLEAR GENERATING STATION

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WEDNESDAY,

SEPTEMBER 15, 2010

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AVONDALE, ARIZONA

+ + + + +

The Public Meeting convened in Estrella
Mountain Community College at 3000 North Dysart Road,
Avondale, Arizona 85392 at 7:00 p.m.

Present on behalf of the Nuclear Regulatory Commission:

JAY ROBINSON

DAVID DRUCKER

KEVIN FOLK

LARA USELDING

MIKE BAQUERA

JOE BASHORE

GINA McFADDEN

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INDEX

Welcome and Introductions, Jay Robinson 3

Overview of License Renewal Process,
 David Drucker 5

Public Comments 11

Closing Comments, Jay Robinson 19

Adjourn 20

1 P-R-O-C-E-E-D-I-N-G-S

2 7:00 p.m.

3 JAY ROBINSON: If I could have everyone take
4 a seat, please, and we'll get started.

5 I want to first of all thank everybody for
6 coming out tonight. This is a public meeting of the
7 Nuclear Regulatory Commission where we will be
8 soliciting comments on the Palo Verde Draft
9 Environmental Impact Statement, which was completed as
10 part of their license renewal process. My name is Jay
11 Robinson. I'm a branch chief from the Nuclear
12 Regulatory Commission and I work in Rockville,
13 Maryland.

14 First of all, let's just go over a couple of
15 ground rules. Everybody knows where the exit is, right
16 there in case there is an emergency. This door over
17 here has the restrooms and a water fountain. If you
18 need the facilities, they're over there. If you do
19 have a cell phone or a pager, just put it on vibrate.
20 If you do have to take a call, please exit the room and
21 take the call outside. If you have to have a sidebar
22 conversation, I'll just ask that you do that outside as
23 well so you don't disturb the meeting.

24 We are transcribing the meeting today, so if
25 you are going to make a public comment, please announce

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1 yourself, your name, and your affiliation and speak
2 slowly and clearly into the microphone. The transcript
3 should be available I guess a couple of weeks after
4 today we'll have that -- do we post that publicly, the
5 transcript?

6 DAVID DRUCKER: Yes.

7 JAY ROBINSON: Yes. So that will be posted
8 on the public website.

9 First of all, we're going to start off with a
10 very brief presentation of the license renewal process.
11 We'll talk a little bit about the environmental review
12 for Palo Verde and then most of the time is going to be
13 devoted to the public comments.

14 Right now we have, I think, three people
15 signed up to speak; is that right?

16 KEVIN FOLK: Yes.

17 JAY ROBINSON: So if you do want to make a
18 public comment, you can see Kevin in the back there and
19 sign up to speak. But at this time we only have three
20 people.

21 There are some additional staff members from
22 Headquarters, we have Mr. David Drucker; he's the
23 project manager, the environmental project manager for
24 Palo Verde license renewal. We have Kevin Folk sitting
25 at the back table; he's with the Environmental Review

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1 Branch at Headquarters. Lara Uselding, she's from
2 regional staff. And also the -- who work at the
3 Resident Inspectors office we have Joe Bashore, Michael
4 Baquera, and Gina McFadden. So welcome all of those
5 NRC staff people.

6 I don't think I have anything else. Does
7 anybody have any questions before we begin? Then I'll
8 hand it over to David and we'll start the meeting.
9 Thank you.

10 DAVID DRUCKER: Thank you, Jay.

11 The NRC was established to regulate civilian
12 uses of nuclear materials including applications that
13 produce electric power. The NRC conducts license
14 renewal reviews for plants whose owners wish to operate
15 them beyond their initial license period.

16 NRC license renewal reviews address safety
17 issues related to managing the effects of aging and
18 environmental issues related to an additional 20 years
19 of operation. In all aspects of the NRC's regulation,
20 our mission is threefold: protect public health and
21 safety, promote common defense and security, and
22 protect the environment.

23 In this meeting I will discuss the potential
24 site-specific impacts of license renewal for Palo Verde
25 Nuclear Generating Station. The site-specific findings

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1 are contained in the Draft Supplemental Environmental
2 Impact Statement the NRC staff published on August 12th,
3 2010. This document contains analyses of all
4 applicable site-specific issues, as well as a review of
5 issues common to many or all nuclear power plants.
6 Issues for which the environmental impacts are the same
7 across some or all nuclear power plants are discussed
8 in the Generic Environmental Impact Statement.

9 NRC staff reviewed these issues to determine
10 whether the conclusions in the Generic Environmental
11 Impact Statement are valid for Palo Verde. The NRC
12 staff also reviewed the environmental impacts of
13 potential alternatives to license renewal. We
14 considered ways to replace Palo Verde's electric
15 generation capacity to determine whether the impacts
16 expected from license renewal are unreasonable in
17 comparison to other power generation options.

18 An earlier part of this environmental review
19 was the scoping period. During this period, the NRC
20 solicited comments concerning what to focus our review
21 on. Comments received during the scoping period and
22 responses to those comments are addressed in Appendix A
23 of the Draft Supplemental Environmental Impact
24 Statement. Comments were grouped into categories shown
25 in the second bullet on the slide. Many of the

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1 comments voiced support for continued operation of Palo
2 Verde.

3 This slide lists the environmental issues NRC
4 staff reviewed for Palo Verde. The staff's preliminary
5 conclusion is that all site-specific impacts related to
6 license renewal are small.

7 Air quality in the vicinity of Palo Verde is
8 regulated by the Maricopa County Air Quality
9 Department, and they recently reissued the Palo Verde
10 air permit in August 2010.

11 Groundwater at Palo Verde is regulated by the
12 Arizona Department of Environmental Quality and the
13 Arizona Department of Water Resources. And Palo Verde
14 pumps groundwater at rates well below what it is
15 authorized.

16 Concerning surface water, Palo Verde does not
17 draw water directly from any natural surface water
18 body; instead it uses treated wastewater effluent from
19 the Phoenix area. Palo Verde does not release water to
20 any natural surface water body. Instead, cooling water
21 is discharged to man-made, lined, evaporation ponds
22 with no outlet and no hydraulic connection to any
23 natural surface water body.

24 Concerning aquatic and terrestrial source
25 resources, NRC staff contacted the U.S. Fish and

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1 Wildlife Service and the Arizona Game and Fish
2 Department and determined that the impact to these
3 resources would be small.

4 The review of human health included noise,
5 radiation exposure, and electromagnetic fields.

6 Socioeconomics addressed housing impacts,
7 public services, off-site land use, transportation,
8 historic and archaeological resources, and
9 environmental justice.

10 The detailed analysis of each of these issues
11 is presented in chapter four of the Draft Supplemental
12 Environmental Impact Statement, and waste management is
13 addressed in chapter six.

14 When reviewing the potential cumulative
15 impacts of license renewal on the environment, NRC
16 staff also looked at the effects on the environment
17 from other past, present, and reasonably foreseeable
18 future human actions. The NRC staff preliminarily
19 concluded that the cumulative impacts associated with
20 these issues shown above would be small, and this
21 analysis is addressed in Section 4.11 of the Draft
22 Environmental Impact Statement.

23 A major step in determining whether license
24 renewal is reasonable or not is comparing its likely
25 impacts with alternatives, including other methods of

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1 power generation and not renewing the Palo Verde
2 operating licenses.

3 In the Draft Environmental Impact Statement,
4 NRC staff considered coal-fired generation, natural gas
5 generation, new nuclear generation, and as part of a
6 combination alternative, conservation and efficiency
7 combined with natural gas generation and with solar
8 power.

9 The NRC staff initially considered a number
10 of additional alternatives for analysis as alternatives
11 to license renewal. These were later dismissed due to
12 technical, resource ability, or commercial limitations
13 that currently exist and that are likely to continue to
14 exist when the existing Palo Verde licenses expire.

15 Finally, the NRC staff considered what would
16 happen if no action is taken and Palo Verde shuts down
17 at the end of its current licenses without a
18 replacement alternative. And overall the staff found
19 the impacts from energy alternatives would vary widely
20 based on the characteristics of those alternatives. In
21 most cases, construction of new facilities created
22 significant impacts. Overall, NRC staff concludes that
23 continued operation of Palo Verde is the
24 environmentally preferred alternative.

25 So based on a review of the likely

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1 environmental impacts from license renewal as well as
2 potential environmental impacts of alternatives to
3 license renewal, the NRC staff's preliminary
4 recommendation is the environmental impacts of license
5 renewal for Palo Verde Nuclear Generating Station are
6 not so great that license renewal would be
7 unreasonable.

8 Well, the environmental review is not yet
9 completed; your comments today and all written comments
10 received by the end of the comment period on October
11 29th will be considered by NRC staff as we develop the
12 final supplemental environmental impact statement,
13 which we currently plan to issue this winter. It will
14 contain the staff's final recommendation on the
15 acceptability of license renewal based on the work
16 we've already performed and on the input we receive
17 during the comment period. Your comments can help to
18 change the staff's findings in the final environmental
19 impact statement.

20 I am the primary contact for environmental
21 review and Lisa Regner is the primary contact for the
22 safety review. Hard copies of the Draft Environmental
23 Impact Statement are available at the back table where
24 Kevin is sitting, as are copies on CD, on compact disk.
25 In addition, Litchfield Park Branch Library and Sam

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1 Garcia Western Avenue Library have copies available.
2 You can also find electronic copies of the Draft
3 Environmental Impact Statement along with other
4 information about the Palo Verde Nuclear Generating
5 Station license renewal review online at the third
6 bullet shown on the slide.

7 And if you need this information just, you
8 know, later on after the briefing, please come up and
9 I'll tell you where you can find it. It's actually
10 inside the very first couple of pages of the Draft
11 Environmental Impact Statement.

12 So to submit written comments, you can send
13 them to the NRC via email at the address at the first
14 bullet or via conventional mail and if you have any
15 written comments today you can provide them to any NRC
16 staff member.

17 And that concludes my remarks. And I will
18 now turn the meeting back over to Jay. And I just want
19 to say thank you all very, very much, especially for
20 those who have listened to this for two times today.

21 JAY ROBINSON: Thank you, David.

22 Now we'll open the meeting up to public
23 comments. First is Dr. Clay Goodman.

24 CLAY GOODMAN: Good evening all, and I'm
25 going to wear some multiple hats this evening.

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1 My name is Clay Goodman, I'm the Vice
2 President for Occupational Education here at Estrella
3 Mountain Community College, and we're very happy to
4 host this meeting this evening. So that's the first
5 hat, as your host. Welcome. I hope you've enjoyed the
6 campus. I've heard some comments that people like what
7 they see. We like providing service to the community.

8 The second hat, similar to the first, is our
9 long-term relationship with Palo Verde. It goes back
10 many, many years with both Arizona Public Service as
11 the parent company and Palo Verde Nuclear Generating
12 Station.

13 Estrella Mountain is part of the Maricopa
14 County Community College District; those of you that
15 live here may know that. Maricopa is the largest
16 community college district in the country. We have
17 about 270,000 students enrolled this semester.
18 Estrella Mountain is one of ten colleges, we have about
19 8,000 students enrolled, and many of those are Palo
20 Verde employees.

21 Specifically, programs that we provide have
22 to do with the operation of the plant. We have a long
23 relationship in working with the maintenance folks, the
24 tradesmen who keep the plant put together. Our
25 maintenance internship program has produced about 150

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1 program completers since its inception, many of whom
2 are working at Palo Verde right now either as
3 apprentices or after they've moved through that program
4 are working as journeymen, tradesmen. Areas: HVAC,
5 machining, instrumentation and control, and several
6 other trades. It's been a very long and fruitful
7 partnership, and one that Palo Verde's been
8 instrumental in helping us put together. We meet
9 regularly with Palo Verde staff to review curriculum,
10 to review standards and make sure that those are
11 delivered to the students who would then hopefully
12 become employees.

13 The second educational relationship that we
14 have is relatively new. It's working with Palo Verde
15 on a uniform curriculum through Nuclear Energy
16 Institute. I just know it as NEI, so I hope I got
17 Nuclear Energy Institute right. But they're developing
18 a uniform curriculum that will help train future
19 workers to work in nuclear plants.

20 We just finished a curriculum analysis on
21 radiation protection technology that is moving through
22 the approval process. Radiation protection is a new
23 program for us in just the last couple of years and we
24 have about 40 students enrolled. We're very excited
25 about that.

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1 Palo Verde has, again, been instrumental in
2 providing faculty for us. The expertise that we need
3 in the classroom to help train that future workforce is
4 very important to keeping the plant safe and then can
5 have some relevance to the environmental impact. We're
6 growing that program, and when the curriculum is vetted
7 through the NEI and becomes uniform, we hope to join a
8 consortium with California nuclear utilities, the
9 colleges that are associated with those will work with
10 Estrella Mountain in helping provide that particular
11 workforce.

12 Radiation protection is the first, and we're
13 looking at chemistry and operations as well, to expand
14 into. And we couldn't do it without a partner like
15 Palo Verde. Palo Verde couldn't do it without a
16 partner like Estrella Mountain. So it's been a very
17 positive relationship and one we're very happy to have
18 and would like to see it continue.

19 The third hat, the last hat I'm going to
20 wear, is as a resident of the West Valley. I live and
21 work out here, raise my family out here, have
22 absolutely no concerns that there's a nuclear power
23 plant located very close. As a matter of fact, when I
24 was going to college I was an iron worker and some of
25 my rebar is buried under concrete out there. But I

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1 think it just speaks to Palo Verde's commitment to the
2 community, keeping the community informed, keeping the
3 community safe and it's somebody that we would like to
4 keep out here. Thank you very much.

5 JAY ROBINSON: Thank you for those comments.
6 Next, we have Anna Kupcik.

7 ANNA KUPCIK: Thank you. I'm glad to be here
8 tonight. I'm Anna Kupcik with the Buckeye Valley
9 Chamber of Commerce and I just want -- I'm going to
10 read this so I don't miss anything.

11 The Buckeye Valley Chamber of Commerce and
12 the business community in Buckeye strongly support the
13 continued operation of the Palo Verde nuclear
14 generating station as an asset to this area.

15 Palo Verde employs over 2000 people full-
16 time, with periodic additions of temporary workers,
17 providing major economic benefits to our community. We
18 have confidence in the ability of APS to operate the
19 plant efficiently, safely, and to the benefit of our
20 entire area. Palo Verde provides 35 percent of the
21 power in Arizona and supplies parts of California with
22 clean, efficient energy. We appreciate the outreach
23 efforts of the NRC and APS, keeping us updated on
24 issues at Palo Verde and we appreciate this opportunity
25 to express our views.

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1 And I too am a resident of the West Valley
2 and have been around since the building of Palo Verde
3 and seen the economic impacts it's had on the whole
4 west side for about 30 years. So we really appreciate
5 having that in our own backyard.

6 JAY ROBINSON: Thank you. Next, we have Jeff
7 Muecke.

8 JEFF MUECKE: Correct.

9 JAY ROBINSON: Did I pronounce your name
10 right?

11 JEFF MUECKE: You did.

12 JAY ROBINSON: Okay, good.

13 JEFF MUECKE: Very good. So thank you.

14 JAY ROBINSON: I had a lot of help with that.

15 JEFF MUECKE: That's very good.

16 Good evening. I'm really here for two fold,
17 one is living here in residence in the Valley of the
18 Sun since 1968. You know, as growing up and going to
19 Phoenix College and ASU I can tell you that you always
20 wonder where power comes from and where electricity is
21 and what resources you have. And I've got to tell you,
22 I've never worried, really, about the Palo Verde plant
23 being here.

24 I'm a resident here at Litchfield Park and I
25 can tell you it's had a significant impact on the

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1 growth here of the Valley. And I know a lot of people
2 that do work out at the plant, a lot of people that
3 benefit from having the plant here in the Valley, and I
4 would like to see it continue to be able to prosper.

5 From a business standpoint I have been very
6 fortunate to work on the education side of the private
7 sector, which is Universal Technical Institute and we
8 provide technicians all across the United States.
9 We're publicly held. I'm the vice president and have
10 been with the company for 28 years. And I can tell you
11 that a lot of students benefit from the plant being
12 here, but I also can tell you that the significant
13 impact is energy, resource, the heavy equipment. There
14 are a lot of jobs to come by this new technology.
15 Nuclear energy's not new, but obviously it's rapidly
16 growing. There's 104 nuclear power plants across the
17 United States and I've just got to believe it's a great
18 resource for this country.

19 We employ here in the Valley 600 employees.
20 So of the 600 employees that work here in the Valley,
21 I've got to tell you energy's very important. And so
22 we have a 28,000 square foot plant here in Avondale
23 that has right close to 3,000 students. We have
24 another campus up in Deer Valley, which is up in north
25 Phoenix, that has right close to another 2,000

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1 students, and about 200 employees, and then our home
2 office is here.

3 You look for efficiencies; and efficiencies
4 is what drives cost if you're a publicly held company
5 like us and you want to make sure that energy costs are
6 affordable. And I've got to tell you, out of all 11
7 campuses of ours across the United States, I've got to
8 tell you from an efficiency standpoint the Avondale
9 campus and the MMI campus are one of our most
10 profitable. And that's due to the energy costs that I
11 think we're fortunate to have here. I attribute that a
12 lot to the Palo Verde plant.

13 So thank you very much.

14 JAY ROBINSON: Thank you. We do have an
15 additional person who would like to comment. Sharon
16 Hohman; is that correct?

17 SHARON HOHMAN: Yes, it is.

18 JAY ROBINSON: Good. And I had help with
19 that one, too.

20 SHARON HOHMAN: Thank you.

21 Thank you very much. I have not read or seen
22 anything that would take away from the comments I made
23 the last time we had the visit. I don't think I would
24 change anything except to reiterate.

25 I too have been in the Valley as a

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1 businessperson since 1980. Currently, I am the
2 Executive Director of the Southwest Valley Chamber of
3 Commerce, so I work with a lot of businesspeople. My
4 job is to encourage people to come to the area. My job
5 is to make people feel comfortable in the area. And I
6 believe that Palo Verde provides the energy we need.
7 We can't encourage more people if we do not have the
8 energy, and it's absolutely critical to our growth.

9 And I would like to emphasize that one more
10 time, I have never felt unsafe living here or working
11 here. I watched it build. I've watched it operate. I
12 think that Arizona Public Service does an incredible
13 job, excellent job, of operation. And I just want to
14 reiterate those comments and thank you for the
15 opportunity to be here and stress how important the
16 relicensing is. Thank you.

17 JAY ROBINSON: Thank you.

18 Is there anyone else who'd like to make a
19 public comment at this time? So what we'll do is, like
20 we did this afternoon, we'll just -- since this meeting
21 is for public comments, we'll keep the meeting open for
22 a while. If you don't want to stay, there's no reason
23 for you to stay, but we will not -- we're not closing
24 the meeting right now. We'll keep it open for a while,
25 see if anybody else comes, and then we'll discuss when

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1 we'll close it based on if we get any more people
2 wanting to make public comments. All right, thank you.

3 (A brief recess was taken.)

4 JAY ROBINSON: If I could ask everybody to
5 have a seat, we'll wrap up the meeting. Wow, that was
6 quick.

7 Once again I'd like to thank everybody for
8 coming to the public meeting to take comments on the
9 Palo Verde Draft Environmental Impact Statement. Bear
10 with me for a minute; I have to read the email address
11 and the address for comments into the record.

12 So if you do want to submit comments, you
13 could submit them by email to:

14 PaloVerdeEIS@nrc.gov

15 Or you could submit them via regular mail to
16 the Chief Rulemaking and Directives Branch, Division of
17 Administrative Services, Office of Administration, Mail
18 Stop: TWB-5B01M U.S. Nuclear Regulatory Commission,
19 Washington, DC, 20555-0001.

20 Are there any other public comments at this
21 time? Okay, one more announcement, we do have public
22 feedback forms, so if you want to submit a comment on
23 the meeting please take one of these forms. It should
24 be double-sided, so all you've got to do is make your
25 comment, fold it up and drop it in the mailbox, and it

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1 will get back to us at headquarters. And if there are
2 not any other comments or questions, this will conclude
3 the meeting and thank you for coming.

4 (The meeting adjourned.)
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