

BEFORE THE STATE ENGINEER
OF THE STATE OF UTAH

IN THE MATTER OF)
CHANGE APPLICATION NO.)
A35402 UNDER WATER RIGHT)
NOS. 89-1285, 89-1513,)
89-74)
AND)
CHANGE APPLICATION)
NO. A35874 UNDER WATER)
RIGHT NO. 09-462,)
)**CHANGE APPLICATION HEARING**

* * *

January 12, 2010

9:09 a.m. to 5:34 p.m.

John Wesley Powell Museum
1765 East Main Street
Green River, Utah

* * *

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A P P E A R A N C E S

Hearing Board: Chairman, John R. Mann, PE, Assistant
State Engineer for Appropriation

Marc K. Stilson, PE, Regional Engineer

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

2 HEARING CHAIRMAN: This is a hearing before the
3 State Engineer on two change applications. The first
4 one is under Water Right No. 89-74, Change
5 Application No. a35402. The applicant is Kane County
6 Water Conservancy District. It's based on three
7 water rights, 89-1285, 89-1513, and 89-74. The total
8 volume of water that is the subject of this change
9 application is 29,600 acre feet. This water is
10 approved to be diverted from Wahweep Creek at points
11 of diversion in Sections 2 and 3 in Townships 43
12 South, Range 2 East and Township 43 South, Range 4
13 East, respectively. It shows a pumping station on
14 Lake Powell as one of those points of diversion.

15 The use of water that is approved under
16 this water right currently is for power generation at
17 a steam generation plant formerly the Kaiparowits
18 Plant rated at 5 megawatts of electricity. The
19 change that is proposed is to divert the water from
20 potentially five points of diversion. Those are
21 located in Section 22 of Township 21 South and Range
22 16 East at five separate points. Those are shown on
23 the application. I'm not going to read each one of
24 them into the record.

25 It's indicated that the source of supply

1 that those points of diversion propose to take water
2 from is the Green River. The application proposes
3 again to convert to another steam generation plant,
4 but the rated capacity of this plant would be
5 3 megawatts, and that the plant would be located
6 within Section 2 of 21 South 15 East. There's some
7 explanatory also associated with the application, but
8 it does indicate that potentially 100 percent of the
9 water on that application could be depleted.

10 The second application is in the name of
11 San Juan County Water Conservancy District. It's
12 under Water Right No. 09-462, Change Application
13 No. a35874. It's approved currently to be diverted
14 from the San Juan River at a location in Section 26
15 of Township 41 South, Range 19 East. It's for 24,000
16 acre feet. The change proposes to take the same
17 quantity of water, 24,000 acre feet, to divert it
18 from the Green River at the same five points of
19 diversion in Section 22 of Township 21 South of Range
20 16 East, Salt Lake Base and Meridian.

21 The use of the water would be to generate
22 electricity again. The plant capacity is noted as
23 being 3,000 megawatts, and there's a small storage
24 reservoir also associated with it, some 2,000 acre
25 feet potentially. Anyway, we'll look to the

1 applicant for an explanation on that additionally.
2 But that's basically the information we have before
3 us.

4 We do have a number of protestants
5 associated with this application. I'm not going to
6 go ahead and identify you at this point in time, but
7 we will after the applicant makes their presentation.
8 At this point that's the information that we have
9 before us on this application. We'll go ahead and
10 turn to the applicant to speak in support of the
11 application.

12 MR. MABEY: Thank you, Mr. Mann and Marc Stilson
13 from the Price area office for conducting this
14 hearing. It's an important matter as we all know.
15 My name is John Mabey. I'm with the firm of Mabey,
16 Wright & James. Along with me here today is my
17 partner David Wright, and I represent the water
18 conservancy districts, the applicants in this
19 proceeding, Kane County Water Conservancy District
20 and San Juan County Water Conservancy District.

21 These districts have entered into long-term
22 leases with Transition Power Development, and since
23 entering into those leases, Transition Power
24 Development has transferred the lease and other
25 assets to Blue Castle Holdings, and so the proposed

1 use is under the Blue Castle Project for a power
2 plant, and just as a point of correction, the number
3 of megawatts proposed for the plant is
4 3,000 megawatts and not three megawatts. I just
5 wanted to make sure that was noted.

6 We will show today why the change
7 applications should be approved, how they meet all of
8 the criteria of the change application statute, and
9 to do so we will have presentations from the Kane
10 County Water Conservancy District executive director,
11 Mr. Mike Noel, Danny Flemming from the San Juan
12 County Water Conservancy District, who is the chair,
13 and present today also are San Juan County
14 Commissioners Bruce Adams and Lynn Stevens. After
15 they speak, we will then have a presentation by Blue
16 Castle Project.

17 There have been many issues and many
18 questions raised about what this project is all
19 about. We feel it's important that right up front we
20 address those issues; we show you that Blue Castle
21 Project is a serious and an ongoing concern. They
22 will discuss among other things the economic and
23 physical feasibility of the project. They will
24 discuss the financial ability to make this project
25 come forward. They will also discuss things related

1 to the nuclear industry so you can understand and see
2 that this project is feasible. Mr. Aaron Tilton will
3 conduct that part of the presentation -- who is the
4 CEO of Blue Castle Holdings. Mr. Nils Diaz, who is
5 also on the management team of Blue Castle and a
6 former chair of the Nuclear Regulatory Commission
7 will also speak, and Mr. Tilton may have others
8 address you as well.

9 Then after Blue Castle has made their
10 presentation, we will address the availability of
11 water at the Green River, the water right issues
12 associated with this change application, impairment
13 of other water rights, and the water availability
14 issues. And that will be presented by Jerry Olds,
15 who is a recent state engineer for the state of Utah.
16 After Jerry's presentation we will then hear from
17 Dr. Thomas B. Hardy who is a respected river systems
18 hydrologist and scientist. He worked for many years
19 as the associate director of the Utah Research Lab at
20 Utah State, and is currently the chief science
21 officer for River System Institute at the Texas State
22 University.

23 At the conclusion of that presentation, I
24 will make a few comments and that will be the
25 applicant's case. Before I turn it over to Mike

1 Noel, I would like to give you this set of colored
2 copies of the PowerPoint presentation. If you want,
3 we can make additional -- how many more additional
4 copies could we make today? We could make several
5 more, but we only have one right now. So if you want
6 to take notes on it or something, we'll get you some
7 clean copies at the break. Do you have any questions
8 about that?

9 HEARING CHAIRMAN: For the protestants that may
10 desire a copy of this PowerPoint, the Division does
11 scan these things and make it available, the
12 PowerPoint presentation itself, on our website. Is
13 that going to be sufficient for your needs? I see a
14 few heads nodding yes. I will assume that's adequate
15 for the protestants. If you want to review any of
16 the documents that are presented to the State
17 Engineer by the applicant, we will welcome you to do
18 that during the break or if you would like to come up
19 here and decide and take a look, we'll pass that to
20 you and you can go ahead and review those. We do
21 accept these documents. They do become a formal part
22 of the State Engineer's administrative record and
23 files in this matter.

24 Anyway, we do whatever we can to provide
25 copies and facilitate you getting the information

1 that the State Engineer has in front of him on this
2 mainly by use of the internet on our website.

3 MR. MABEY: Thank you. With that, we'll turn
4 the time over to Mike Noel to make an opening
5 statement as the applicant.

6 MR. FLITTON: Hey, Mr. Mann, can I just ask a
7 preliminary question. In terms of procedure for the
8 hearing, the applicant has presented that there's
9 going to be a number of experts they are going to
10 call to testify, and that raises the question about
11 questioning from protestants and that hasn't really
12 been addressed. Is there going to be a period of
13 time at the end of each expert's statements for
14 questions?

15 HEARING CHAIRMAN: You want to allow questions
16 from the protestants after each person makes his
17 presentation or do you want them to wait until the
18 conclusions of all the presentations?

19 MR. MABEY: We prefer to get the entire
20 presentation out, and certainly anyone is welcome to
21 ask questions of any of the experts. You know, we
22 want to have them answer any questions that the
23 protestants may have. So at the conclusion of the
24 presentation -- so we would just ask that you take
25 notes, and we'll proceed along those lines.

1 HEARING CHAIRMAN: In light of the number of
2 parties that we have involved, the number of people
3 who probably are going to want to speak, I think the
4 best way to organize it would be to allow the
5 applicant to go through and make their presentation
6 and hold the questions until they have concluded
7 their presentation. So hopefully we'll go ahead and
8 proceed in that manner. Mr. Noel.

9 MR. NOEL: Thank you, Mr. Mann and Mr. Tilton,
10 appreciate the opportunity to be here. My name is
11 Mike Noel. I am the executive director and general
12 manager of the Kane County Water Conservancy
13 District. The Kane County Water Conservancy District
14 was established in 1992 under the statute of the
15 state of Utah Title 17. We have been in existence
16 since '72. Our principal obligation is to conserve,
17 develop, and protect the water resources of the state
18 of Utah specifically in Kane County where we own
19 water rights.

20 The water rights are needed for this
21 project in order to develop some of the Upper
22 Colorado River water rights received under the
23 Compact, and as part of that process we have the
24 right under the statute to develop these water
25 rights, to acquire water rights, to lease water

1 rights both within and without outside the District.

2 The three specific waters rights that you
3 mentioned, 89-74, 89-1285, and 89-1513, which
4 together comprise a Change Application a35402, were
5 acquired by the District from the Analex Resource
6 Project. Originally the water rights were owned by
7 the City of Los Angeles, Los Angeles Power and Water,
8 and San Diego Power and Electric, and they were part
9 of what they called the Kaiparowits Project, which
10 was a project -- I think you mentioned in your
11 statement 5 megawatts. It's actually 5,000
12 megawatts, a power generation facility there at the
13 Kaiparowits Plateau.

14 The resource for that generation was in the
15 Kaiparowits about 5 billion ton resource of low -- a
16 high Btu, low-sulphur content, a compliance coal that
17 is now pretty much locked up in the Grand
18 Staircase-Escalante National Monument. We met with
19 the owners of the water rights and worked out an
20 agreement with them and a purchase agreement to be
21 able to acquire these water rights for the people of
22 the state of Utah. As I said heretofore, they were
23 owned by Los Angeles Water and Power, and they
24 actually retained the water rights if the project
25 wasn't to built, so we also worked through the

1 attorneys from Analex Resources to acquire those
2 water rights, which we've owned for, I think, seven
3 or eight years.

4 We have leased these water rights to
5 Transition Power, now Blue Castle, Inc., and it's a
6 40-year lease. We feel like this is within the
7 statute to be able to lease water. There's been some
8 questions from protestants that were outside of our
9 jurisdiction. If that is the case, then projects
10 such as the Bear River Project, Central Utah Project,
11 and even the Lake Powell pipeline project would not
12 be feasible since all those water rights are outside
13 the jurisdiction of many of those water conservancy
14 districts that own those water rights.

15 So we feel it's within the rights of the
16 District to lease these water rights. We feel it's
17 important that we protect those for the future use of
18 the citizens of Kane County and the people of Utah,
19 and that's one of the reasons we've leased it. We
20 support the development of this project. That's up
21 to, of course, the proponent for the nuclear power
22 plant, Transition Power, Blue Castle. We would
23 ask -- I guess with those statements we would ask the
24 State Engineer to approve this change application.

25 HEARING CHAIRMAN: Thank you very much,

1 Mr. Noel.

2 DANNY FLEMMING: Good morning. My name is
3 Danny Fleming. I'm the chairman of San Juan County
4 Water Conservancy District. As Mr. Mabey said
5 earlier, we have two county commissioners here,
6 Bruce Adams, our commission chair, and Lynn Stevens
7 county commissioner, and Norman Johnson, our
8 Conservancy District general manager is also here.

9 We are a water conservancy district
10 established under the laws of the state of Utah. Our
11 principal obligation is to conserve and develop the
12 water resources of the state of Utah in San Juan
13 County. It's kind of a misconception that people
14 think we own the water. The state owns the water.
15 We just manage it. Our water rights are needed to
16 develop the water resources of this state and Utah's
17 allocation of water under the Upper Colorado River
18 Compact.

19 We're obligated to promote, develop, and
20 use the water and promote its beneficial use. All
21 the water we help develop is for the benefit of the
22 public, but the water can be used for private uses by
23 our customers and the people that we do lease to.
24 The water right in question here that San Juan County
25 Water Conservancy District owns is Water Right

1 09-462. It's the one we're using and asking for this
2 change application, this diversion application.

3 It's a 24,000 acre foot water right that
4 was originally approved for power generation on the
5 San Juan River. The District has leased these rights
6 to Transition Power Development for a power plant
7 near Green River city. We support the use of our
8 water rights for the power plant because it is a
9 benefit to the public that the water resources of the
10 state of Utah are used for power generation as
11 designated by our water right. The District also
12 wants to see Utah's portion of the Upper Colorado
13 River be fully utilized, put to beneficial use, and
14 have that water stay in the state of Utah. We ask
15 the State Engineer to approve Change Application
16 a35874. Thank you.

17 HEARING CHAIRMAN: Thank you, Mr. Flemming.

18 AARON TILTON: Thank you, Mr. Stilson and
19 Mr. Mann. My name is Aaron Tilton. I'm the
20 president and CEO of Blue Castle Holdings, which is
21 the owner and developer of Blue Castle Project, which
22 took over the operations of the original company
23 called Transition Power Development that has the
24 leases with the water conservancy districts. And at
25 this time what I would like to do is go through and

1 describe the project and how the project meets the
2 regulatory and statutory requirement of the use of
3 the water rights and demonstrates that it's a
4 beneficial use to the state of Utah.

5 And if we can -- I think this will get
6 going here. Here we go. So introduction about the
7 project is that Blue Castle Holdings is a Utah-based
8 company, and again, as I explained before, it assumed
9 the operations from Transition Power Development in
10 September of 2009. Blue Castle business model is
11 focused on the selection, acquisition, and licensing
12 of the plant site and reactor technology, both of
13 which are well suited for the deployment of new
14 nuclear power generation here in Green River.

15 The project to date has accrued
16 approximately three years of preparation, studies,
17 and strategic business development which represents
18 multiple millions in value and investment for
19 environmental stewardship and use of the water here
20 as well as the business as an ongoing enterprise.
21 Management of the company, myself, as I described
22 before, also Tom Retson, who is here today as a chief
23 operating officer, spent 23 years with GE Nuclear
24 Energy and is the president of EnergyPath
25 Corporation. Dr. Nils Diaz, chief strategic officer,

1 who is here with us today as well, is a past chairman
2 of the Nuclear Regulatory Commission and
3 international energy consultant. And the two that
4 are not here with us today, Reed Searle, former
5 director of Utah Energy Office and also chief of
6 staff to Governor Norm Bangerter and recently managed
7 the IPP for some 20 years as one of the state's
8 largest power plants; and Rob Graber, who is our
9 senior VP of energy economics, and also with GE
10 Nuclear for some 20 years and spent time with Chase
11 Bank in the Energy Economics Group, and is also a VP
12 of EnergyPath Corporation.

13 The feasibility of Blue Castle Project is
14 that -- the Blue Castle proposed site appears to meet
15 the NRC physical site requirements. And we're going
16 to go through a little bit about the studies that
17 have been conducted and the research we've gone
18 through in the last several years to determine that
19 site, and we have a couple studies that we'll provide
20 hard copies for the Division of Water Rights for
21 publication, and then also the site is currently
22 escrowed. A purchase agreement has been executed,
23 was executed earlier this year, and is in escrow.

24 And Blue Castle has signed an agreement
25 with Enercon, which is a qualified licensing

1 contractor, proposed to manage both what are called
2 the early site permits and the construction operating
3 license, or the ESP and COL applications, of which
4 will be another five years from the date that we
5 begin collecting data to demonstrate and license the
6 site environmentally, provide for the safety
7 requirements and the technical considerations for
8 deploying a new nuclear power station at the site.

9 And later on in the presentation we may
10 have Bob Evans, who is part of their management team,
11 talk a little bit more about what it is they would
12 do, how they would prepare the applications, the
13 planning and the processes that are involved with
14 that. This is the site itself. It's an aerial view.
15 I've got a laser pointer here. There's a
16 thousand-acre rectangle in this area right about here
17 that is the actual plant site. There are about 450,
18 500 acres here that would be the reservoir site and
19 ancillary property here for other uses during
20 construction and operations during the process of
21 licensing and building the site.

22 The infrastructure components needed for
23 not only nuclear but any other thermal process to
24 generate electric are basically the same. You have
25 to have a source of cooling water, which this hearing

1 will address. You've got to have transmission
2 also -- not just the ability but the capacity. This
3 is an existing 345 KV, kilovolt, line. We'll talk
4 more about that alignment and the potential upgrades
5 to that process in the transmission in the site.
6 Rail access for the heavy components and then
7 interstate highway for also the transportation
8 corridors are going to be needed to bring in all the
9 necessary components to license and build the site.

10 The preliminary site evaluation that was
11 done in November of 2007 was completed by a company
12 called McCallum Turner, and they have conducted
13 studies for about half of the announced nuclear sites
14 in the US. 13 studies they have done with a total of
15 more than a hundred sites evaluated, and ours is
16 included in that evaluation. William Lettis and
17 Associates -- and I think they are providing copies
18 now of the study -- performed geological and
19 seismology evaluation. They conduct earthquake
20 related services -- engineering, geotechnical, water
21 resources, services for lots of different projects,
22 not just nuclear power but plants, dams, liquefied
23 natural gas, bridges, pipelines -- obviously very
24 well qualified. And they do this around the world.
25 They were part of this evaluation.

1 The results of the study are basically as
2 follows, that -- McCallum Turner and William Lettis
3 and Associates -- basically the evaluation was
4 focused on whether the site could reasonably be
5 expected to satisfy the guidelines of the Nuclear
6 Regulatory Commission for siting and licensing a
7 nuclear power reactor. These are the items that they
8 studied: Flooding potential, water availability,
9 nearby hazardous land uses, and the geology and
10 seismology.

11 The conclusions were this -- and in order
12 of those four items studied -- was that the site is
13 expected to be outside the 100- to 500-year flood
14 plains. There appears to be adequate water. And
15 we'll address that in more detail later on in the
16 presentation. That the features nearby or the
17 hazardous land uses effectively were the municipal
18 airport -- they look at anything that would go on
19 inside the air or on the ground -- and concluded that
20 was not an issue for the site as well as the crystal
21 geyser was a geologic activity -- concluded that was
22 not an issue. It's further down on the river as well
23 as the old White Sands missile range, that that was
24 not an issue. Obviously it's not been operating.
25 But all of those items that could or may present some

1 kind of aerial or geotechnical issue have been looked
2 at and concluded that they are not an issue and that
3 they would not present significant licensing
4 problems.

5 Also that the geology and seismology is a
6 significant issue in consideration of licensing and
7 siting a nuclear power plant. We spent quite a bit
8 of time looking at that, and the conclusion again was
9 that the Blue Castle site appears to be feasible as a
10 nuclear power plant site based on initial screening
11 and feasibility analysis of earthquake and ground
12 motions and potential tectonic fault rupture. So
13 they looked at a broad area and scope of the
14 seismology in the area and found it very favorable.

15 One of the other studies that was completed
16 was a cultural and paleontological study. This was
17 completed by Abajo Archeology in June 2008. We will
18 provide a copy of that as well. This is the -- the
19 site here is basically the thousand acre rectangle
20 where the actual plants would be located, and
21 basically a series of one, two, and possibly a third.
22 That's the sitting requirements that the NRC
23 discusses and requires that there's a certain amount
24 of acreage and control of land and those types of
25 things. So there's a thousand acres there for the

1 siting of it. Here's the land that would encompass
2 the reservoir and ancillary land surrounding the site
3 for other uses related to the operations and
4 licensing of the project. All of this was studied
5 under this -- with Abajo Archeology.

6 This study when it was concluded was
7 submitted to the State of Utah Department of Natural
8 Resources. Their conclusions effectively here is
9 that "There are no paleontological localities
10 recorded in our files for this project area.

11 Quaternary alluvial deposits and Cretaceous Mancos
12 Shale that are exposed here have a low potential for
13 yielding significant vertebrate fossil localities.
14 Unless vertebrate fossils are found as a result of
15 ground disturbing activities, this project should
16 have no impact on paleontological resources."

17 Also included in this was obviously
18 historical and cultural sites, one new site was found
19 that was small, dense concentration of cans and
20 similar artifacts representing basically a deposit of
21 trash from the 1940's, and obviously it doesn't meet
22 the requirements for the registration in the national
23 historical preservation places. There are two
24 existing possible historical sites that may qualify
25 for this but would not be affected by the activities

1 of the site. Effectively they are the abandoned
2 Highway U.S. 6. It's the right-of-way corridor
3 that's there. It's not under use, and also the
4 railroad grade tracks that parallel the corridor.
5 They are actually in use, so they are certainly not
6 going to pose any problems for the activities at the
7 site. They are still used as a railway. We're going
8 to talk a little bit now -- so far are there any
9 questions from the Board? Okay.

10 Power needs, why would you build a nuclear
11 power plant? What's the reason for it? Obviously,
12 if there isn't a need, we don't need the project, but
13 there is a significant need, and we'll discuss that
14 here briefly. The Blue Castle Project will be
15 effectively there where the star is. These are
16 basically the markets that would be served, certainly
17 Utah but also the southwest and California. Let's
18 talk about the North American -- effectively North
19 American Reliability Corporation every year publishes
20 data related to the needs of future electricity
21 requirements and what they call effectively capacity
22 resources.

23 There's a margin that they say that each
24 utility has to provide, or if they fall under these
25 margins, basically they state they don't have enough

1 electricity to provide for the needs of the areas
2 that they service. The latest study was issued about
3 30 days ago, and again over the last several
4 publications, last several years of this publication
5 has identified that going into the future that the
6 WECC area, which is here, the Western Electric
7 Coordinating Council area, is continually projected
8 to be short on electricity. Over here these are
9 basically the three designations of these areas that
10 they studied which we would serve. By 2015, 2018
11 every one of those areas is short resources.

12 Effectively you could put multiple Blue
13 Castle Projects in this market area to serve it, and
14 it would absorb those projects based on the projected
15 need. So there's definitely a need for the resource,
16 not only in Utah -- specifically in Utah, it has one
17 of the highest needs -- but in these other areas as
18 well. And this study does include or account for the
19 recent slow down in the economic activity of the
20 country. The projections were much higher in the
21 last reports. They have slowed down a little bit.
22 But suffice it to say, there's still massive needs
23 that they already were unable to identify capacity
24 resources for, and they are still on that path.
25 Effectively the growth is about 1.6 percent

1 annualized. So by the time the project would be
2 built or could be -- the earliest in-date service for
3 the project, each of these regions would be short by
4 15 percent of their power needs and they are
5 currently unidentified as to how they are going to
6 meet those needs.

7 HEARING CHAIRMAN: Mr. Tilton, I'm sorry, but
8 would you please explain again, reiterate perhaps,
9 what the numbers in the bottoms of the rectangles
10 mean, the significance of those.

11 AARON TILTON: These dates -- down here it says,
12 "When deliverable capacity resources drop below the
13 NERC reference margin level," so those are the dates
14 they say we are going to be out of power or we don't
15 have any resources identified currently for that
16 capacity. There are a couple of different dates
17 where it says 2015 and 2018. They also account for.
18 Down here it says, "including adjusted potential
19 resources." So one date is effectively when they
20 believe they would be out of resources or drop
21 below -- it's the current projection -- when they
22 would drop below the margins that NERC prescribes as
23 a safe operating level. So that would be 2015.
24 That's without adjusted potential resources. This is
25 with potential resources. So you've got 2015 they'll

1 be short power. 2018 they'll be short power even if
2 they build the potential resources that they had
3 identified in the study.

4 HEARING CHAIRMAN: Thank you.

5 AARON TILTON: Potential project participants in
6 the Blue Castle Project currently about two thirds of
7 the output from the proposed project is in various
8 stages of negotiations and due diligence with
9 participants, again, demonstrates there's significant
10 need out there. The utilities are looking for ways
11 to meet future load growth. An example of this is
12 Page Electric Utility signed an MOU for 30 megawatts
13 of the Blue Castle power in September of '09. That
14 power is actually going to be used for Utah. It's a
15 new load they have projected they will need to run
16 the pumps for the Lake Powell pipeline. So the
17 electricity generated in Utah in this case will
18 actually serve Utah by actually providing more water.
19 And we expect that about 50 percent of the output of
20 the project to stay here in Utah would be used here
21 in Utah. The forecast and current ongoing
22 negotiations that we have with utilities in Utah
23 demonstrate that that would be the case.

24 So the illustration that there's a need
25 obviously electricity -- we've got to have more

1 electricity. Electricity use doesn't really go down
2 as the population goes up. It's going to be there,
3 but it's no good if you don't have any way to
4 transmit the electricity to basically the load
5 serving areas. In Utah in other surrounding states
6 there are several transmission projects underway
7 proposed and actually being constructed and going
8 through the process of siting, one of which is called
9 the Transwest Express, which is going from Wyoming
10 down to Nevada as well as other one called Gateway
11 South, which is Rocky Mountain Power, PacifiCorp's
12 proposed transition line, all -- virtually all
13 transmission in the West is constrained. There have
14 been no significant new capacity added in the last
15 25, 30 years for transmission.

16 All transmission has got to be upgraded to
17 acquire the new electricity that would be generated
18 from any power plant project virtually anywhere in
19 the West, and so these projects not only would serve
20 other locations in Wyoming but obviously down through
21 Utah, Nevada, and other areas. The in-service date
22 for the Gateway South Project is planned at 2017 and
23 2019. They built this in several different phases
24 based on their siting studies and load requirements,
25 who needs power first, these types of things.

1 Again, one illustration that there's
2 definitely new need and new capacity needed to be
3 built in the last -- this is the way -- at least one
4 way that the electricity would be delivered to the
5 load serving areas. There's another one called the
6 Frontier Line, much more of a feasible process, much
7 more long term. These ones are actually underway,
8 actually being sited and going through the process.
9 We'll talk just briefly about some other
10 accommodations for that.

11 The expansion has also been identified at
12 the federal level as a critical need. The Energy Act
13 of 2005 provided for the designation of what were
14 called the West Wide Energy Corridors so that the
15 energy needs of the West would have effectively a
16 more reliable siting process and reduced time to site
17 new electricity transmission projects as well as
18 other gas lines, other transportation processes for
19 any electric or any energy need in the West. And in
20 that the designations were finalized April 23rd of
21 2009, and the Blue Castle Project sits in that
22 designation -- one of those designations right there.

23 So the U.S. Department of Energy,
24 Agriculture, Defense -- all of these agencies went
25 through a siting process what was called a

1 programmatic EIS and determined and finalized this
2 would be one of the routes that new transmission
3 could take and would have a programmatic EIS to rely
4 on to shorten the process for siting and
5 transmission.

6 This is going back a little bit to the
7 other slide, but I wanted to show you the
8 designations first of the West Wide Energy Corridors.
9 The site is right here. You could see this light
10 blue rectangle. That's the thousand acre rectangle
11 for the site. It's also being designated as one of
12 the alternatives or alignments for the Gateway South
13 Project. So the Rocky Mountain Power proposed
14 alignments, one of those actually intersects and
15 actually crosses the land for the ancillary parts of
16 the site obviously making the project a very viable,
17 feasible alignment for their project.

18 Any questions about that? Some of those
19 are a little technical with the alignments and EIS
20 work that's being completed, but any questions about
21 transmission?

22 HEARING CHAIRMAN: Not at this point, thank you.

23 AARON TILTON: Why nuclear? There are other
24 ways to generate electricity. What does nuclear
25 offer? Why would we build nuclear there versus

1 anything else that might exist? There are several
2 reasons for that. One is nuclear provides a long and
3 reliable plant life. 60 years is the design life for
4 these plants. Low variable costs, large and steady
5 base load output. It's different or diversified from
6 typically the region's most abundant electric
7 generating resource which is thermal generation
8 through the burning of coal.

9 Utah currently has about 85 percent of its
10 portfolio in coal, and nuclear would add diversity to
11 that so it wouldn't be so reliant and dependent on a
12 specific fuel type. It's also very, very clean and
13 environmentally friendly. It doesn't have --
14 effectively near zero emissions from its operations.
15 There's minor emissions related to the ancillary
16 things that go on at the site, but there is no stacks
17 that put, you know, CO2 emissions in the air, PM10,
18 NOC, SOCs -- any of those typical elements that are
19 usually identify as emissions. Nuclear power plant
20 does not produce those.

21 Is it competitive? What is -- you know,
22 we've kind of illustrated there's a need, that
23 there's a way to get the power out there, and that
24 nuclear power has the profile, the generation
25 profile, that's really desirable for utilities and

1 for the rate payers to keep costs stable and low over
2 long periods of time. And the pricing, is it
3 competitive? According to Rocky Mountain Power's
4 Integrated Resource Plan, they are required to put
5 out a plan every two years. It gives a ten-year
6 estimate of what they would propose to do to provide
7 electric generation and what the resources are. Gas
8 prices from -- another thermal generation process
9 from natural gas would be anywhere from \$84 to \$170
10 per megawatt, depending again on the technology they
11 select, gas prices. There's a huge variability in
12 gas. That's the profile that nuclear doesn't have is
13 this variability. It has stable prices. Once it's
14 built, you can very much depend on the pricing for a
15 long period of time.

16 During that same time the Blue Castle
17 Project, the analysis was done on the proposed --
18 some proposed technologies there that it would be
19 from 85 to \$100 a megawatt hour, depending on the
20 technology, and the type -- the different variables
21 that would deploy that asset. So it's very
22 competitive with gas, which is really the only viable
23 resources that could be built at this time based on
24 siting and licensing in the state and at the federal
25 level.

1 Here's an example -- let me back up. This
2 is an example obviously of the price as owned and
3 operated by regulated utility. They have different
4 capital structure. That's the biggest variable in
5 pricing for new nuclear. This is on the basis of
6 municipal electric utilities, which typically have
7 access to cheaper capital, so their structure in
8 building nuclear power plants is actually a little
9 cheaper than investor owned. And here is basically a
10 breakdown of the cost of the power as well as the
11 components in the power and what makes it so stable,
12 why is the pricing so stable for nuclear.

13 Here are the -- obviously the different
14 components and the pricing that make up the cost of
15 electricity. This is low nuclear and high nuclear
16 marks, and you can see that the capital costs
17 effectively are the largest component of building a
18 nuclear power plant. It's very capital intensive
19 upfront, but after it's built, the capital costs and
20 O&M, fuel costs, and these other things are very
21 small components of the overall cost of electricity.
22 So it's effectively a hedge against pricing and makes
23 it very stable because really you have a determined
24 debt service level to pay on the nuclear power plant
25 that stays current for many, many years.

1 This is a gas profile, again, of a
2 municipal electric utility. If they were to build a
3 gas plant, you can see the largest variable cost in
4 natural gas is fuel. Natural gas a commodity. It's
5 traded and has demonstrated wide swings for a long
6 period of time, and this is the real downside to
7 natural gas, is that it's unstable in its pricing.
8 But you could see the advantages it has initially on
9 is it has very low capital costs but then you have a
10 large variety of changes in pricing or fluctuation in
11 pricing over a short period of time. Any questions
12 about that?

13 HEARING CHAIRMAN: (Inaudible response.)

14 AARON TILTON: Okay. The way we illustrate
15 this -- the historical production cost of nuclear.
16 We showed you what the future might be. This is what
17 the historical perspective has been, and since this
18 period and even before this, since 1995 nuclear power
19 has the lowest cost of all thermal generation base
20 load production of electricity. You can see you've
21 got coal and nuclear very much on par. Coal has been
22 starting to trend upwards, and actually nuclear power
23 has trended down over the last several years because
24 of the efficiencies in the plants and changes in
25 operations that allow it run for longer periods of

1 time. Petroleum and natural gas, you can see, have
2 wide fluctuations and unstable pricing.

3 Let's talk a little bit about feasibility
4 from the perspective of state policies and local
5 governments and official positions on nuclear power
6 inside the state, the county, and nearby
7 municipalities here in Green River. What are the
8 official policies on nuclear power and does the state
9 consider nuclear power viable?

10 State statute qualifies new nuclear as
11 qualifying zero carbon emissions resource for both
12 municipality electric utilities and investor-owned
13 electrical corporations and also defines nuclear
14 power as qualifying for renewable energy tax credits
15 and actually encourages the development of nuclear
16 power in the state as well the state legislature
17 passed a resolution last year calling for investment
18 in nuclear power inside the state of Utah also the
19 counties -- Emery County and the City of Green River
20 have both passed official resolutions calling for
21 investment in new nuclear power in May and February
22 of last year.

23 What will nuclear power do economically for
24 the areas that it's deployed in? Many studies have
25 been conducted and done -- this is the result of lots

1 of that information also site specific information
2 here for the Blue Castle Project. The job profile
3 that is created -- the creation of jobs at the site
4 initially have a little bit lower. They ramp up to a
5 hundred or so jobs and go through the licensing
6 period where effectively what we're doing is
7 collecting data samples, information at the river at
8 the site, other places, and basically quantifying the
9 site and qualifying it for licensing through the NRC,
10 through the Nuclear Regulatory Commission, so most of
11 the processes there are analytical and data
12 collection in nature and regulatory in nature. So
13 they don't have lots of impact at the site
14 immediately in the local vicinity.

15 But once the project starts into the
16 construction phases, you see really quickly it rads
17 up during this period here about 2015 or so
18 construction jobs peak at about 4,000 jobs and would
19 range in average 2,000 jobs over the construction
20 period of the project but peak at 4,000. And during
21 normal operations of the project go to about 1,100
22 jobs with an average salary of about \$85,000 a year
23 for a time frame of 60 years. So the impact for
24 nuclear power is huge as a boom to the economy both
25 locally here and throughout the state. You can

1 imagine effectively you're creating a town of 4,000
2 people to build a project for about seven years.
3 Then you have 1,100 full-time employees operating
4 that plant for 60 years effectively. So we obviously
5 we feel that's a huge, huge impact, not only putting
6 water to use at the state and showing the water is
7 being put to beneficial use but also employing people
8 here in Utah.

9 Federal policies and the status for new
10 nuclear power plant licensing, I'm going to turn this
11 over to Dr. Diaz who will go through to the issues
12 related to nuclear power at the federal level.

13 NILS DIAZ: Having found the right button, I
14 greet you all this morning. Mr. Mann, a pleasure to
15 meet you. Having been a federal regulator for ten
16 years, I always tremble a little bit when I come to
17 the state level, but I would like to say that I
18 always manage to have quality relationships with the
19 state, and we can see the things we did -- things we
20 did in common, not always separate.

21 One of the things that I think is very
22 important to understand is that the licensing process
23 of a nuclear power plant is a long and comprehensive
24 process, and in this process, you know, the Nuclear
25 Regulatory Commission has the lead role from the

1 federal government. But we do, of course, as shown
2 by this hearing, we have interacted, and the agency
3 will continue to interact with the state and local
4 authorities to make sure that the best things are
5 done for the people of the state of Utah. The United
6 States NRC will have primary responsibility for the
7 licensing and that will include both environmental
8 protection and all of the necessary things that are
9 part of the licensing.

10 The fact is, you know, most people question
11 what it is the NRC does. They actually do two
12 different things. The NRC actually licenses plants
13 and then regulates them and continues the monitoring
14 process, not only during the plant life but even
15 after the plant life. So it is a process that begins
16 early. It begins with the licensing which will take
17 into account every possible impact that the operation
18 of the plant will have on the county, the land, the
19 health and protection of the people, the protection
20 of the environment, and the protection of the common
21 defense and security.

22 There are, of course, multiple stories
23 about how the licensing is done. I think the country
24 right now has settled into one way of licensing
25 nuclear power plants which is the way that is

1 essentially allowed by law. If you look at the past,
2 you will see that in 1992, the Energy Policy Act of
3 1992 created a completely different playing field for
4 nuclear power plants. The Congress of the United
5 States decided that the plant licensing will have to
6 be done in a very effective and efficient manner that
7 will be transparent but will also take care of
8 minimizing the financial risk of any applicant in a
9 manner that will be fair and equitable and also will
10 provide enhanced safety reviews.

11 And these enhanced safety reviews, the
12 Congress of the United States essentially called it
13 standardization, meaning a way in which most of the
14 plants would be very close to each other. There will
15 be no significant difference, and the design
16 therefore will be standardized, and a standard way of
17 judging the safety of the designs will be conducted.

18 In 2005 during my tenure at the NRC the
19 Energy Policy Act of 2005 was legislated and it
20 provides multiple incentives for nuclear power
21 including federal loan guarantees, protection for
22 unnecessary delays. In a certain way it took the
23 1992 Act and added some additional protections so
24 that the risk, again the financial risk, will be
25 minimized.

1 This has been exercised. This is not a
2 motherhood and apple pie in the future. In reality
3 we already have four major licensing decisions in the
4 area that is probably more pertinent to this hearing,
5 which is the environmental assessment of site. There
6 have been four new Early Site Permits, which is one
7 component of the process that was establish in 1992.
8 Those were done within a reasonable time. They were
9 adjudicated. They were opened, and they were
10 actually concluded, and they are owning the license.

11 Since the last essentially three years, 18
12 construction and operating licenses, another part of
13 the process, have been submitted to the NRC. Some
14 other applications that were submitted have been held
15 for the time being due to the financial crisis in the
16 country, and 28 applications I expect by the year
17 2012.

18 I'm going to take a minute to try to and
19 explain what the Congress of the United States was
20 trying to do. If you remember prior to 1992 the
21 nuclear power plants licensing was a little complex,
22 a little convoluted, and sometimes it took quite a
23 bit of time. The Congress decided that there were
24 better ways of it doing, and one of them was to
25 remove from the actual adjudicatory process the

1 review of the safety of the plant, and they
2 established just a standard size and a design
3 certification in which the NRC conducts a study which
4 normally lasts up to seven years of approving the
5 plant design.

6 At that time every safety aspect is
7 analyzed and is essentially reviewed and in an open
8 process was interaction with the public. It
9 continues to be, you know, advanced until the time in
10 which it is concluded that it meets the safety
11 criteria at which time the Commission validates and
12 provides the rule making that establish a design as
13 having satisfied all safety conditions. That permit
14 is filing for 10, 15 years, and it is renewable. So
15 you don't have to use it at that very minute.

16 The part of the process, the one we talk
17 about, is the Early Site Permit, which is actually
18 centered on environmental protection and physical
19 security and emergency preparedness -- three
20 components that are of vital importance to the
21 community. And that is really separated into this
22 special type of environmental review that is
23 conducted in an exhaustive manner, and will deal
24 with -- the things that we're dealing in here are far
25 many more. And this process also take place in a

1 period of about three years, maybe two and a half
2 years if it's a well-known site. And then it's again
3 renewable for ten years after the initial ten years'
4 period.

5 The final part of the process, the one that
6 actually could take you to plant construction and
7 operation is called a combined license. It's a
8 combined construction and operating license. And
9 this is the one in which everything is put together.
10 It's an integral process. All the aspects are put
11 together, and then again it's a process that is open
12 and transparent. It's adjudicated. The adjudication
13 begins 60 days after the application is submitted and
14 contested hearings are taking place for approximately
15 three and a half years. And then they stop and then
16 a final mandatory hearing is held in which, if the
17 plant meets all the conditions, then the plant will
18 receive a license. If not, of course, the process
19 continues.

20 Once the plant receives the license, that
21 license -- which would contain the design
22 certification, probably an Early Site Permit and a
23 Combined License -- now allows the applicant to build
24 the plant as it is licensed and to operate the plant
25 as it was licensed, and that essentially provides

1 significant protection. As you will see in the
2 graph, there is -- the graph in a minute -- there is
3 some real reason for doing it this way. The key part
4 of licensing a nuclear power plant is the
5 environmental considerations because, as I just
6 showed you, if you reference a certified design, the
7 safety issues are essentially done. They have been
8 already reviewed and the rule making sets them up in
9 a manner that you no longer have to do with safety
10 issues of the plant.

11 So the environmental considerations become
12 the heart and the real, real, you know, work that
13 needs to be done, and that work was begun by TPD. and
14 BCH almost three years ago. This is what we've been
15 doing is making sure that we put the right stones on
16 the way to be continuously towards this path of
17 environmental stewardships. So all required
18 environmental issues, everything from the river water
19 to seismology and hydrology, the location, air -- all
20 of those things will be actually conducted during the
21 licensing.

22 The NRC will implement NEPA in a manner
23 that is a consistent with its licensing authority
24 under the Atomic Energy Act, which is the act that
25 establishes nuclear power as a beneficial way of

1 producing power in the United States. And there is a
2 regulation CFR Part 51 which actually conducts this.
3 These regulations to implement NEPA are now captured
4 in a complete, complete set of regulations that
5 specify all you have to do and all you have to comply
6 with. And there are reg guys and staff that go step
7 by step to make sure everything that needs to be done
8 will be done.

9 The NRC will develop, as required by NEPA,
10 an Environmental Impact Statement for any major
11 federal action, which this will be. Both the area
12 site permit and the COL will be considered major
13 federal actions. For example, the issues of the EIS,
14 even though we will have corresponding agencies that
15 will participate, it will be issued by the NRC in
16 this particular case. The NRC environmental
17 protection regulations are comprehensive. This is
18 something that existed from the very beginning of the
19 Atomic Energy Act. We were charged -- and excuse me
20 if I keep saying "we." I spent ten years in there.
21 The NRC is charged. I'm no longer there. The NRC is
22 charged with protecting public health and safety,
23 protecting the environment, and protecting the common
24 defense and security. And those type of regulations
25 are embedded in everything that the NRC is going to

1 do. Okay.

2 This new licensing process which we -- the
3 Congress called it effective public involvement and
4 it's embedded in the second part of the slide. It's
5 quite interesting. I actually happened to discuss
6 this in many fora in this country and outside, and
7 this distinction is very clear what the Congress was
8 trying to do. The old process you have a
9 construction process and there will be contested
10 hearings and a public hearing. Then during the
11 period that the plant was being constructed, those
12 contested hearings continue, and then you get into
13 where the plant is finished. You already spent your
14 money. The plant is completed. You spent a billion
15 dollars at the time, \$2 billion, maybe \$5 billion
16 now, and then you have to start all over again. You
17 have to justify why the plant should be operated.
18 And it was a reopened case.

19 It was not very effective. It was
20 definitely very laborious for everybody, and the
21 Congress thought it was not a fair process, and
22 therefore, this new process was established in which
23 everything is still open and transparent. When you
24 provide your application, 60 days thereafter you can
25 intervene, contested hearings are going on, and at

1 the end of the process, once you have selected, you
2 know, your plan, and you have complied with all of
3 the regulatory requirements, then there is a final
4 mandatory hearing. And that final mandatory hearing,
5 if the applicant is successful in overcoming the
6 objections, then a construction and operating license
7 is issued, meaning that at that time and only at that
8 time where that line finish does -- the applicant is
9 now able to make investments on the plants, period.

10 The law is clear. You cannot make major
11 investments in a power plant, pour concrete or do
12 anything until after you get the license. And
13 therefore nobody is considering making significant
14 investments that are not necessary to obtain the
15 license before that time. That's the protection that
16 the law provided the applicants. You will be able to
17 invest in your plant in whatever amount is necessary
18 after the license. You cannot pour concrete. You
19 can do roads and you can do simple things to allow
20 you access to the site, bring electricity, but not
21 much.

22 So public intervention is very much part of
23 what we consider a fair process. We have always
24 welcomed it. We think it is needed and necessary.
25 It brings the public interest into play, and is very

1 much a part of the process, but it will conclude,
2 okay, with a final hearing. And after that, the NRC
3 holds the applicant to one very high standard, "You
4 will build and operate as licensed, no deviations,"
5 and that's the what job of the Commission is. Any
6 questions on the process?

7 HEARING CHAIRMAN: In the regard to the timing
8 of your hearings, Mr. Diaz, I presume those have not
9 been held because you have not formalized your
10 application with the NRC at this point; is that
11 correct?

12 NILS DIAZ: That is correct. The hearings will
13 not begin until 60 days after we actually provide a
14 formal application to the NRC, which could be -- will
15 be after we conduct our site characterization studies
16 which will take about 15 -- 18 months from now. And
17 then at that time the application is submitted at
18 which time it will be noticed, especially in here,
19 but it will be noticed everywhere, and then that
20 process of open and transparent interaction will
21 begin 60 days after that point. So probably in
22 another year and a half.

23 HEARING CHAIRMAN: So probably perhaps 2012
24 then?

25 NILS DIAZ: Yes.

1 HEARING CHAIRMAN: Where would those hearing be
2 held incidentally? Are they here locally or would
3 they be held at the state capital?

4 NILS DIAZ: They will be held locally, sir, for
5 sure.

6 MARC STILSON: Mr. Diaz, on the Early Site
7 Permit, could you talk a little bit more about that.
8 Is that process already started or --

9 NILS DIAZ: The Early Site Permit, what it
10 allows you is to separate the Environmental Impact
11 Statement and considerations from the actual
12 selection of the technology and from the application
13 to construction and operate. And what it -- the
14 process begins when we start to put -- make towers
15 and the NRC engages in what is called preliminary
16 work. In other words, there is preapplication
17 activities that are required before you can actually
18 put an application. Those activities will be
19 conducted during the next 15, 18 months, and it
20 includes everything from geology, seismology
21 hydrology, you know, archeology -- all of the aspects
22 will be touched on and more in a very complete
23 manner. And then that process -- when we hand in the
24 application is when it officially starts, and that
25 will be probably about 18 months from now.

1 One of the things that is important,
2 because I know that we all remember -- I see a few
3 gray hairs and a few people in here not as many as
4 mine, but a few gray hairs -- this process as it was
5 done was very, very complex. And it had many, many
6 stops and go. And therefore one of the things that
7 the country has been wanting is a predictable and
8 executable process, something that we can see what it
9 is and we can predict what it is.

10 Every one of these processes have a time,
11 okay, and the Congress is very insistent in that the
12 time lines be respected. There is always a little
13 bit of leeway, but the reality is that every one of
14 these things says, "This will be conducted in this
15 period. This will be conducted in this period of
16 time." And the reason is to be -- to have, you know,
17 a fair process to all participants, both the
18 applicants and the inter-agreements.

19 The signed certification again resolves all
20 safety related issued early in the process. Okay.
21 The new light water reactors which will have enhanced
22 safety and which are the ones that are planned to be
23 built in this country, they will all have design
24 certification rule making by 2013, so before we
25 actually get to the -- our COL process, this design

1 certification will be completed and the issues of
2 safety will have been resolved by rule making. Early
3 Site Permits, we have experience with it, and here
4 are the plants that have already gone through this
5 process. All the new ESP's have passed judicial
6 appeals. Appeals are not final. That's a final
7 decision-maker, so a license has been issued. And
8 every applications have been granted in three years
9 or four years for two of the cases.

10 But it is a process that is now, you know,
11 being done. It's executable, and we believe is a
12 predictable process. It will be fair. It will be
13 transparent, but it will be done in accordance with
14 the law. And the law in this particular case is
15 actually very clear in what's to be done. And it
16 will be completely open and transparent to you
17 members of the board. You will be able to see what
18 is done and any type of request for meetings or
19 hearings, they will take place in your territory.

20 The NRC has a budget cycle just like all
21 federal agencies, and the NRC has accepted the fact
22 that the Blue Castle Project has conducted enough
23 activities to be able to placed in its budget cycle.
24 So we are in the 2011, and this month we will be
25 placed on the 2012 budget cycle. This means that

1 staff will be assigned to work with it. People will
2 be working in the preapplication process and
3 eventually the staff will be able to have their
4 resources to conduct work that needs to be done.

5 And I believe that concludes my part of the
6 presentation. This is just a last slide. It shows
7 where the applications are, 18 applications, 28
8 expected, and you can see in the West we are the Lone
9 Ranger. We like that position. Thank you very much.

10 AARON TILTON: Thank you, Mr. Diaz, what we're
11 going to do briefly here is I am going to have
12 Bob Evans from Enercon come up and describe the
13 process since Enercon has been the contractor we have
14 executed a contract with them to complete the license
15 application that Dr. Diaz just spoke about, has
16 prepared them to go through them. I would like Bob
17 to talk briefly over the next two slides about what
18 does that mean, what are we going to do as the
19 primary subcontractor and -- primary contractor for
20 it, how is that done.

21 BOB EVANS: Thank you. Enercon Services is an
22 engineering technical services company that works
23 with developers of nuclear power plants in the
24 preparation of license applications that are
25 submitted to the Nuclear Regulatory Commission. Our

1 company was founded in 1983. We've supported the
2 commercial nuclear power industry for 27 years now.
3 We've been active in the development of license
4 applications for new nuclear power projects in the
5 United States over the past nine years. We were the
6 contractor -- prime contractor that prepared one of
7 the four early site permit applications that Dr. Diaz
8 spoke about. The project was for Entergy's Grand
9 Gulf nuclear site near Pittsburgh Mississippi. The
10 application was submitted in 2002 and approved in
11 2007.

12 We have prepared a total of four combined
13 operating license applications that are under active
14 review by the NRC at the time. Two of those
15 applications were prepared for a consortium of
16 nuclear power plant developers in the United States.
17 NuStart Energy Development, which includes eight
18 existing nuclear power plant operators in the United
19 States.

20 We prepared an application for a
21 Westinghouse AP1000 advanced reactor design, which
22 will be sited in Northern Alabama at the Tennessee
23 Valley Authority's Bellefonte nuclear power plant
24 site and also prepared an application for a General
25 Electric economic simplified boiling water reactor

1 also an advanced reactor design which was to be
2 located at Entergy's Grand Gulf Nuclear station site
3 near Pittsburgh. And that application actually used
4 the early site permit that was approved by the NRC as
5 part of the combined license application process.

6 We prepared and submitted two other license
7 applications, one for Duke Power Company for a plant
8 to be located in South Carolina at the William States
9 Lee nuclear power plant, which consists of two
10 Westinghouse AP1000 reactor plants and also a project
11 in Texas for Luminant Energy, two Mitsubishi U.S.
12 advanced pressurized water reactors, APWRs, to be
13 sited at the Comanche Peak Steam Electric Station
14 near Glen Rose, Texas.

15 Enercon is the one of leading contractors
16 in the United States in supporting new nuclear power
17 plant deployment, and we've been involved in all
18 aspects of strategic planning and execution of
19 license applications. The process of preparing and
20 conducting the NRC licensing process is a long-term
21 effort. It involves a broad range of activities.

22 In order to fully understand the conditions
23 at the site, it's approximately a hundred million
24 dollars that will be expended over the licensing
25 process. This includes the actual preparation of the

1 license applications which includes site
2 characterization activities to understand all aspects
3 of the site including the aquatic and terrestrial
4 ecology of the site including the hydrology of the
5 site, meteorology of the site, the seismic and
6 geotechnical conditions of the site, air quality of
7 the site, economic and socioeconomic conditions that
8 surround the site. So that site characterization
9 process, as Dr. Diaz alluded to, takes upwards of 15
10 to 18 months. We'll collect a broad range of data
11 which will include an extremely thorough geotechnical
12 investigation program at the site.

13 The process also involves NRC's review of
14 the applications after they are submitted. The NRC
15 review is conducted on fee-for-service basis for the
16 applicants, so the applicant is actually responsible
17 for paying for the NRC's review time and that's a
18 significant component of the overall total project
19 cost. Eventually, after approximately five years of
20 time, we will achieve the issuance of the early site
21 permit and the combined license application. That
22 will then be followed by an extended construction
23 period before the units are placed into service. So
24 the total time from which Transition Power began
25 studying this project until the plant becomes

1 operational is on the order of 12 to 13 years.

2 Any questions on the license application
3 preparation process or what goes into that?

4 HEARING CHAIRMAN: No, sir, not at this time.

5 BOB EVANS: Thank you very much.

6 AARON TILTON: I think I was just reminded to --
7 I guess get on the record, Bob, your position.

8 BOB EVANS: Vice president of new plant
9 services.

10 AARON TILTON: Vice president of new plant
11 services. And then also on the record for Dr. Diaz,
12 Ph.D. I may get these wrong. Nils has done so many
13 things and been in lots of places, but was the past
14 chairman of the Nuclear Regulatory Commission also
15 served as the professor -- come up and really quick
16 get on the record your credentials and qualifications
17 so that's on the record.

18 NILS DIAZ: I am sorry. My first stint was in
19 academics. I was a professor of nuclear engineering
20 science and nuclear medicine, University of Florida.
21 I was the associate dean for research at California
22 State Long Beach. I was then for 11 years one of the
23 directors of the strategic defense nuclear projects,
24 so I worked actually as director of a consortium for
25 strategic defense. And then I spent ten years as a

1 commissioner and then chairman of the Nuclear
2 Regulatory Commission. I am presently an
3 international consultant on nuclear energy.

4 AARON TILTON: Thank you. Now we've gone
5 through effectively why nuclear, when, how. We'll
6 talk a little bit about the financial portion of what
7 does it mean to deploy nuclear power, how is the
8 capital stage, when is it staged, why is it staged --
9 all these issues in relation to financial issues and
10 deploying the nuclear power.

11 What you see here is we have three examples
12 of how these are done. You have to look at deploying
13 nuclear power in the context of the entities who
14 would do that. There's several entities that could
15 do that. They are investor-owned regulated utilities
16 such as Rocky Mountain Power. There are municipally
17 owned utilities which are not regulated at the state
18 level. They are governed by a board, and then you
19 have a merchant-owned development which would be
20 Blue Castle, and we'll talk about the similarities.
21 They are very similar, but there's -- some of the
22 ways they structure things are a little bit
23 different. But effectively they all point to a
24 similar theme, that you stage capital and regulate
25 risk internally or externally through either

1 governing bodies or corporate bodies that allow you
2 to mitigate risk, and the law provides for that
3 mitigation by staging the deployment of a project.

4 And so what we would effectively illustrate
5 here is that if you would take these years here at
6 three, two, and one, effectively -- this would kind
7 of represent if we were an investor-owned utility,
8 this would be the phase we were at. That is what an
9 investor-owned utility would do. They would spend
10 effectively 3 to \$10 million in feasibility studies,
11 go through a state regulatory cost and rate recovery
12 process. And that would be done in multiple stages.

13 Here above is feasibility, licensing, and
14 construction, and they would have multiple hearings
15 that go through this process that allow them to
16 protect the rate payers in deploying that capital
17 that is staged and that the federal law again
18 provides for that in the nuclear power. Then again
19 they stage that and the minimization of financial
20 risk is limited that effectively nobody goes out and
21 raises the construction capital or does anything with
22 construction capital until they have completed
23 significant portions of this process, and really,
24 actually, well out to here they made spend a little
25 more money on long lead items and some other things

1 that take time to construct off site, but the process
2 is staged for that specific reason that it helps to
3 minimize risk in the process.

4 This would be municipality electric
5 utilities, their phase, and how they would do it
6 effectively again 3 to 10 million in feasibility
7 studies, staging utility/off-take participants
8 effectively, here, especially in the West, there are
9 very few, if any, large thermal generation projects
10 that have a single owner. These are multiple-owner
11 projects because of the geography and the distances
12 associated with the load serving areas. You have
13 multiple utilities that take small pieces and some
14 large pieces that make a consortium, and effectively
15 over a periods of years they put the consortium
16 together and can be combined between regulated,
17 municipal, and merchant developers all under the
18 broad direction of off-take participants. They are
19 going to somehow take electricity from the project --
20 either sell it, or serve load, or trade it, do
21 something with it that requires them to go through
22 the licensing process.

23 Again, capital is staged, and for a
24 municipal electric utility that has a governing board
25 instead of the state Public Service Commission, these

1 are governed by boards, and typically a municipal
2 electric utility, they will participate in what's
3 called a joint action agency such as UMPA, UAMPS.
4 These are agencies provided for statutorily in the
5 state that allow municipal utilities to get together
6 and financially participate in projects and stage
7 their capital and minimize the risk of their capital
8 by joining up together to build a bigger project and
9 getting the economies of scale that a normal, larger
10 investor-owned utility like Rocky Mountain Power
11 would have.

12 The next one, this is the merchant model,
13 or the Blue Castle model. Again, this is deployed
14 all over the country. Virtually everybody does the
15 same process, one, because it's heavily regulated
16 through the federal government and also regulated
17 through the state process that you're going to
18 typically have a combination of all three of these
19 entities participating in a project, so they have to
20 follow a very similar process.

21 But with a merchant development, they are
22 basically governed by corporate boards and investment
23 bank processes and investors that say, "We'll stage
24 the capital according to our tolerances and the risk
25 profile." Again, we are right here. Mr. Stilson

1 asked effectively, "Where are you in this process?
2 How long before you begin licensing?" This is the
3 status of the Blue Castle Project, from three years
4 out to here. We are at the very tail end of the
5 feasibility portion of the project, and within here
6 this time frame you'll see about a six- to
7 eight-month process where we'll start to begin data
8 collection and going through this work at the site
9 and the surrounding areas to start the license
10 application of preparation. You go out about a year
11 and a half. Here is where the application would be
12 prepared and submitted, and then continue through the
13 processing out here at the end of about five and a
14 half years there.

15 Currently the status for Blue Castle is
16 that we have incurred similar costs through our
17 feasible studies as a municipal or merchant utilities
18 would, the 3 to 10 million range here for feasibility
19 studies. That's again where we are. For our
20 licensing process we have staged capital. Currently
21 we have an investment bank that is running our
22 process as well as terms sheets on about half of the
23 capital, about \$50 million for the licensing process.
24 There's still things we need to do that again will
25 take place from here to here in this licensing period

1 in preparation, about the next six to eight months of
2 finalizing those pieces.

3 There are, again -- we said two thirds of
4 the off-take participants are either in
5 discussions -- or two thirds of the off-take are in
6 discussions with participants that range everywhere
7 from municipal electric utilities to investor-owned
8 utilities and other merchant entities. So we'll take
9 the next two years and formulate that. Basically,
10 you know, it's a sponsoring development company that
11 would put these guys all into their process, and they
12 participate on a pro rata basis based on their
13 percentage of the off-take they would take. They
14 would then be required to put up either their part of
15 the licensing or once we get through this process --
16 in the investment bank side, which is again different
17 than on the merchant side, than the municipal utility
18 or the investor-owned utility, there's an exit for
19 the investment bank portion of this. So the capital
20 is staged here a little bit differently than
21 investor-owned -- in an investor-owned utility they
22 wouldn't have an exit in their equity. They would
23 stay in through to the construction process.

24 So the merchant development process has an
25 exit and a restaging of capital here based on these

1 participants coming into the project that negotiate
2 over the next two and a half, three years, through
3 that process. And that's well on its way. We're
4 going through these -- you know, the negotiations
5 with these other entities currently.

6 Any questions about that? I know it's a
7 little quick, and that's kind of a crash course on
8 nuclear power development but effectively you could
9 see the processes are very similar and that the
10 feasibility and financial considerations for the
11 project have certainly -- are well advanced into the
12 process and are being dealt with currently and are
13 similar to what everybody else would be doing in this
14 process.

15 Let's talk just briefly about how this
16 applies -- you know, the financial staging of capital
17 and how it applies to the approval of water rights.
18 The current water rights that the change application
19 applies to and are for went through a similar process
20 already. Early on in the feasibility stages of those
21 other projects, those other thermal plants that were
22 talked about in San Juan County and also down in the
23 Kaiparowits Plateau were approved in this stage
24 currently here, the same stage that we are in.
25 During the feasibility studies, there was nothing

1 constructed for these plant, nothing that had -- they
2 didn't pour concrete, all these things. In fact,
3 their licensing applications hadn't been applied for
4 because there are several -- two different power
5 plants that are in different stages but generally
6 they are in this phase here.

7 And so the same standard would apply for
8 our approval of these water rights and for the change
9 applications according to the Kane County and the San
10 Juan County Conservancy districts that there is
11 precedence set that is where the change application
12 would take place, and then the licensing and
13 everything else would go through the same as they had
14 been before. Any questions about that?

15 Again, I think we kind of hit this slide.
16 Basically Blue Castle is on schedule for completing
17 all necessary steps for licensing. Feasibility stage
18 is almost complete. Blue Castle signed an agreement
19 with the investment bank to conduct private fund
20 activities for various stages of the project. We
21 have already invested money into the project and are
22 on track to continue the normal development process.
23 Term sheets for the larger funding have been signed.
24 We are negotiating on other portions of it, but
25 effectively half of the capital is in a staged

1 process.

2 The state of Utah actually is providing
3 financial incentives on a project-by-project basis.
4 That application has been submitted. We're well down
5 the path to that. We don't have exact numbers on
6 what it would be, what the state would rebate back,
7 but effectively the statute says it could rebate back
8 up to a hundred percent of the total state tax
9 liability including income tax, withholding tax, the
10 other taxes that we would pay as the state --
11 operating company in the state of Utah, over the next
12 20 years of the project.

13 So when you look at just the taxable income
14 to the state from building the project, virtually all
15 the inputs to building the project, the taxes will
16 amount to about \$16 billion worth of inputs that are
17 raw materials into the project that are taxed at
18 about 4.7 percent. Significant dollars that the
19 state would be rebating back to the project in the
20 neighborhood of 500 to a billion dollars --
21 500 million to a billion.

22 Utility participants effectively use their
23 own credit facilities to construct their percentage
24 of ownership and power purchase agreement obligations
25 in the project. So when you look at this -- and

1 maybe we need to go back just briefly. These
2 participants basically use their credit facilities
3 from this point out for the construction. So for the
4 large capital outlay, the 13 to \$16 billion, their
5 credit facilities -- their bonding, corporate bonds,
6 municipal bonds -- that's what they use to build the
7 project in all cases of all the development
8 regardless of who, whether it's a merchant,
9 investor-owned utility, or municipal utility that is
10 that the case. And that's where the financial
11 obligation to build a project is entertained.

12 Let me also state something that's
13 important. When you get the to licensing -- and
14 Dr. Diaz hit upon this -- the licensing process, the
15 decision to construct according to the federal
16 government can be made now any time once the license
17 is issued within about a 20-year period. So XYZ
18 Utility is in for part of the process, say,
19 10 percent or 20 percent, and others are coming in.
20 They are all going to decide at a coinciding space
21 and time when they need the power, what fits well,
22 and what has the most financial advantages for them
23 to build it.

24 So the licensing may come here, but they
25 may not start building for a year later or it allows

1 them again to stage the capital, stage what they are
2 doing based on their load requirements and their
3 needs for the state and surrounding areas.

4 I am going to zip through this really
5 quick, the feasible summary, again, site quality, I
6 think we demonstrated that, but again from the
7 studies, the site meets the requirements according to
8 the studies for the NRC licensing siting
9 requirements. We are showing greater detail about
10 water, that unappropriated water is available to use
11 and have data to show that are no impairments to the
12 other water rights or to affect the environment or
13 the public recreation activities on the stream, the
14 river. Market demand, obviously, demand exceeds
15 capacity of the Blue Castle Project and many other
16 projects that are projected to be built. There is a
17 definite need for new power in the area and has been
18 demonstrated for many years that that has to happen.
19 That's got to take place.

20 We talked about the tax incentives from the
21 state. This is new policy they've implemented again,
22 100 percent of state taxable income, liability,
23 effectively for 20 years on new nuclear power
24 project. That will actually go to lower the capital
25 cost of the project. Policy development environment,

1 support of federal and state local governments.
2 Again, new nuclear power is defined in statute of
3 Utah, has official support from the state
4 legislature, governor, Emery County and the City of
5 Green River. And the state legislature has passed a
6 resolution calling specifically for the investment of
7 new nuclear power in Utah. The management team we
8 believe has -- is certainly expert and efficient
9 combination of skills and experience specifically
10 oriented for the development and deployment of new
11 nuclear here in Utah. We believe we can effectively
12 and efficiently do that.

13 And then market access through new
14 transmission expansion. We think we have
15 demonstrated that that's effectively the designation
16 of the West Wide Corridors on the federal level and
17 existing transmission rights-of-way and projects that
18 are underway that effectively intersect directly with
19 our site project, that we'll be able to access those
20 in the future. That's it for that one. Did you want
21 to do the introduction for the others?

22 MR. MABEY: Thank you, Aaron. I guess in sum,
23 the project is feasible. There's the financial
24 ability to complete the project, the environmental
25 and the safety issues will be thoroughly examined,

1 regulated, reviewed through the licensing and the
2 early site permitting process. It leaves up to the
3 State Engineer to decide now whether there's the
4 water available, whether other water rights will be
5 impaired, and all of the issues associated with the
6 water rights. What's your pleasure, Mr. Mann? Do
7 you want to proceed at this point to have Jerry Olds
8 make his presentation?

9 HEARING CHAIRMAN: Want to take a ten-minute
10 break? Okay. We'll go ahead and take a ten minutes
11 here.

12 MR. MABEY: Thank you.

13 **(A break was taken.)**

14 HEARING CHAIRMAN: Okay. This is a hearing
15 before the State Engineer again on the Kane County
16 and San Juan County applications. We've taken a
17 brief recess and we've reconvened. So at this point
18 looks like we're back to the applicant and Mr. Olds
19 will proceed.

20 JERRY OLDS: Okay. My name is Jerry Olds. I
21 serve as an engineering consultant, and I will be
22 addressing issues with regard to water rights, water
23 requirements, and water availability with regard to
24 the Blue Castle Project. Just let me take a little
25 personal moment here. I served as state engineer in

1 the state of Utah from 2002 to 2008. Many of the
2 issues that I dealt with were in the Green River
3 area, many of the lawsuits and conflicts between
4 water users. And I told myself when I retired, it
5 would be will be a cold day in Green River before I
6 go back there, and look what happened.

7 Okay. The topics I'm going to cover is
8 briefly the change applications. There's a number of
9 issues that's come up in the protests that I want to
10 address, some Upper Colorado River issues; third, the
11 project water requirements; fourth, the issue of
12 unappropriated water and water availability in the
13 Green River near the town of Green River; impairment
14 of other water rights; and then in closing touch open
15 stream alteration permits and dam safety as it
16 relates to the project.

17 As has been indicated, the two change
18 applications that are before the State Engineer were
19 originally filed for coal-fired steam generation
20 power plants, the Kane County one on the west side of
21 Lake Powell and then the San Juan County one near
22 Mexican Hat. The proposed changes want to move the
23 points of diversion and place of use to the Blue
24 Castle Project near the City of Green River. In the
25 heretofore of these applications, the water was used

1 for power generation and was totally consumptively
2 used, and in the hereafter of these applications for
3 the Blue Castle Project, the water will also be
4 totally used and depleted from the system.

5 I'd like to address a couple of issues with
6 regard to the Colorado River, and you are very
7 familiar with these numbers, but Utah is allocated
8 23 percent of the water available to the upper basin
9 states. The state calculates that at 1,369,000 acre
10 feet. And again this is depletion, not diversion.
11 It is what we can deplete from the system. In 2005
12 the depletions were estimated at 1,007,500 acre feet,
13 and so in 2005 there was just over 360,000 acre feet
14 that was not being used within Utah.

15 Here is a list of potential applications to
16 be developed. These are already approved
17 applications that are on the books and are waiting to
18 be put to beneficial use. The two that I've
19 highlighted in blue, the San Juan County Water
20 Conservancy District and the Kane County Water
21 Conservancy District are the subject of the two
22 change applications before you today. Those
23 applications have been included within the State
24 Engineer's calculations as far as where we're at on
25 the Colorado River with regard to our entitlement.

1 So it is not a new appropriation of water.
2 It is change applications on these existing water
3 rights, moving them from downstream, upstream to the
4 Green River. Couple of other applications I'd like
5 to point out here is the third one down from the top,
6 the Board of Water Resources for 158,000. That is
7 the Flaming Gorge water, and a significant quantity
8 of that water has been transferred to the Green River
9 area and has been placed to use over the last several
10 years.

11 Also, the fourth one down, the Wayne County
12 Water Conservancy District for 50,000, change
13 application was approved in 2007 to allow that water
14 to be moved, at least part of it, here to the Green
15 River area and placed at use.

16 All total these applications and
17 commitments to the Native American tribes total
18 574,600 acre feet. So on paper, the basin, the Upper
19 Colorado River Basin is over-appropriated, but still
20 as a state we've struggled to put all of our
21 entitlement to use. Again, under the proposed change
22 applications that are before you, this is an
23 opportunity to use some of that water. Here is a
24 hydrograph of the Colorado River at Lee Ferry,
25 Arizona. This is basically the amount of water that

1 goes to the lower basin.

2 On the left is a million of acre feet per
3 year and then the bottom is a time scale from 1896
4 through 2008. The darker portion of the bar chart
5 shows the actual measured flow at Lee Ferry and the
6 lighter gray portion of the bar chart shows the
7 estimated depletions that occurred upstream in the
8 upper basin states. If you look at the dark blue
9 line, it shows the ten-year average of historical
10 flows from 1896 up through 2008. As you would
11 expect, it's showing that line going down as the
12 water resources are being developed in the upper
13 basin states, less water is going past Lee Ferry.

14 Then the light blue line shows the ten-year
15 average of virgin flow, which takes into account the
16 depletions that are occurring in the upper basin
17 states. You can see that there's general trends of
18 ups and downs within that 110-year period. And as
19 you look at the flows on an annual basis, you'll see
20 significant flows, 20 million acre feet or more in
21 some years. And then other years we have flows in
22 the 3 to 4 million acre feet a year, and so there's
23 been dramatic shifts in the water that has flown in
24 the Colorado River. If we look at the average virgin
25 flow for that period of record, it's about

1 4.6 million acre feet per year.

2 In looking at the water supply within the
3 Colorado River Basin, there is no doubt it has
4 experienced significant wet and dry cycles in the
5 past, and it probably will continue to experience
6 those into the future. Predicting what the future
7 water supplies will be is difficult, but again, I
8 think the historical record gives us a base of what
9 we've seen, will probably see in the future as well.

10 The thing that gives me comfort though as a
11 look at perhaps shortages into the future or
12 whatever, Utah water law is based on doctrine of
13 prior appropriation, and I think it is a very sound
14 and it is designed to distribute water by priority
15 during times of shortages. And even though it won't
16 be easy to do it, I think the institutional mechanism
17 by which to deal with those types of issues is
18 already in place.

19 Now, shifting over to the water
20 requirements for the power plant, the amount of water
21 that is needed is dependent upon the design and
22 technology that is used in designing the plant, the
23 power production level from the plant itself,
24 climatic conditions, and then the cooling water
25 cycle, which is somewhat dependent upon the water

1 quality that is available. As has been indicated,
2 there's not a lot of nuclear power plants in the
3 Western United States.

4 One that is somewhat similar is the Palo
5 Verde nuclear generating station located about
6 50 miles west of Phoenix, Arizona. It began
7 commercial operation in 1988. There's three units
8 there with about 3,872 megawatts of output. That
9 plant uses sewage effluent from the greater Phoenix
10 area and their consumptive use is about 77,000 acre
11 feet a year. Again, that plant has been in operation
12 for over 20 years and probably does not represent the
13 technology that is available today.

14 With regard to the Blue Castle project, it
15 will be designed using state-of-the-art technology.
16 It is planned to have two 1500-megawatt units,
17 nominal. Again, when they get into the design of
18 those, they may be reconfigured, but it is for a
19 total of 3,000 megawatts. The estimated water use is
20 25,000 acre feet per unit, and so with two units,
21 that would be 50,000 acre feet per year. The water
22 will be totally consumptively used. There will be no
23 discharge back to the Green River or its tributaries.

24 With nuclear power plants, they are
25 basically base load facilities, so there's generally

1 very constant power production that equates to a
2 constant water demand for the plant. With 50,000
3 acre feet at a constant flow rate, that would be just
4 over 69 cubic feet per second year-round to supply
5 the plant. Also, there will be a reservoir
6 constructed for the plant. It will be a dam 30-feet
7 high inundating 100 acres with a storage capacity of
8 2000 acre feet. If we take the hundred acres of
9 surface area times 3.3 acre feet per acre taken from
10 Dr. Hill's study for open water evaporation here in
11 Green River, that equates to 330 acre feet that would
12 be associated with the reservoir.

13 For purposes of planning the project, we
14 have used the 70 CFS as a demand -- water demand for
15 the project. This is at a capacity factor of
16 100 percent, and nuclear power plants normally
17 operate at about a 90 percent capacity. Every other
18 year they are taken off-line and refueled, and so the
19 water use during that period would cease. Also, the
20 applicants need the ability to divert on an
21 occasional basis at a rate greater than 70 CFS to
22 refill the reservoir as water is used from it. And
23 I'll talk a little bit more about that as we go on.

24 Now, as far as the water analysis, we have
25 used the USGS Green River at Green River Gauging

1 Station for our analysis. The period of record there
2 goes from 1894 up through the present. There are a
3 few missing records within that period, but there is
4 a continuous record from October of 1905 through
5 September 2007. The USGS rates the station as good,
6 and within their definition that means that
7 95 percent of the measurements at this station are
8 within 10 percent of the actual flow value. The
9 average annual flow of the Green River at Green River
10 Utah is 4,383,000 acre feet a year, so fairly
11 significant amount of water.

12 Flaming Gorge Reservoir is located on the
13 Green River upstream where the proposed project will
14 divert water. The gates at Flaming Gorge Dam were
15 originally closed on December 10th, 1962, and there
16 is no doubt the flows on the Green River have been
17 influenced by Flaming Gorge Dam. Here we have a flow
18 duration curve, two of them, for, again, the Green
19 River gauge here in Green River. On the left it
20 shows that discharge for any particular time and then
21 on the bottom it is a percent of the time that the
22 indicated flow is exceeded.

23 And so on this particular graph we have two
24 flow duration curves. The red one indicates the flow
25 in the Green River prior to Flaming Gorge Dam coming

1 online. Then the green is the flows in the Green
2 River after the construction of Flaming Gorge Dam,
3 and as you can see, generally what has happened is
4 the higher flows have been reduced after Flaming
5 Gorge came online, and the base flows have increased
6 as a result of that.

7 This next slide shows the actual numerical
8 values where we can look at that a little bit closer.
9 Prior to Flaming Gorge coming online, the peak flow
10 here at Green River was 66,700 CFS. After Flaming
11 Gorge Reservoir it has been 47,200, and as you go
12 down like, for example, at the 10 percent occurrence
13 exceedance, prior to Flaming Gorge Reservoir, the
14 flows were 16,700 CFS. Then post Flaming Gorge,
15 11,900. So again on the top end of that graph, the
16 flows have been reduced.

17 But as we drop down to the 90 percentile,
18 you'll see that prior to Flaming Gorge, the flows
19 were 1,390 CFS. Now with Flaming Gorge in place at
20 the 90 percentile, it's 1,740 CFS, and at the
21 95 percentile it was 1,140; now, 1420. The point
22 that we want to make here is that the operation of
23 Flaming Gorge Reservoir does have an impact on the
24 flows of the Green River, and generally since the
25 construction of Flaming Gorge Dam, those have

1 increased during low-flow events.

2 Now, as far as the stream flow analysis, we
3 selected the last 30 years of complete record to look
4 at. That is because in Water Year 2008 there were a
5 few missing dates. It appears because of icing and
6 other problems, and rather than estimate those and
7 plug them in, we used the actual USGS records for the
8 continuous 30 years that we could use, and so we went
9 with the water year 1978 through 2007.

10 We believe this reflects current water use
11 and management practices on the river as best as we
12 can obtain at this time. The average annual flow
13 during this 30-year period is 3,940,000 acre feet a
14 year, so, again, fairly significant quantities of
15 water. A high water year, as you would guess, 1983,
16 was just over 8 million acre feet. The low-water
17 year is 2002 at 1.47 million acre feet.

18 And I should add that 2002 is the second
19 lowest year in the hundred-plus years of record. The
20 only year lower was 1934, and so it's extremely dry,
21 2002. I think there's a number of water users in
22 this room that remember the problems they had just
23 getting water out of the river here. Then an average
24 year we selected 1978 as representing average
25 conditions, and that's at a flow of 3.78 million acre

1 feet a year.

2 Hear is hydrograph of the Green River at
3 Green River USGS gauge for 1978. Again, this
4 represent average conditions. You can see that in it
5 October, the start of the water year, the flows are
6 fairly consistent in the neighborhood of 1800 to 2500
7 CFS. That goes along for several months up through
8 about February, and we start to get somewhat of a
9 spring thaw. Flows start to increase, and then the
10 peak flows hit generally around the middle of June.
11 In this particular year the peak flow was 23,000 CFS.
12 Then they start to recede and then in late July,
13 early August, again getting back to the base flow in
14 the range of 1800 to 3000 CFS.

15 Now, if we impose the demand for the
16 project, the 70 second feet, what happens in an
17 average year? As you can see, the red line is the
18 stream flow minus the 70 CFS, and it is set under the
19 green line. So as you look at it, you'll see it on
20 the bottom of the green line. The point I want to
21 make here that it is a very small portion of the
22 total flow of the river in this average year even in
23 the lower-flow periods of this year, it is
24 2 percent -- approximately 2 percent or less of the
25 flow. So in average or above-average years, know

1 there's plenty of water.

2 The problem then becomes the low years, and
3 again I think those are the ones that you have to
4 manage for. This happens to be the low year, 2002,
5 and again this is the second driest year in over a
6 hundred years of record, and so you can see here that
7 the flows in the early part of October are 1000 to
8 1500 crowding up to 2000 acre feet -- or CFS in
9 December and then dropping down in mid-December, I
10 assume as the weather gets fairly cold. We do see a
11 little bit of a spring thaw in the March time frame
12 where it starts to go up, but again the peak flow
13 here actually occurred the end of May, first of June,
14 and it was only in the neighborhood of 7600 CFS, so
15 substantially lower.

16 Then as you look at the remainder of the
17 water year, you can see that the flows receded
18 significantly through June and July. Then in the
19 latter part of July, August, and into the first part
20 of September we're below 1,000 CFS. If you look at
21 the seven-day, low-flow period -- it is here at the
22 end of August, first of September -- and the average
23 flow during that seven-day period was just over
24 700 cubic feet per second.

25 Now, to look at this a little more in

1 detail, I've blown up the months of August and
2 September, and again the flow here in August gets
3 down in the 800 to 700 cubic feet per second range.
4 And so during these periods of time, again, a very,
5 very low water year. The project diversions would be
6 only about 10 percent of the flow in that period of
7 time. You can see in this particular year the first
8 part of September, we apparently got some rains in
9 the watershed and so the flow came back up, but
10 again, this was a very dry, low-flow year. And
11 probably represents worst conditions, and Dr. Hardy
12 will talk about the natural stream environment and
13 public recreation implications with regard to that.

14 Now, I'd like to talk about water rights
15 here in the Green River area and the potential
16 impairment with regard to those. Here we have the
17 City of Green River. The USGS gauging station is
18 located just south of this building a little ways by
19 the state park. The proposed points of diversion for
20 the project are located on the west side of the Green
21 River just above where the river crosses under
22 Interstate 70.

23 As you look at the water use and water use
24 practices here in Green River, there are a few water
25 rights above Tusher Dam, and then Tusher Dam being

1 the point where the major water rights are diverted
2 here in the Green River area. At that point, water
3 is diverted to the Green River Canal Company. Thayns
4 divert water here for their irrigation water rights,
5 and the east side ditch takes off on the east side of
6 the Green River.

7 Also, there are three hydropower water
8 rights that divert from this point and divert
9 significant quantities of water. However, on those
10 hydropower filings, the water is returned to the
11 river within -- well, less than a half mile from the
12 Tusher diversion dam. If we look at the water rights
13 below the town of Green River, there are
14 approximately 36.6 cubic feet per second of perfected
15 water rights located below the gauging station. Of
16 those, 1.17 CFS is for mining purposes, and then 35.4
17 CFS for irrigation purposes of about 1763 acres in
18 that area.

19 In addition, there are water rights that
20 are in the process of being developed or have
21 recently been put to use here in the Green River
22 area. Those would be water rights under what is
23 referred to as the Flaming Gorge water. Many of
24 those were required to submit proof, I believe, by
25 October 31st of 2009. So quite a bit of that water

1 has been put to use here in the Green River area, and
2 we acknowledge that and will respect those that have
3 been developed.

4 Also, Wayne County Water Conservancy change
5 application has the right to develop lands east of
6 Green River, below the town of Green River, and also
7 in the Hanksville and Cisco area as well. Just how
8 that will sort out, we don't know, but again the
9 project water rights have a 2009 priority date as it
10 relates to the Green River under these change
11 applications and will honor and respect all existing
12 water rights in the Green River area or upstream of
13 the project.

14 Now, as far as the points of diversion that
15 have been selected, there are five that have been
16 identified and again those are located on the west
17 side of the Green River just above Interstate 70
18 where the river crosses. The points of diversion
19 would be in this area here. I think this is a very
20 favorable location. It will not conflict with the
21 other diversions. It will not impair other water
22 rights in the area. There is sufficient water
23 bypassing this point to satisfy all downstream water
24 rights. And, again, the applicants recognize and
25 respect the existing water rights in the Green River

1 area and realize their priority date is 2009 in
2 supplying water to the project.

3 Now, with regard to the diversion
4 structures from the Green River, these will be
5 designed and addressed during the NRC licensing
6 process. Again, that's one of the environmental
7 issues that will have to be dealt with. The project
8 will comply with all requirements either under the
9 COE 404 permit or the State Engineer stream
10 alteration permits. I would believe the 404 would
11 probably rule in this particular case. The
12 applicants and the project are committed to
13 coordinate with the Recovery Program to ensure the
14 intake structure is properly design, that the fish
15 are protected in that process. And so we believe
16 that the design will not adversely affect the natural
17 stream environment or the public recreation.

18 Now, with regard to the storage reservoir
19 that I indicated earlier, there will need to be and
20 there are planned to be geologic, hydrologic, and
21 engineering studies on the reservoir site. The
22 applicants and the Project will submit the necessary
23 plans and specifications to the State Engineer for
24 his approval before any construction starts. Again,
25 this is a 30-foot high dam, hundred acres of surface

1 area with 2,000 acre feet of storage. The NRC
2 requires that the nuclear power plant have four days'
3 water supply on hand. So that calculates to about
4 555 acre feet.

5 The remaining storage could be relied on to
6 reduce diversion during low-flow periods if need be,
7 and in working with the recovery program there was
8 something that the Project and the Recovery Program
9 could do to basically lessen any impacts of the
10 diversion.

11 So in summary, I think the data and
12 information definitely shows there's unappropriated
13 water from the Green River here at the proposed
14 points of diversion. The project recognizes the
15 existing water rights that exist on the Green River.
16 The points of diversion are located to minimize
17 conflicts with others, and no water rights will be
18 impaired as a result of the diversions for this
19 project. I think this project also provides an
20 opportunity for Utah to put some of its Colorado
21 River water to a beneficial use to benefit the
22 citizens of Utah.

23 With regard to the stream alteration
24 permits and dam safety, the project realizes that
25 those are things that will have to be taken care of

1 in the future and they will be addressed and
2 coordinated with the regulatory agencies. As you
3 look at the permitting process for this power plant,
4 it has to go through a very comprehensive process
5 through the NRC regulatory process. Water rights is
6 just one step in that process, a very important one,
7 but again many other issues will be addressed at a
8 later date as the project moves forward.

9 Any questions with regard to what I have
10 presented? If not, I appreciate your time and thank
11 you.

12 HEARING CHAIRMAN: Thank you, Mr. Olds.

13 THOMAS HARDY: Good morning. I'm Professor Tom
14 Hardy. I was formerly the associate director of Utah
15 Water Research Lab. I've recently moved to Texas to
16 avoid the cold and became chief science officer at
17 the River Systems Institute at Texas State
18 University. What I'd like to address is the summary
19 of environmental- and recreation-based protests. I
20 was asked to examine those in light of the existing
21 project.

22 There were quite a few protests that were
23 submitted. There was a high degree of redundancy in
24 those. So I tried to break them out into a summary
25 of the physical, chemical, biological, and recreation

1 aspects that were submitted. And based on my review
2 I've concluded that the applications will not
3 unreasonably effect the natural stream environment or
4 public recreation, and my following presentation will
5 give you the basis for that conclusion.

6 Some of the claims -- physical impacts, one
7 component of that basically is about high flows or
8 peak flows effecting geomorphic processes, timing,
9 frequency, and magnitude of flood flows. They were
10 characterized as a large depletion, reducing spring
11 runoff, and reducing flood volume and frequencies. I
12 believe that Jerry Olds had a good summary about
13 average and above-average water years, that the
14 volume of water in the river is substantial.

15 This graph here is about peak flow
16 magnitude comparisons. The red line on the right
17 axis is the percent of time the flow is equaled or
18 exceeded. The blue line represents the percent
19 change in the flow due to the 70 CFS diversion at a
20 constant rate. And what I've indicated in the green
21 line are flows above about 8,000 cubic feet per
22 second. From my reading of a thesis on geometric
23 processes of channel change here in the Green River
24 area below the Green River gauge by Terry Kennedy,
25 and a lot of material that has come out through the

1 Recovery Implementation Program, flows above about
2 8,000 CFS are associated with those peak flow events
3 that are trying to be protected.

4 And as you can see, at the point of 8,000
5 CFS, the percent change due to the 70 CFS is less
6 than 1 percent, and based on that as flows go up in
7 peak flows, that 70 CFS represents greatly
8 diminishing percentages. And based on that I do not
9 believe that there is a change in material
10 measurement of the peak magnitude, timing, or
11 duration.

12 Over those range of peak flows in summary,
13 greater than about 8,000 CFS will not alter the
14 timing of those peak flows. They originate upstream
15 of project location. The frequencies of those peak
16 flows are not going to be influenced by a 70 CFS
17 diversion. The changes in the peak flow magnitude --
18 that is, the volume reduction -- are considerably
19 less even than the measurement error at the Green
20 River gauge. Again, as Jerry Olds indicated, the
21 gauge is rated as good, so 95 percent of the
22 measurements are within 10 percent, and we're talking
23 on an order of less than 1 percent in terms of the
24 change of flow volume. I think that is de minimis in
25 its impacts.

1 Okay. The proposed diversion rate again is
2 small depletion and will not unreasonably affect
3 spring runoff flood volumes or frequency. This is
4 basically a table showing that range. Up to about
5 the 90 percent exceedance ranges, the maximum change
6 in flow volume is less than 5 percent. If you get
7 into extremely dry conditions -- and this is at flows
8 less than spring peak flows, and I'll address this
9 later under base flow -- it can be still less than
10 about 10 percent.

11 Again, a lot of the protestants indicated
12 that the project would cause undue harm due to
13 changes in the base flow. That is not high flows but
14 really that low-flow period by reducing the minimum
15 flows and then reducing in-stream flows throughout
16 the year. Clearly the previous slides illustrated
17 that during the spring runoff period, the 70 CFS
18 diversion is de minimis. So I would like to
19 concentrate on the low-flow period.

20 What this graph illustrates, again, on the
21 right-hand axis or the red line is the percent of
22 time that flows are equaled or exceeded, and this is
23 the flow rates below 8,000 CFS, and the blue line
24 represents the percent change in flow volume. I went
25 ahead and ran this down to about 700 CFS, which is on

1 the order of the minimum flows that we saw during
2 2002 drought here in the Green River. In the period
3 of record in 2002 in that period there were only five
4 flows lower than 700 CFS. They were on the order of
5 680. Over the entire period of record post-Flaming
6 Gorge, there are only 41 observations of flows below
7 700 CFS, and what you see here is in the range of the
8 95 percent exceedance level. Your percent reduction
9 is less than 4 percent. At the 90 percent exceedance
10 level it's again on the order of about 4 or
11 5 percent. And as you would expect at 700 CFS, a
12 70 CFS depletion would represent a maximum of a
13 10 percent depletion. I do not believe that that for
14 this size of river represents a problem.

15 This is numerical values here, and what
16 I've indicated is over-exceedance ranges. Below
17 8,000 CFS, these are -- the percent reductions in
18 flows are extremely small and in the area of impacts
19 that I would not anticipate to cause harm in the
20 aquatic environment either to the fisheries or
21 aquatic macroinvertebrate resources or recreation.

22 To try to get a better handle on the
23 underlying protest facts that were brought forward or
24 alleged to be occurring in terms of the aquatic
25 environment, I went to the USGS gauge and extracted

1 their actual physical measurements on flow versus
2 discharge in terms of stage. This is what the
3 relationship looks like for the 1979 through November
4 27 and 2009 with the standard power law of regression
5 fit. I wanted to use these data long with the
6 following to try to address the alleged impacts to
7 the aquatic resources.

8 So this is a relationship with stage. What
9 this shows then is a change in stage. In this case
10 it actually is depth because it's the difference
11 between the stage reading versus discharge. Along
12 the bottom axis is the discharge after the 70 CFS
13 diversion. On the Y axis is the change in depth in
14 feet after the 70 CFS diversion. And what you can
15 see is as you get lower and lower still down to 700
16 CFS being depleted to 630 CFS, the expected change in
17 depth at the Green River gauge is still only .12
18 feet. In my opinion as a biologist, that would
19 represent a de minimis change to the aquatic
20 environment.

21 This is summarized in the following table,
22 over-exceedance ranges, and as you can see that the
23 difference in stages as you get into very high flows,
24 you can't measure that level of difference at the
25 Green River gauge very accurately. And then what I

1 want to point out is that the 95 percent exceedance
2 at 1420 if you take your 70, you still have only a
3 .07 or so foot change in stage, and even down to the
4 99 percentile -- 700 CFS is actually 99.7 percent
5 exceedance. And that gives you an idea how rare
6 those events occur. You still only get a .12-foot
7 change in stage or depth in the river at the cross
8 section.

9 What this graph shows is the same period of
10 record from the actual physical measurement at the
11 Green River gauge, again, discharge on the bottom and
12 on the left is mean channel velocities in feet per
13 second, and you can see the power law fit represents
14 the data exceedingly well. I used this relationship
15 then to compute the changes in expected mean channel
16 velocities associated with the diversion. What this
17 graph illustrates is discharge on the bottom after
18 the diversion and changes in velocity and feet per
19 second on the Y axis.

20 And you can see that the overall impact of
21 those changes and discharge is 70 CFS even at
22 extremely low flows represents a very small change in
23 the expected mean channel velocities. This is
24 illustrated numerically in this table, and you can
25 see that the changes in mean column velocity over all

1 exceedance ranges are extremely small.

2 What I want to point out here is this is a
3 relationship between discharge and width of the river
4 at the Green River gauge, discharge along the bottom
5 axis, river width and feet on the top axis, and are
6 some characteristics of this I would like to point
7 out. You can see that the basic change in width is
8 fairly insensitive down on the order to 3,000,
9 perhaps 4,000 CFS. That is the nature of the channel
10 at the Green River gauge. Having been on the Green
11 River and talking with the USGS personnel who also
12 float the river, I want to point out that most of the
13 river in the Green River below Green River occurs in
14 confined canyon areas without extensive flood plains,
15 and therefore you would expect a U-shape channel and
16 therefore not expect large changes in width. But
17 they do occur as you get into very low flows.

18 I then used this relationship to compute
19 the expected changes with the 70 CFS diversion.
20 Again, on the bottom axis it is discharge after 70
21 CFS has been consumed, and then changes in width and
22 feet after 70 CFS along the Y axis, and even down at
23 the 700 CFS range, the maximum expected changes at
24 the Green River gauge is on the order of 1.4 feet
25 maximum. And I would expect that to hold for most of

1 the river downstream through Still Water Canyon and
2 other places where you have really confined channels.

3 The numerical values, to make it easy to
4 look at, are contained in the following table, and
5 you can see that the changes in width are very small,
6 on the order of .6 feet even down to the 95 percent
7 exceedance level. And even at the 99.7 level, the
8 maximum change is expected to be on the order of
9 1.3 feet.

10 Again, I want to look at cross-sectional
11 area. Again, this is the empirical data from the
12 gauge, and discharge along the bottom cross section
13 area and square feet on the Y axis fitted to a
14 standard power curve. This is the affect of the
15 70 CFS diversion, after the 70 CFS along the bottom
16 axis, and then change in area in square feet after
17 the 70 CFS diversion. I'd like to point out here
18 that the 35 to 40 square feet change at 700 CFS, if
19 you deplete 70, that's out of 890 square foot
20 cross-sectional area. So it represents a very small
21 percentage change.

22 Again, this is provided in tabular form for
23 you, and you can see then over a broad range of flow
24 exceedance values that we still are less than 40 feet
25 change in cross-sectional area even at the 99.7

1 exceedance level. I was able to obtain actual
2 measured geometry from the USGS at the cableway,
3 which is about a mile downstream from the actual
4 gauge. Just to illustrate some of the various
5 attributes here, you can see at the gauge we have a
6 very U-shaped and steep channel. This is at 1,340
7 CFS collected in 2006. At this flow rate, a change
8 in stage, if you plot it, it would be under the blue
9 line it's so de minimis.

10 At the same gauge in 2002, that critically
11 dry year, this is about 980 cubic feet per second.
12 From the previous analysis, what you can see, that
13 with those changes in stage, changes in width and
14 velocity, you're not materially affecting the
15 characteristics of the cross section. It's about a
16 one-tenth foot change. The increments on the grid
17 are two-tenths of a foot, and so your change would be
18 on the green line basically in this vicinity in terms
19 of your change in water depth at the cross section.

20 We were fortunate enough to also have data
21 so as not to overrepresent the U-shaped channel at
22 the gauge. This is a section collected during that
23 incredibly low period of 709 CFS, July 23rd of 2002.
24 It's about .7 miles downstream of the gauge and
25 represents a shoaled up shallow area that was in fact

1 wadeable. At that 99.7 percent exceedance, you're
2 talking about a .2 change in stage which would be
3 about where the blue line is given the .2 increment
4 would be on this area. And that still gives, even at
5 the shallow peak here, plenty of water for rafting in
6 terms of whitewater rafting, which I do on a regular
7 basis, wouldn't pose a hazard to boating and still
8 permit recreational passage.

9 Based on these analyses, I came to the
10 following conclusions broken up by physical,
11 chemical, and biological. The change in river depths
12 are less than 1.5 inch at flows as low as the
13 99 percent exceedance level. Changes in the mean
14 channel river velocities are within measurement error
15 of existing measurement devices. Typical coefficient
16 and variation on a current meter, if you're out there
17 with a 42nd average, is probably 30 percent. It's
18 going to be difficult to detect these changes.
19 Changes in river width are less than 1.4 feet, again,
20 at flows as low as the 99 percent exceedance level.

21 The claimed biological impacts, based on
22 the foregoing analysis and my experience with river
23 systems, the lower flows providing a competitive
24 advantage to non-native species -- I would anticipate
25 given the very small changes in flow volume, depth,

1 velocities, channel widths, and cross-sectional area,
2 there is no evidence to support the diversion amount
3 would result in any advantage to nonnative species.

4 The increased competition among fish for
5 fewer resources -- again those resources from an
6 aquatic ecology perspective represents living space,
7 depth, velocity, substrates as well as potential food
8 bases. That's the thirds bullet here, but the
9 physical analysis of changes do not suggest there
10 would be a measurable change in available resources
11 in the river given how small those changes are even
12 at those very, very rare exceedance levels.

13 Impacts to the macroinvertebrate community
14 weren't identified specifically. It was just stated
15 that there would be impacts. From my experience,
16 given these small changes, again, in the width,
17 depth, velocities and cross-sectional area, I would
18 not anticipate a measurable change in
19 macroinvertebrate community habit that they depend on
20 or the community structure itself.

21 Again, continuing on with biological
22 impacts, several of the protestants indicated
23 impaired ecological function although not specified
24 what that actually meant. My experience that these
25 level of physical and chemical characteristics of the

1 river with the proposed diversion do not suggest an
2 impairment in ecological function. And my definition
3 of ecological function would go to available fish
4 quantity and quality of habitat. Habitats of their
5 food based upon which they would be dependent would
6 not be impaired.

7 Another group of impacts were loss of fish
8 and wildlife habitat. Again, the very small de
9 minimis changes in all of the physical properties
10 upon which this habitat is dependent would not
11 represent a detrimental loss in any fish and wildlife
12 habitat to be expected.

13 Several people indicated there was a
14 potential for reduced suitable fish habitat. Again,
15 the physical analysis strongly suggested there would
16 be no detrimental changes to the suitable fish
17 habitat in terms of their depths, their velocities,
18 the substrates, the widths or the volumes.

19 A couple of protestants indicated there
20 would be less side channel habit. The estimated
21 changes in depth and channel width in particular
22 strongly suggest that the diversion would not have a
23 measurable impact to side channel habitats. Again, I
24 want to point out the vast majority of the river
25 corridor is in fossilized sandbars by tamarisk and/or

1 with rock channel canyons. The only substantive
2 areas of side channel habitats rarely occur in the
3 middle bottom area, and I think those impacts in more
4 detail will clearly be addressed in the Environmental
5 Impact Statement required by the NRC and will be
6 mitigated if they occur, which I don't believe they
7 were, by working directly with the Recovery
8 Implementation Program.

9 Again, continuing on with biological
10 impacts, "Entrainment and impingement of eggs,
11 larvae, juveniles, and adults at intake." This will
12 occur to some degree. Again, it is my belief that
13 through the Environmental Impact Statement and
14 designing that you can effectively design these
15 intake structures to minimize these potential
16 impacts.

17 "Reduce reproductive success of fish,"
18 again, my physical analysis of the change in volume,
19 depth, velocity, width and area do not suggest a
20 measurable change in reproductive success. All of
21 the geometric processes that basically create the
22 gravel beds and the spawning beds are occurring in
23 the 8,000 CFS and higher ranges of the flows. This
24 is clearly illustrated in the thesis by
25 Terry Kennedy, that work below the Green River gauge

1 on the changes in channel conditions.

2 "Impacts to the riparian corridor
3 integrity," again we are not affecting, or the
4 Project is not affecting with the 70 CFS diversion,
5 the type of flows I associate with riparian or
6 channel maintenance flows that reorganize those side
7 channels. Those peak flows will still come through
8 in the 70 CFS. At a minimum of 8,000 is de minimis.
9 Also, in the low-flow period, given the very, very
10 low changes in channel widths and depths, I would not
11 anticipate that those impacts would be anything but
12 negligible and difficult to measure if at all.

13 "Impacts to terrestrial species," again, I
14 defer this to the Environmental Impact Statement. I
15 believe these can adequately be addressed during the
16 plant siting and design through the NRC permitting
17 process.

18 "Claimed Recreation Impacts, Intakes would
19 be a boating hazard." My experience is that there's
20 ample evidence from existing river intakes on large
21 river systems that are used extensively for
22 recreation that such intakes do not impose an undue
23 boating hazard. And you can look at lot of the
24 intake on the lower Colorado River in Texas and see
25 the large water diversion and pump intakes are

1 regularly in use in high recreation areas.

2 "Low stream flows would expose boating
3 hazards." I am a boater, given the small changes in
4 depth and velocity over all flow rates, the proposed
5 diversion would not increase boating hazards due to
6 reduced water depth and velocities. We're dealing
7 with such de minimis changes.

8 "Lower stream flows may reduce the length
9 of the recreation season." Again, my analysis of the
10 physical changes do not indicate at all that there
11 would be any changes of flow volumes that would
12 affect the length of the recreation season. That's
13 depending on the boat flow generated upstream of the
14 diversion, and the changes of 70 CFS are -- in my
15 opinion, would not effect the recreation season.

16 "Lower flows may impact fishing." Again,
17 being redundant, physical changes are so small they
18 don't support the claim that the proposed diversion
19 would have an impact on recreational fishing given
20 the small changes in the depth, velocities, channel
21 widths or the cross section.

22 I wanted to find out myself, because I'm a
23 rafter, what would happen with this change of 70 CFS
24 over different flow rates, and the analysis of the
25 physical changes here shows that the rafting -- what

1 this table is -- discharge, the velocity at mean
2 column feet per second, and then basically based on
3 an eight-hour day of floating, the miles per day that
4 would be covered and then discharge after depletion,
5 the change in velocity and the change in miles per
6 day. The last column shows you the distance
7 differences in miles in a day that you could cover.

8 I'm not sure I would want to be on the
9 Green River at 47,200 CFS. That's death wish flows,
10 but I would be on the river at the 40 percent
11 exceedances and lower even at the 99.7 percent
12 exceedance at 700 CFS. The total change on a float
13 using the mean column velocities is only .26 miles.
14 I could make that up by rowing in a downstream
15 direction on the order of 15 or 20 minutes. I don't
16 believe that this would impact the float times to get
17 to the commonly used recreation areas for camping
18 along the river corridor.

19 So in conclusion, my analysis at this point
20 in the process, pending the more detailed EIS
21 analysis, my opinion is that the application in the
22 70 CFS diversion will not unreasonably affect the
23 natural stream environment or public recreation.

24 Thank you.

25 HEARING CHAIRMAN: Thank you, Dr. Hardy. One

1 question, in regard to your analysis and the numbers
2 that you've used, those are based on the gauging
3 station data which is located below existing
4 diversions except for the roughly 35 second feet that
5 Mr. Olds pointed out were below -- were downstream
6 from these diversions; is that correct?

7 THOMAS HARDY: That is correct, sir.

8 HEARING CHAIRMAN: Thank you. Anything
9 additional, Mr. Mabey?

10 MR. MABEY: Not at this point.

11 HEARING CHAIRMAN: Thank you very much.

12 MR. MABEY: I'd like to open it up for questions
13 from the protestants.

14 HEARING CHAIRMAN: Okay. Very good. I think
15 that's a good idea. We do intend to take a break at
16 some point to have a sandwich and those kind of
17 things, but since the applicant has now concluded
18 their presentation and given information to you about
19 what is being proposed, we would like to offer you
20 the opportunity to ask questions of the applicant
21 about any of the information that has been presented.
22 So protestants -- yes, ma'am in the back -- would
23 come forward please to the microphone and state your
24 name for the record.

25 THERESA BUTLER: Theresa Butler, Moab, Utah. I

1 usually don't put myself in the hot seat. My
2 question was to Dan, I believe, for the San Juan
3 River. With the McPhee Dam going in along with the
4 Glen Canyon Lake depleting the back waters down below
5 and around Clegg Hills take out, without having an
6 annual runoff or spring, we don't get that waters
7 pushed out. Do you think this is going to be an
8 impact?

9 DANNY FLEMMING: No, I really don't.

10 THERESA BUTLER: And has anyone considered the
11 two elements together, the Glen Canyon dams receding
12 and the lack of flow coming down the San Juan?

13 DANNY FLEMMING: I don't think so.

14 THERESA BUTLER: And can I ask that possibly you
15 do consider that? Can I ask that you possible do
16 consider that by taking water out of the San Juan's
17 flow?

18 HEARING CHAIRMAN: Mr. Mabey, do you want to go
19 ahead and respond at the microphone more formally to
20 the questions?

21 MR. MABEY: Yeah, just briefly, I think she's
22 talking a lot about downstream impacts that happen --
23 Glen Canyon Reservoir area, Glen Canyon Dam, and
24 those, of course, are impacts that are created from
25 the entire system. These applications are only

1 proposing depletion at the rate of 70 CFS. And
2 obviously San Juan counties moving their change
3 application up can't, you know, create a large enough
4 of an impact to be significant, as testified by
5 Dr. Hardy.

6 HEARING CHAIRMAN: Okay. Thank you. So in
7 essence you're saying that the diversions that may
8 have been approved previously on the San Juan River
9 are to be abandoned, and those diversions will be
10 combined for this power plant here at the Green
11 River?

12 MR. MABEY: Not at the time.

13 HEARING CHAIRMAN: Would there be additional
14 impacts to the San Juan River then by virtue of
15 implementation of this application?

16 MR. MABEY: No, because the diversions from the
17 San Juan River would cease. There would be no longer
18 any diversions out of the San Juan for the historic
19 power plant that was proposed. They would take place
20 at the Green River.

21 HEARING CHAIRMAN: Does that answer your
22 question, Ms. Butler?

23 THERESA BUTLER: Not really, but I'm still
24 pretty green horned at all of this so --

25 HEARING CHAIRMAN: We all are.

1 THERESA BUTLER: Yeah. I just have one more
2 question, and maybe you stated it, but where was the
3 storage reservoir on the Green River going to be and
4 how long is it going to take to fill that to subtract
5 the 70 CFS that we're going to have to take the
6 impact out? And I'm not sure if that was the doc
7 from Texas or -- and then thank you. Thanks
8 everyone.

9 HEARING CHAIRMAN: Thank you very much,
10 Ms. Butler.

11 JERRY OLDS: With regard to the storage
12 reservoir -- and I'm Jerry Olds for the record --
13 again, it is a 2008 acre foot reservoir. It will be
14 located in Sections 11 and 12, Township 21 South
15 Range 15 East, which is approximately 4 miles west of
16 the town of Green River. With regard to the
17 diversion of water to that reservoir, again, during
18 most times of the year, it will not be a problem and
19 could be diverted at a rate that would fill the
20 reservoir in, you know, 30 days basically.

21 One of the things that the project will do,
22 though, is working with the Recovery Program to also
23 identify times when that may be a concern and not try
24 to divert additional water during low-flow years, but
25 as far as the rate at which they would take it, it

1 would be over a number of days, number of weeks to
2 fill that reservoir.

3 HEARING CHAIRMAN: Thank you very much. Are
4 there other questions for the applicant? Yes, sir,
5 would you identify yourself, please.

6 BOB GREENBERG: Yes, I'm Bob Greenberg. I'm the
7 former chair of Grand County Council, and I was the
8 chair at the time we voted after some discussion to
9 file a protest. So I welcome you to what was
10 formerly Grand County. Just more specifically,
11 Mr. Olds, what's anticipated to be the peak diversion
12 from the Green River?

13 JERRY OLDS: We did not present data that
14 actually talked about a peak diversion. If you look
15 at the applications how they are filed, it is in acre
16 feet, 53,600 acre feet of depletion from the river.
17 Again, rather than prejudge things, we wanted to
18 basically leave that open through the environmental
19 impact statement process, work with the Recovery
20 Program so that we didn't put a figure out there that
21 was unreasonable.

22 But again 2,000 acre feet, if you spread
23 that over 30 days during high flows, again the
24 percentage impact on the system is very, very low.
25 It's those critical flow periods that we talked about

1 like in 2002, and the project would not be diverting
2 water to the reservoir during those periods of time.

3 HEARING CHAIRMAN: Thank you. Additional
4 questions? Yes, sir.

5 JOHN WEISHEIT: Yes. My name is John Weisheit.
6 I live in Moab, Utah. I have a question for
7 Jerry Olds, and I have a question for Aaron Tilton.
8 My question to Aaron Tilton is what I thought was
9 missing from your presentation was the cost of
10 decommissioning, how much that's going to cost, what
11 is the plan for uranium waste and that. And also for
12 Jerry Olds I thought doing 38 years of record for a
13 river that's 6 million years old is a little
14 misleading. There was a paper written by
15 Lettenmaier, Milly, Betancourt called "Stationary is
16 Dead," which I would like to put on the record at
17 some time.

18 HEARING CHAIRMAN: Do you have a copy? We'd be
19 glad to accept it.

20 JOHN WEISHEIT: I didn't bring that one with me.
21 Get me online and I'll get it for you. But, anyway,
22 so my question is when you look at the tree ring
23 record and when you look at climate change
24 projections, this brings about a whole different
25 dynamic for depletions, and you did not address

1 those, and I would like and hope that you would.

2 Thank you.

3 NILS DIAZ: I will try to answer the question on
4 the decommissioning. The plant that will be
5 established for the project would include not only a
6 decommissioning plan, but it will include the payment
7 of the decommissioning. That is essentially done by
8 law. It's 1 mil, 1/10th of a cent per kilowatt hour,
9 and that will be kept under the monitoring and
10 surveillance of the Nuclear Regulatory Commission and
11 will be accumulated to ensure there will be
12 sufficient cost for the decommissioning the plant.

13 Originally, when decommissioning was
14 thought off in the beginning, people thought plants
15 were going to last 30 years. The reality is right
16 now there are 58 plants in the United States that
17 have 60 years' license for operation, and that
18 essentially creates a larger decommissioning fund
19 that they would have. So it is covered by federal
20 law. It will be from the very beginning established,
21 and it will certainly be sufficient to cover the
22 decommissioning costs.

23 HEARING CHAIRMAN: Thank you. Of the nuclear
24 power plants that you're aware of, Dr. Diaz, how many
25 of those have been decommissioned since they were

1 brought online?

2 NILS DIAZ: Well, during my ten years at the NRC
3 there were seven plants that stopped operations of
4 which seven -- three plants have been decommissioned
5 of those seven. The other plants, some of them are
6 calling -- in abeyance, meaning they will not start
7 decommissioning until sufficient plant -- time has
8 elapsed to make the decommission. That's a choice of
9 the applicant. The applicant applies, and it can
10 select different types of time frames, different
11 types of doing it.

12 All of the plants that have been
13 decommissioned now are being returned to green
14 fields. Those are now for -- you know, you can put a
15 park in there. The plants that have not been
16 decommissioned are being partially decommissioned.
17 They have remained with the enclosure and have
18 remained with the security in it.

19 HEARING CHAIRMAN: Thank you.

20 JERRY OLDS: With regard to the 30 years of
21 records that we used, just a couple comments with
22 regard to that. As we examined the water supply, we
23 wanted to be open and forthright as we examined this
24 project. If I wanted to, I could have used the
25 entire period of record, and it would have shown this

1 project in much more favorable light. By using the
2 last 30 years, it reflects upstream depletions within
3 that record. It shows the effects of the Central
4 Utah Project as well as other diversions above the
5 gauge here in the Green River area, the Vernal area
6 and so forth.

7 So in doing that, it is showing the best
8 conditions that we can at this time, and as a result
9 using that last 30 years it was, say, a little more
10 unfavorable with regard to the project, but I think
11 it shows the reality of what we're dealing with.

12 With regard to long-term records, I am
13 aware of a number of studies out there that look at
14 tree ring data, and I think we could spend several
15 days at this hearing discussing what all of that
16 means. The bottom line is Utah's system of water
17 right management will deal with the shortages.
18 There's a system already in place, and the project
19 sponsors realize that and support it. It provides
20 certainty to the system, and so you can theorize
21 about what's going to happen in the future but to
22 predict it with any degree of certainty, I don't
23 think it's there.

24 HEARING CHAIRMAN: Thank you very much,
25 Mr. Olds. Anything in addition in response to the

1 question by applicant? Yes, ma'am, back here.

2 PAM HACKLEY: Thank you. My name is
3 Pam Hackley. I'm a resident of Castle Valley here in
4 Grand County. I was wondering if some of the more
5 in-depth materials would be available for review.
6 Particularly I was wondering if Dr. Hardy has a
7 written paper he would put into the record that would
8 describe his methods and provide the in-depth
9 analysis that he was summarizing in his presentation
10 and also for Mr. Olds if he could provide a similar
11 sort of in-depth written record. And also I would
12 like to ask for a significant extension in time to be
13 able to respond to the applicant's presentation and
14 materials that they may respond with after we've had
15 time to --

16 HEARING CHAIRMAN: Okay. Very good. I think
17 that request would be more properly made when we turn
18 to the protestants to make presentations of their
19 concerns.

20 Mr. Mabey, would you like to respond to
21 that? Will there be anything additional that will be
22 provided to supplement the record, the PowerPoint and
23 whatnot that's been shown already?

24 MR. MABEY: The data used by the State Engineer,
25 of course, is available online as far as the USGS

1 gauging station at Green River City. Similar data
2 was also used by Dr. Hardy. At this point we're not
3 planning on submitting any additional written
4 explanation and in-depth analysis, but I want to make
5 it very clear that we understand that there's been a
6 lot of information submitted here that today and that
7 we do anticipate leaving the record opening open for
8 a reasonable amount of time in order for everyone to
9 review that and submit, you know, responses to that.
10 So just to alleviate any of concerns in that regard,
11 we do not want it to be an unreasonable length of
12 time but certainly give them a time to review and
13 file responses after which we would have an
14 opportunity to review and respond ourselves.

15 HEARING CHAIRMAN: Okay. Thank you. Are there
16 other questions for the applicant? Yes, ma'am, in
17 the back.

18 NANCY STARK: Hi. My name is Nancy Stark, and
19 I'm with Green River Company, and we have a farming
20 interest in the area. If you boil down the
21 presentation and the testimony that was provided
22 today, it looks like, you know, from my perspective
23 what they are saying is that the plant will have a
24 negligible impact on the river in isolation. So my
25 question is like in the aggregate or the cumulative

1 impact when you get everyone that's got the
2 allocation to pull out the water, has that been
3 reviewed or looked at or considered?

4 And the other part of that question is if
5 the state has a system -- I'm assuming it's the
6 "first in time" type system to deplete the water, are
7 investment bankers and the people that are providing
8 the financial support to the plant prepared to just
9 forego that if the studies show with the other people
10 that have the water rights, if they pull that out of
11 the river, if it does have more of a negative impact
12 or consequence?

13 HEARING CHAIRMAN: Would the applicant like to
14 respond?

15 JERRY OLDS: I'll address part of that question.
16 With regard to the cumulative impact, we realize that
17 there are a number of approved yet undeveloped water
18 rights out there within the upper Colorado River
19 basin. Again, I think it has been the policy of the
20 state of Utah to encourage the use of that water, to
21 put it to beneficial use so there are economic
22 benefits for our citizens. And that's what this
23 project is in the process of doing. Yes, there are
24 additional diversions that will take place from the
25 Green River, and again those all have issues that

1 have to be dealt with individually. I don't think
2 the burden should be placed totally upon this
3 project.

4 Again, the project sponsor, the applicants
5 have committed that they will work with the recovery
6 program to deal with those impacts with regard to the
7 endangered fish and the environment and try to work
8 within that program to minimize any adverse effects.

9 HEARING CHAIRMAN: Okay. Thank you, Mr. Olds.
10 Something additional, Mr. Tilton?

11 AARON TILTON: Yeah, I'll take the last half of
12 the question about the company accepting the impacts
13 of what took place and the sponsorship of the
14 project, yes. As part of the feasible study, we
15 looked at really is it feasible to include our
16 diversions along with other diversions that may take
17 place on the river at the times of the extreme low
18 flows, and yes, that's part of it. We will accept
19 the responsibility and participate with everybody
20 else as well as the other water right users in that
21 process and work together to determine what needs to
22 be done in those extreme cases.

23 I think you saw from the presentation that
24 we're talking about occurrences that are once in a
25 hundred years, once in 60 years or something on the

1 order of a very, very de minimis occurrence at that
2 low flow. We'll work with all the other water right
3 users as the law allows to make sure everybody's
4 needs are provided for under the system that
5 currently exists within the state.

6 HEARING CHAIRMAN: Thank you very much,
7 Mr. Tilton. Are there any other questions from the
8 protestants? Mr. Flitton.

9 MR. FLITTON: I've got a number of questions,
10 and I understand that we probably need a break at
11 some point. I don't think -- you know, first off, I
12 don't think that the responses that I've heard really
13 address the question that was asked previously and
14 that is I've heard over and over again the comment
15 that the priority system will protect the water
16 rights on the river. And my question is how does
17 this power plant shut off its diversions during times
18 when of priority cut if that in fact is the case?

19 NILS DIAZ: Let me try to answer. From
20 experience, we have had in the United States in many,
21 many places mostly happening down east, but it's the
22 same thing. The period of drought, there is drop in
23 the lake water level or the flow and all of a sudden
24 you have the need to curtail the diversion from the
25 river. It has been worked out between the federal

1 government, the state, because, you know, you cannot
2 tell somebody that is producing power "Shut the plant
3 down," but it has been achieved. Power reductions
4 have been made to reduce the diversion of water. So
5 there has always been a way to work with it for the
6 benefit of everybody that uses the water and the
7 people that receive the power which also could not be
8 left without power. So it's a combination of those
9 things.

10 MR. FLITTON: So if I understand you correctly
11 then, the answer is that you cannot shut off all of
12 the water coming to the plant. You could work on
13 limiting the amount you have to divert by reducing
14 the output or working with other things, but can you
15 physically respect priority cuts? Meaning, on the
16 date that that cut is made, will you be able to stop
17 the diverting water and stop operating your plant?

18 NILS DIAZ: That will not happen. You will not
19 cut off completely a power plant from water. You can
20 reduce the amount of water that is being taken and
21 you can plan with plenty of time, which is necessary,
22 like has been planned in Washington state when they
23 have problems with the salmon spawning on the Snake
24 River. There was an agreement made in which the
25 plant was going to reduce its power down, and

1 eventually they planned to do their outage, in other
2 words, when the plant uses very little water in times
3 of need.

4 Those things can be planned. So can there
5 be accommodations? Yes. Can somebody call a nuclear
6 power plant or coal plant and say, "Shut down
7 tomorrow and you will not produce electricity for all
8 of this people" and do that in ten places because
9 there's no water and then the region is in darkness?
10 No. But can you work within the system? Yes. The
11 federal, you know, government and, you know, the
12 federal agencies and the state agencies do work
13 together, harmoniously I might add, to resolve this
14 situation, and it had been resolved on multiple
15 occasions.

16 AARON TILTON: Let me add one more clarifying
17 statement to that. The question presupposed that
18 there would be an incident that there would need to
19 be some kind of emergency shut off of the water
20 because there would be inadequate flows in the river
21 that couldn't be planned for. That's an inaccurate
22 assumption. The process it will go through will plan
23 for several different scenarios and put in place the
24 adequate resources that we will need to provide for
25 the power plant as well as the other water right

1 users in the region. So the assumption that one day
2 somebody has to call up to the power plant and say,
3 "Hey, you have to shut this off because we don't have
4 water tomorrow," that's inaccurate. I think you can
5 see by the data that's collected and that we've shown
6 over the last hundred years, is that doesn't happen.
7 You can project with a certain amount -- with a
8 degree of certainty what the flows are going to be
9 within a specified period of time that allows you for
10 appropriate planning. So the assumption is
11 incorrect. So the answer really is that situation
12 doesn't occur with the power plant.

13 MR. FLITTON: That leaves me with several
14 questions, and these are really directed more at the
15 hydrology and Mr. Olds. Just so that I understand
16 this properly, I understand that when you've done
17 your analysis and you've looked at whether there's
18 water available, what you have taken into account is
19 the existing diversions and depletions and you have
20 not calculated in prior approved water rights that
21 may increase those diversions in assessing whether
22 that water is available; is that correct?

23 JERRY OLDS: In the analysis that I did, as I
24 looked at the approved yet undeveloped water rights
25 that -- and let's just take the ones here in the

1 Green River area, it is very difficult to go in and
2 prejudge what's going to happen there. My purpose in
3 identifying the Wayne County water right that the
4 change application has been filed on is to bring it
5 to the attention of the State Engineer so that you
6 can consider that in your decision. I think you're
7 very aware of what that allows for and so forth. I
8 do not know -- and I don't think anyone else knows --
9 to the extent that water right will be developed, the
10 water put to beneficial use, and proof filed on it.

11 And so rather than to go to through some
12 analysis trying to do that, it was our intent to do
13 the analysis based on the most recent stream flow
14 that is available, bring to your attention the other
15 depletions that are out there, and I think you're
16 very aware of those, and I think you can factor those
17 into your decision-making process.

18 HEARING CHAIRMAN: Thank you, Mr. Olds. Would
19 it be possible by chance for, say, Flaming Gorge
20 Reservoir to be regulated to supply additional water
21 during critical times?

22 JERRY OLDS: Well, if you look at the 2002 EIS
23 that was done, one of things that they were looking
24 at with regard to the four endangered fish and the
25 Recovery Program was the agreed operation of Flaming

1 Gorge Reservoir. Again, we're not saying that has to
2 be done. Could it be? Yes, it could. And, again, I
3 think the applicant and the project, Blue Castle, is
4 willing to work with the Recovery Program.

5 HEARING CHAIRMAN: Thank you.

6 MR. FLITTON: Just one quick follow-up, you
7 know, since you mentioned the 2002 study and the EIS
8 that was performed amending the operations of Flaming
9 Gorge Dam, have you taken into consideration in your
10 analysis also the flows that are released from
11 Flaming Gorge Dam that at least under the purpose of
12 that EIS document are meant to replace waters all the
13 way to the confluence of the Green and the Colorado
14 River?

15 JERRY OLDS: With regard to the 2002 Draft
16 Environmental Impact Statement, that is looking at
17 identifying some flows that are needed in the various
18 reaches of the stream. I think the State Engineer's
19 office is currently looking at that, what you're
20 going to do with regard to providing, say, some
21 protection level for those flows. That's still in
22 the review process. I think you held some public
23 meetings down here last September, was it? So, yeah,
24 we're aware that you're working through that.

25 Again, I don't think those things have been

1 finalized, but, again, I think we have brought those
2 to your attention so that they would be included
3 within your decision-making process.

4 MR. FLITTON: But my question deals more with
5 whether there's a water available for appropriation
6 since this is effectively an appropriation by virtue
7 of a change that's being made. When you did your
8 analysis, did you take into account -- I mean, I
9 think you answered previously you didn't take into
10 account prior approved water that's upstream, but did
11 you take into account the potential requirement at
12 least under the purpose of the change in operating
13 plan of shepherding the water that's released from
14 the Flaming Gorge through the system all the way to
15 the Colorado River?

16 JERRY OLDS: There's a couple questions in
17 there. First of all, with regard to the approved yet
18 undeveloped water rights, again those water rights
19 can be moved around within the basin, and we realize
20 that. Again, we showed the list of what those
21 applications are, whether they will all be developed
22 remains to be seen. And so rather than to make a lot
23 of assumptions there that probably are not founded
24 upon good data and so forth, again, we have brought
25 those to your attention so that you could at least

1 factor them into your decision-making process.

2 With regard to the reoperation of Flaming
3 Gorge Reservoir, no, I did not analyze how it would
4 affect the flows and so forth. Again, I think that
5 process is being worked through at the present time
6 and Blue Castle has committed that they will work
7 with the Recovery Program as they move forward with
8 the project.

9 MR. FLITTON: I appreciate you clarifying those
10 points for me which really leads me to clarification
11 again about how these water rights -- you know, given
12 a better understanding of the basis for your decision
13 and going back specifically to your statements,
14 Mr. Olds, about you have great comfort in this
15 application and knowing that there's a priority
16 system in the state of Utah, my understanding of that
17 priority system is that if you're later in time, you
18 don't receive any of your supply until all of the
19 prior rights are satisfied. And, you know, what I've
20 heard in response to the first time I asked the
21 question is that, "Well, you know we'll work with the
22 entities and we're looking at low flows" and those
23 kind of things. But I guess my question is how you
24 view the priority system is working with respect to
25 this plant? Is it possible to cut priorities and

1 respect priorities given the operations of the plant?

2 JERRY OLDS: As you examine Utah's water right
3 system, yes, it is based on the doctrine of prior
4 appropriation, first in time first in right. And I
5 think that system works very well. It's not always
6 easy to implement, but, again, I think it provides
7 certainty to the system to the water community, and
8 as we deal with shortages, increased demands on the
9 system, yes, the priority system will work. To
10 actually implement it on such a large system as, say,
11 the Green River, Colorado, it will not be easy. The
12 upper basin states are looking at that issue
13 currently as to what would happen during times of
14 shortage.

15 But, again, I think the fundamental
16 principles are there, and this project in their
17 analysis as they move forward will look at that and
18 are they assured that they believe that there will be
19 a water supply there. If the Green River dries up at
20 Green River, Utah, we're going to have significant
21 problems, and I just do not see that the Green River
22 itself will dry up. Yes, will we have wet-and-dry
23 cycles in the future? Absolutely. But I don't think
24 it's a dooms day where in essence the Green River
25 dries up.

1 MR. MABEY: In furtherance of what Mr. Olds
2 stated, if the Green River dries up, it won't be just
3 Blue Castle's problems, it's the entire region's
4 problem, and this proceeding should not be seen as
5 these applications to solve and mitigate every
6 problem there might be in the future on the Green
7 River system. They are a small part of the river
8 system. They'll contribute to the solution of the
9 problems as will everyone else on the system.

10 Another point that's important to make is
11 in relation to the priority system because there is a
12 priority system they can make plans as part of their
13 licensing process, some critical flow management
14 plans as to what their options are should flows get
15 very low. They have options to purchase other water
16 rights as any other water user would. They have
17 better priority to maintain and establish the rights
18 they have to divert. They have ability to work with
19 Flaming Gorge with the Bureau of Reclamation. They
20 have offered contracts for purchase of water. Within
21 the priority system and the distribution of water
22 there are options by which the project can make plans
23 and have plans in place and implement those plans
24 should there be shortages.

25 HEARING CHAIRMAN: Thank you. Anything

1 additional, Mr. Flitton?

2 MR. FLITTON: Yes, I'm sorry. Maybe just so I
3 make sure I fully understand this issue, and this is
4 a question I had independent. I'd like to understand
5 a little bit more about how the plant operates and
6 what the water requirements are of the plant because
7 I think it's important to understand. I just want to
8 make sure that I understand clearly because the
9 testimony has come in pieces, number one, that this
10 will be a closed system in terms of the water will
11 not be returned. I think I've heard that.

12 But the question I have is what kind of
13 water requirements are necessary for operation, and
14 what I mean by my question is, is that -- and from
15 what I've just heard, I want clarification. Is the
16 plant dependent upon water a hundred percent of time
17 regardless of what the output is and how is the
18 plant, you know, going to deal with the
19 contingencies -- I mean, I think I've heard a little
20 bit there's federal, but my question is how you're
21 going to protect downstream water rights in the event
22 that you have to curtail your diversions and if
23 you're unable to do that physically.

24 AARON TILTON: To answer that first I would
25 probably refer Mr. Flitton to the prior presentation

1 under Jerry Olds's part of the presentation we stated
2 what the diversion requirements were, the CFS
3 requirements and the operational status of the plant
4 and how often it operates at capacity. All those
5 things are already in the presentation and would
6 refer you back to that information.

7 Second, we've already discussed what we
8 would do in the process in developing plans or
9 contingency plans for those occurrences that are
10 maybe once in a hundred years, once in 60 years, that
11 we would work with both storage, the Recovery
12 Program, and the other water right users on the
13 system to implement the process according to the
14 current prior doctrine rights on the system. And so
15 in order not to belabor this point over and over and
16 over again -- we've answered that about four times
17 now -- I refer you to the presentation already
18 presented.

19 MR. FLITTON: I don't know how you want to
20 proceed. There was a lot of information that was
21 presented, and I have a number of questions with
22 respect to the financing and process and some of
23 those things. I anticipate I've got a number of
24 questions. I don't know if you want me to proceed
25 now or you if want to look at taking a break and come

1 back?

2 HEARING CHAIRMAN: Are there other protestants
3 that have questions?

4 There are a few other people. Why don't we
5 go ahead and turn to them and perhaps we can more
6 fully address these as you make your presentation in
7 the afternoon. Would that be okay?

8 MR. FLITTON: Well, yeah, I mean, if I can ask
9 them as questions, I don't want to push it off to the
10 protest. I just would rather get clarification so I
11 can understand exactly what it is we're dealing with.

12 HEARING CHAIRMAN: Why don't we defer them to
13 the afternoon if that's okay, and then perhaps some
14 of these other folks can ask questions.

15 MR. FLITTON: That would be fine.

16 HEARING CHAIRMAN: Yes, ma'am, right here.

17 SARAH FIELDS: My name is Sarah Fields, and I
18 represent Uranium Watch in Moab, Utah. I have a few
19 questions. First of all, I'd like clarification
20 regarding Blue Castle Holdings ownership of the site.
21 I want to know does Blue Castle Holdings own the
22 proposed site, has the site been purchased from
23 SITLA?

24 HEARING CHAIRMAN: Do you have other questions
25 you want to go ahead and phrase and then they can

1 respond to all of them at the same time?

2 SARAH FIELDS: Oh, okay. Another part of that
3 question, if the answer is no, is that there was an
4 April 2008 option contract between EnergyPath
5 Corporation and Emery County. So if Blue Castle
6 Holdings does not own the site, I want to know if
7 they have a signed purchase agreement between Emery
8 County and Blue Castle Holdings or Transition Power
9 Development, and if so, if that contract will be put
10 on the record of the proceeding. If they own the
11 site, will the ownership documents be put on the
12 record of the proceeding? Okay. That has to do with
13 ownership.

14 I'd like to know if Blue Castle Holdings
15 intends to construct and operate the nuclear power
16 station itself? Are they going to be the ones to
17 carry out the project? I want to know what will
18 happen with the high-level nuclear waste that is
19 going to be produced by this proposal project. I
20 also had a brief question to Mr. Diaz regarding
21 meetings and communications with the NRC staff, so
22 maybe Mr. Tilton could answer my initial questions
23 and then I could just go on to Mr. Diaz.

24 HEARING CHAIRMAN: Okay.

25 AARON TILTON: Thank you. First question, as I

1 have it, is does Blue Castle own the site currently?
2 And I think in the presentation we talked about that
3 we had executed a purchase agreement and that the
4 site is currently in escrow and that the documents
5 outlining the details of that are actually a public
6 document. In the SITLA agreement with Emery County
7 it states what the purchase price and the details of
8 effectively a two-part process, which is one, there
9 was a lease agreement that was signed with the county
10 and SITLA, and then, two, there's a process in that
11 agreement that demonstrates how the purchase of the
12 project or the plant site and for that matter any
13 other property inside the Green River Industrial
14 Park, not just our site, will be carried out. There
15 are multiple parcels of land in that lease that are
16 not part of our project but are part of the overall
17 industrial park. And that's a public document that's
18 available -- was made available through the Emery
19 County Commission as well as SITLA.

20 Second, you talked about -- and it's kind
21 of the precursor to that agreement, an option
22 agreement was signed. That option agreement has
23 transitioned into a purchase agreement. So the
24 option agreement that was signed originally with
25 Transition Power Development is no longer in effect.

1 The purchase agreement is in effect. So there's a
2 closing date structured and the purchase price and
3 everything. Effectively, if you were to buy a house,
4 you have a period where you make the offer, everybody
5 signs the offer, and then there's an escrow period
6 where details of the transaction are carried out.
7 And that's the period that we're in right now.

8 Are we going to be the owner and operator
9 of the project I think was your other question. In
10 the slides that we presented earlier, we showed the
11 development cycle for power plants regardless of
12 whether it was us -- regulated utility, municipal
13 utility, or nuclear, coal, any really power project
14 has a process that you go through effectively from
15 the feasible stage and sponsorship developments,
16 capacity. Blue Castle acts as that and transitions
17 through all phases of the project as both an owner
18 and joint operator with inside the project along with
19 the other utilities that will come into the project.
20 So there will be multiple owners and it will be
21 operated through basically a typical operating
22 agreement from multiple owner perspective.

23 SARAH FIELDS: But you don't know who those
24 other entities will be?

25 AARON TILTON: We are currently negotiating with

1 other utilities and working through the process. It
2 is a normal part of the process -- it takes a couple
3 years to work that out just like IPP, Palo Verde, any
4 of the large power plants within the western region
5 are multiple-owner power plants.

6 SARAH FIELDS: I do have one other -- I need to
7 know about the nuclear waste. What's going to
8 happen?

9 AARON TILTON: I'll defer to the issues of spent
10 fuel to Dr. Diaz.

11 NILS DIAZ: There will eventually be an
12 owner-operator entity identified, and that
13 owner-operator entity will be responsible to the
14 Nuclear Regulatory Commission for the construction,
15 operation of the plant, and that entity will receive
16 federal scrutiny as to what its capabilities,
17 experience, financial, and everything and all of
18 those will be part of the public record.

19 Now, with regard to spent fuel, or used
20 fuel as we call it today. There is no doubt that for
21 the first years of operations of the plant, the spent
22 fuel, used fuel, will be stored in the plant and most
23 probably will be stored in there for a period of 40
24 years. It is now clearly proven that, you know,
25 spent, used fuel is very safe inside the plant. They

1 put it in a swimming pool first to cool it, and then
2 it's removed and it will be put in dry cast. The dry
3 casts are formidable structures which are now
4 designed against aircraft crashes, fires, et cetera,
5 et cetera. And they will remain in there -- it will
6 be occupied in the life or the lifetime maybe the
7 volume of this room. That's all the fuel in the
8 plant.

9 There will be fuel, new fuel, coming into
10 the plant every two or three years. One truck will
11 come in, and nothing will leave. It will stay inside
12 of the plant. It will be safeguarded, and it will
13 remain in there just like it is in the other power
14 plants in the country. There probably will not be
15 any transportation of used fuel out of Utah until the
16 federal government has now -- which is I think it
17 will put in place a program to actually -- we call it
18 used fuel disposition in which the fuel will be
19 actually put in the best manner possible including
20 maybe repossessing it to separate the long-lived
21 activity and capture that so what will be left will
22 be a very small volume -- will only have a
23 radioactive life of about 300 years. At the end of
24 300 years, it will have the same radioactivity as you
25 would have in many of your carriages in here, and

1 that's probably what it is, but I say probably
2 because it is not a program that has been completely
3 determined. What has been determined by the Congress
4 of the United States is the fuel will stay in those
5 plants in a safe and secure manner.

6 SARAH FIELDS: Indefinitely.

7 NILS DIAZ: Indefinitely no.

8 SARAH FIELDS: Indefinitely because at this time
9 you really don't know where and how that spent fuel
10 will -- high-level nuclear waste -- some people call
11 it high-level nuclear waste -- will be disposed of.
12 You really do not know that at this time.

13 NILS DIAZ: From my experience -- and I don't
14 want to get in an argument in any way with you, I
15 think -- a tremendous respect all my life for people
16 that have concerns, and I have tremendous respects
17 for your concern. But the reality is that the
18 government of the United States will have a program
19 to take care of the spent fuel, used fuel, in a
20 manner that protects the health and safety of the
21 people of this country. Of that, ma'am, you can be
22 assured.

23 SARAH FIELDS: I did have one -- I guess that
24 will be it. Thank you.

25 HEARING CHAIRMAN: Thank you, Ms. Fields.

1 Another question I think right here in the red shirt
2 in the front.

3 BRUCE ADAMS: I'm Bruce Adams, chairman of the
4 San Juan County Commission. I would like make a
5 comment about the proposed change of water right from
6 the San Juan County Conservation District. I don't
7 have a question of the project, but I'd like to make
8 a comment.

9 HEARING CHAIRMAN: Okay. Very good. Go ahead.

10 BRUCE ADAMS: Under the laws of the state of
11 Utah, county commissioners appoint members to the
12 Water Conservancy District Board in the county and we
13 take serious the principal obligation of the Water
14 Conservancy District as they try to develop water
15 resources of the State of Utah. And in that
16 development process, we worked hand in hand with the
17 Water Conservancy District on a variety of projects
18 within our county. The Water Conservancy Districts'
19 request for a change involves a lease that has been
20 executed with Transition Power for 24,000 acre feet
21 of water from San Juan County.

22 And I want to let you know that development
23 monies are pretty hard to come by in the state of
24 Utah. We've worked with Water Resources and other
25 entities to get money to develop our water rights in

1 the county. This is one of the water rights that
2 we're anxious to get proved up on and look at this as
3 an opportunity to prove up on the water rights that
4 have been filed by the Water Conservancy District.

5 The money generated from the lease with
6 Transition Power, we anticipate will be used to
7 develop other water projects in San Juan County. Not
8 the least of which is a possible reservoir that we've
9 been working on called Clay Draw Reservoir for the
10 beneficial use of the public, and we have another
11 proposed project to increase the size of Dry Wash
12 above Blanding, again, for the beneficial use of the
13 public and more recently another project to develop
14 water in Spanish Valley in the northern end of San
15 Juan County. And we would hope that with the lease
16 money that we receive from Transition Power that we
17 would be able to successfully develop those other
18 water resources or other water rights.

19 And so San Juan County Commission is very
20 much in favor of this change of application, and we
21 are in the process of preparing a resolution from the
22 San Juan County Commission to submit to you as a
23 supporting document supporting the efforts of the San
24 Juan County Water Conservancy District. Thank you.

25 HEARING CHAIRMAN: Thank you, Mr. Adams.

1 There's some other hands in the back, one back here.

2 MICHAEL PECK: Thank you.

3 HEARING CHAIRMAN: Could you state your name,
4 please.

5 MICHAEL PECK: Michael Peck. I live in Castle
6 Valley.

7 HEARING CHAIRMAN: Thank you.

8 MICHAEL PECK: My concern is -- and I think I
9 want to just direct this to the company. I'm
10 concerned about the privatization of water rights by
11 businesses and what that will look like if in the
12 process of this next five years something goes wrong
13 and they are not permitted to build this nuclear
14 plant. Will they still -- will Blue Castle still
15 have those available rights and can they then sell
16 them at a profit when we are a known drought area
17 right now. So that's something that really concerns
18 me because they have -- they'll have 50,000 acre
19 feet. That's a lot of people's drinking water.

20 Also, I can't understand why when they
21 presented up here all these various options for
22 creating power, which is necessary, that they had no
23 solar power which neither creates any water usage or
24 any emissions and could probably be online quicker.
25 And also, thirdly, I think that when they base their

1 whole Colorado River water and Green River water on
2 the past 30 years or so and in the last two years
3 we've been told our snowpack and so forth is going
4 down.

5 So we don't have a guarantee, as they seem
6 to think they have, that we will have the same amount
7 of water to operate with. And they've said that
8 should anything happen, they can't shut this plant
9 down because it will probably have a meltdown if they
10 don't have water. They can't shut it down if we need
11 the water for humans outside of just power in LA or
12 Las Vegas or some other state. Those are my three
13 questions.

14 MIKE NOEL: Mike Noel, Kane County Water
15 Conservancy District. I'm going to answer this
16 question because the water rights do belong to the
17 citizens of Kane County. We did not sell the water
18 right to Transition Power. We leased those water
19 rights for a period of time. There are specific
20 parameters in the contractual agreement that we have
21 with them that they have to develop those within a
22 timely fashion.

23 Once the change application is approved,
24 there's a substantial amount of money that starts to
25 come to the county. So it's incumbent upon them to

1 follow through on this in a rapid manner, and then
2 when the project is completed, of course, as the
3 commissioner from San Juan County stated, that
4 increases by tenfold. So those water rights will be
5 developed.

6 The other question -- again, water rights
7 are in fact a property right in the state of Utah.
8 They have to be put to beneficial use. Water rights
9 are traded and sold all the time. So to say that
10 "I'm afraid these will go into private interest,"
11 water rights are in fact a private interest in terms
12 of how you use those water rights. If you keep them
13 in beneficial use, you continue to use them. I have
14 many, many to water rights myself to farm, to raise
15 hay, to do other things with on my own private
16 property. So those are mine as long as I use them in
17 a way.

18 Let me for just a second put on my
19 legislative cap as a chairman of the public utilities
20 committee. This gentleman talked about solar power.
21 I'm very, very supportive of that, in fact, passed
22 legislation that allowed for tax credits for solar
23 power and renewable energy. It's very, very
24 important we do that. The problem we've found in
25 dealing with all the public utilities in the state of

1 Utah including those nonprofits such as Deseret and
2 different companies that are involved with that,
3 which is a nonprofit organization, is the need for
4 base load power, which we have not been able to get
5 from renewal except for sources like geothermal.

6 So when he talked about solar power, no one
7 has come up with a methodology when the sun doesn't
8 shine, the wind doesn't blow to be able to use that
9 as base load power. We need base load power in Utah.
10 We are growing still at a rapid rate. We'll need
11 that power. So having this base load power available
12 is a good thing for the people of Utah.

13 You mentioned the fact also that we seem to
14 sometimes say, "Well, water is more critical than
15 power." In my area, without power, we don't have
16 water. 90 percent of our water is generated from
17 wells. Most of the people in areas in -- a lot of
18 the people in Utah do require power for water, so
19 it's a very important need to have the power to
20 generate the water. Put those in perspective, which
21 is more important, I'm not sure if you can answer
22 that question. The water again is in our name. It's
23 the same contract I believe with San Juan County.
24 I'll let them answer for them, but we did not sell
25 the water to them. We leased the water to them.

1 HEARING CHAIRMAN: Thank you, Mr. Noel. Does
2 that answer your question, Mr. Peck?

3 MICHAEL PECK: That answers my question about
4 the water. I'm glad to here they lease them.

5 NILS DIAZ: Let me just for the record, yes, we
6 can shut a nuclear power plant down. It's no
7 problem. We shut them down all the time.
8 Practically today we can go on the record and you can
9 see nuclear power plants shutting down. The issue I
10 think was brought very well by Mr. Noel. When you
11 have a power plant that is producing electricity for
12 hundreds of thousands of homes and you are, you know,
13 faced with the fact that there has to be a decision
14 whether how much power is produced and how much water
15 is taken, that decision is a major decision. It will
16 be undertaken by the people that are responsible for
17 it, and we might very well be, as I've seen happen
18 many times, that we will bring the power down a
19 little bit. It is necessary when we do this, by the
20 way, with hurricanes every year. The hurricane
21 coming, people say, "We're going to shut this power
22 plant down." Then the power plant is shut down. The
23 Environmental Protection Agency comes in, they look
24 at it, and then the power plants are off. No
25 problem. It is the fact that by removing that asset,

1 base load generation asset, you are actually creating
2 problems that are as complicated or more complicated
3 than the use of power. It can be worked out, and
4 when we do -- we have done it now for 50 years. We
5 work those thing out. We make it in a manner that
6 the people get the most benefit from whatever is
7 happening.

8 HEARING CHAIRMAN: Mr. Diaz, if you might do me
9 a favor, some of the people here might not understand
10 exactly what you mean when you say base load power.
11 Would you offer kind of a basic definition of that
12 for us.

13 NILS DIAZ: Sure, sure. Base load power is
14 power that is generated essentially at a constant
15 rate, 24 hours a day, seven days a week, sometimes
16 365 days of the year. It is what provides the amount
17 of power that is used mostly, okay, during, you know,
18 the day and provides the essential part of the
19 electrical generation. After that there are changes,
20 people turn their lights off at night, industry goes
21 off, commerce close their doors. And so there are
22 peak loads that come and go. Base load generation
23 has the quality of staying on. It stays on it. Is
24 not intermittent like solar power, which is a nice
25 thing to have. It's not intermittent like wind

1 power, which comes and goes. This is constant. It
2 is there. You can rely on it. When you turn your
3 light switch on, most of the time you're relying on
4 base power. And that's what this is. That's what
5 the big coal plants do. That's what nuclear plants
6 do. They are on all the time. On the average 90 to
7 92 percent of the time. So they do shut down maybe
8 10 days every couple of years or 20 days every couple
9 of years. The rest of time they are on, and normally
10 they are on at full power all the way through.

11 HEARING CHAIRMAN: Thank you very much. One
12 more question in the back, and I think we'll go ahead
13 and break for lunch. So you'll get the last word
14 this morning. How about that? I mean this
15 afternoon.

16 CHRIS DUNHAM: My name is Chris Dunham. I live
17 here in the valley. I just had a question about has
18 there been any consideration about the safety, say,
19 of the river system if there's a failure in this
20 plant? I heard Dr. Diaz talk about the spent fuel
21 rods are put in water. I heard him say there's going
22 to be a 2,000 acre foot storage. If I understand
23 that right, that's a thousand acres with water
24 two-feet deep; is that right?

25 MR. MABEY: No. A hundred acres.

1 CHRIS DUNHAM: A hundred acres with water
2 two feet deep?

3 HEARING CHAIRMAN: A hundred acres with water
4 20 feet deep.

5 CHRIS DUNHAM: A hundred acres with water
6 20-foot deep -- that's going to be out here a mile or
7 whatever above this river. What happens if somebody
8 comes in and terrorizes the plant, first of all?
9 That would be my question. I know in World War II
10 they bombed entire cities flat. We are going to have
11 a nuclear reactor sitting right besides this stuff, a
12 hundred acre pond of water that's 20 feet deep. Has
13 that been considered at all? That's my question.

14 NILS DIAZ: Again, every one of those issues,
15 which are very important issues -- and you're
16 entitled to answers -- will be answered completely.
17 And for the record there will be a complete and
18 detailed analysis of every one of those issues. The
19 existence of nuclear fuel -- has anybody ever heard
20 of an accident with nuclear fuel or release of
21 radioactivity with nuclear fuel? No, you have not.
22 It has never existed. It has never been.

23 CHRIS DUNHAM: Chernobyl.

24 NILS DIAZ: No. Chernobyl is a reactor.
25 Chernobyl is a reactor and it's made for weapons. It

1 is not a reactor like we have here, but fundamentally
2 with nuclear fuel, spent fuel, there has never been
3 an accident. There has never been a release. There
4 has never anything happen to it. It is very secure
5 and very stable and kept very, very well.

6 Regarding safety, it's a very, very
7 important question. This nuclear power plant by all
8 standards of safety are very safe, and the new plants
9 are even safer. They have redesigned and have
10 established, you know, a model of safety that has no
11 parallel in the industrial society. They actually
12 provide an assurance of safety that is unique. It is
13 continuously monitored, continuously checked, and
14 they operate day in and day out.

15 There is practically -- you know, everybody
16 talks about Chernobyl. I will be happy to come one
17 day in here and give you an eight-hour seminar on
18 Chernobyl because, of course, I come pretty much
19 informed with it. It is not an issue we're dealing
20 with. It's a totally different type of plant. It
21 was a dictatorial government that actually took it.
22 You should not look at the nuclear power plants in
23 the face of what the Soviet government did. Look at
24 what we do and look at the care that we take in
25 assuring that those plants protect the health and

1 safety of the public, and that's what you will have
2 to the mean degree in which these plants are
3 tremendously safe right now all the time. I hope
4 that answers your question, but I will be available.

5 HEARING CHAIRMAN: In regards to the aspect
6 about the pond, is there any constituent in the water
7 other than the Green River water that's diverted in
8 the pond, say, if there was a release of water from
9 the pond? Would it just hold Green River water; is
10 that correct?

11 MR. MABEY: Yes.

12 HEARING CHAIRMAN: Okay. Thank you very much.
13 Well, I hope that answers some of your questions this
14 afternoon. We're going to go ahead and break for
15 lunch. If you have other questions when we come
16 back, I think what we'll do is go ahead and begin
17 with presentations by the protestants to start with
18 and hopefully you'll have your questions answered in
19 the course of those presentations. It's a little
20 after 1:00 now. We'll go ahead and break, say, until
21 2:00, perhaps a few minutes after 2:00, but we'll try
22 to begin as close to 2:00 as we can. So we'll go
23 ahead and take a recess at this point. Thank you.

24 **(A lunch break was taken.)**

25 HEARING CHAIRMAN: This is the hearing again on

1 the Kane County Water Conservancy District and San
2 Juan County Conservancy District applications under
3 Change Application 89-74 and 09-462, and we've been
4 taking a lunch break. We're going to go ahead and
5 recommence that hearing now. So far today we've
6 heard from the applicants. We've also had some
7 questions from the protestants.

8 What we'd like to do now in order to
9 facilitate offering everyone the opportunity to speak
10 hopefully and to have their concerns addressed, we're
11 going to go down through the list of protestants, and
12 there are roughly, I would guess, about 50 of those
13 that we need to wind up offering the opportunity to
14 speak. So as you can see, it's going to be rather
15 time-consuming. HEAL Utah is the first protestant
16 that we would like to turn to. I believe that they
17 had been -- they are represented by John Flitton, an
18 attorney.

19 So Mr. Flitton, we'll go ahead and turn to
20 you for a statement of your protest, and also you
21 have indicated that you had some questions of things
22 that you would like to ask of the applicant, perhaps
23 get responses from them on. Mr. Flitton.

24 MR. FLITTON: Thank you. As noted, I'm
25 John Flitton, I'm an attorney representing HEAL Utah.

1 I'm also here representing Bill and June Adams, who
2 are water right holders along the Green River. I
3 know that we spoke just before the break about the
4 question-and-answer portion, and I do have a few
5 questions but maybe we could dispense with some of
6 those questions in the sake of time and making sure
7 that everybody has an opportunity to speak today at
8 this hearing -- you know, I could dispense with that.

9 My understanding is that the applicant has
10 agreed to leave the record open for a period of time,
11 and if, you know, we could go ahead and have some of
12 the questions answered during that period, I think
13 that would be helpful not only for myself but anybody
14 that might have questions out here.

15 Turning to the protest of HEAL Utah and the
16 Adamses, we've heard a lot of information today that
17 has run the gamut of issues that are included under
18 section 73-3-8. And in my mind, the statements that
19 have been made today have really left more questions
20 than they've given definitive answers. I think the
21 picture that's been presented and I've heard over and
22 over again is that this application should, you know,
23 move forward to allow this project to move forward
24 and that everything will be taken care of at the end
25 of day, that all of the environmental issues will be

1 taken care of under the NEPA process as part of the
2 NRC review, that we don't really need to worry about
3 this financial issue, and that the water right is
4 something that we should be looking to develop here
5 in this scenario.

6 And I think that it's important that we
7 recognize who has the burden here and what this
8 proceeding is really about, and this is a significant
9 application. There's a lot of people at this
10 hearing. There are a lot of people that are
11 concerned about a number of aspects that this change
12 application raises, and I think that each one of
13 those issues should be taken seriously and should be
14 considered seriously by the State Engineer.

15 I think it's his duty in reviewing the
16 application and certainly it's his statutory duty to
17 make sure that he fully investigates the issues that
18 are raised here today and any particular issues
19 related to the water rights and the natural stream
20 environment and public welfare as set forth in the
21 statute. And I think that at the end of the day,
22 given the nature of this water right and given the
23 nature of this change application, that it is the
24 burden of the applicant to demonstrate that they will
25 not impact, interfere with existing water rights on

1 the system and that there is in fact water available
2 for appropriation.

3 I recognize this is not an application to
4 appropriate, but I also recognize that the statute
5 requires that review even under a change application
6 process and particularly in the case where water is
7 being moved so many miles upstream into a completely
8 different area. And, you know, if you look at the
9 historical water rights point of diversion and you
10 make the assumption that some of the water came from
11 Green River, you know, given the flows that go into
12 Lake Powell from the Green River, that would make up
13 for only about 30 percent of the waters in Lake
14 Powell.

15 And then, you know, you've got to take into
16 account all of the water rights that will be impacted
17 on the entire Green River system from at least the
18 point of diversion down, and given the testimony that
19 we've had today about the ability to respect priority
20 cuts, I think that it affects the river all the way
21 back up to Flaming Gorge Reservoir. I think the
22 water right holders who are above this diversion, if
23 push comes to shove and this applicant were approved
24 and this nuclear power facility were built and began
25 operating, ultimately for the public safety and the

1 public good, even upstream senior water right holders
2 are going to have to release water down to make sure
3 that this power plant has water so that you don't
4 have a nuclear disaster, so that there is not a melt
5 down, so that the cooling can continue to take place.
6 And I haven't heard anything that suggests that this
7 nuclear power plant can respect those types of
8 priority cuts on a regular basis.

9 I think that, you know, addressing the
10 standards here, you know, there's a long line of case
11 law that addresses change applications and more
12 recently there's more importance that have been
13 placed on the courts in looking at all of the issues
14 that are considered, and I think that, you know, one
15 of the things that my clients -- and I've heard it
16 asked from a lot of the protestants here is that we
17 have an opportunity to fully digest what's been
18 presented to us today and to respond.

19 You know, the applicant has had the
20 opportunity to bring in experts to address issues
21 that we could only guess at before we came here today
22 and present its best case for why this water right
23 application should be approved. Most of the
24 information that is critical to this application is
25 really not so much contained in the application. You

1 know, the questions that still remain are -- and I
2 think they may remain for the applicant as well is
3 what is the exact technology that's going to be
4 employed in this treatment plant? What are the exact
5 water requirements going to be?

6 We've had a lot of guesses that have been
7 given today about what type of operation and how all
8 of this is going to work, but, you know, looking down
9 the future and having these assurances that "Well,
10 the NRC will take care of that. They'll make sure
11 that that's" -- I think that's passing the buck just
12 a little bit.

13 Going through each of the specific issues,
14 so I make sure that we create an accurate record of
15 at least our position on many of these things, you
16 know, I think that in looking at whether or not there
17 is water available to make this appropriation and
18 certainly looking at whether or not this will impact
19 existing water rights on the system, I think that the
20 first and foremost there is a lack of information.

21 In preparing to come today I went through
22 the records of the State Engineer's office, and I
23 looked at the Environmental Impact Statement on the
24 operation of the reservoir and the read the Colorado
25 River Compact, and I've looked a lot of the

1 information. And one of the things that hasn't been
2 presented is an actual water budget.

3 You know, I hear a lot of talk "Well, we
4 think this will work because I've got the gauging
5 station records for the Green River at this location,
6 so we can extrapolate that information and make a
7 conclusion that there's water available for
8 appropriation." But what I do know is the State
9 Engineer said over and over again that the system is
10 over-appropriated. I do know that the Green River is
11 closed to new appropriations except for minor
12 appropriations, and I do know that those things have
13 been -- those actions have been taken because of
14 concerns that there's really just not enough water to
15 support these applications.

16 And I'm not very comfortable with a
17 viewpoint that says "We're going to ignore all of the
18 applications that are out there that may be --
19 diligently being prosecuted in terms of perfecting
20 those interests, that we're going to exclude all of
21 those applications for our consideration, and we're
22 going to look at just the gauging station flows in
23 determining whether or not this water right can be
24 approved."

25 We've already heard that, you know, State

1 Engineer recently approved a water right for Wayne
2 County Water Conservancy District for a significant
3 quantity of water. Well, you know, that
4 consideration of that prior approval has to be taken
5 into account when looking at this water right
6 approval because pretty soon you start getting those
7 accumulative impacts that there isn't sufficient
8 water.

9 And I just don't believe there is water
10 available in the source, and what I would ask the
11 State Engineer to do is exercise his obligation to
12 investigate and come up with a definitive position on
13 how these types of large scale change applications
14 coming into this portion of Green River are dealt
15 with and what the water budget looks like, whether or
16 not there is actually unappropriated water in the
17 source. Because I think that as you track through
18 all of the things that are happening on the Green
19 River system, I don't believe that there is
20 unappropriated water.

21 What I've heard today is testimony that
22 focuses and really presents the best case for the
23 applicant, but there are a couple things that I think
24 have been ignored relating to the availability of
25 water supply and ultimately to the impacts to

1 downstream. But I think that the EIS -- and I didn't
2 hear either Mr. Olds or Mr. Hardy directly address
3 the EIS in terms of an analysis. But I do know that
4 the State Engineer recently implemented or adopted a
5 policy for the upper reaches of the river system, and
6 I think that that policy is completely consistent
7 with the State Engineer's stewardship over the waters
8 and the commitments that the State Engineer's office
9 has made and the state has made to the Fish and
10 Wildlife Service under the Endangered Species Act.

11 And, you know, looking at the history of
12 operations of the dam, I mean, clearly, you know, the
13 flows that were being released pre2007 are different
14 than the flows in some respects that are being
15 released from the reservoir today. But one of the
16 things the State Engineer's policy does that I think
17 is critical here is that policy for that upper reach
18 of the river takes into account the flows that are
19 being released under the operating plan from the dam
20 to protect the natural resources and the aquatic
21 habitat along the Green River from the Flaming Gorge
22 Dam all the way down to the Colorado River.

23 And although that policy only applies to
24 the area currently above the Duchesne River, the
25 shepherding of that water down through the entire

1 system is completely consistent with the rules that
2 are set forth in the Environmental Impact Statement.

3 If you go back to the 2000 study, back to
4 the 1992 study, that was clearly what was required
5 under the Endangered Species Act was to make sure
6 that we provide protected habitat for the four
7 endangered fish that are on the river. I know the
8 Fish and Wildlife Service has filed a protest and
9 certainly can speak for themselves, but there are
10 broader issues as well in terms of threatened species
11 and species that may become listed along the river
12 system.

13 So if you take into account the water
14 that's being released from Flaming Gorge Reservoir
15 and you try to look at what the target numbers are
16 all the way down the system through both Region 1, 2,
17 and 3, you're going to see the numbers that were
18 presented here today by the applicant are less than
19 the quantities of water that are being released from
20 Flaming Gorge Dam to provide these base flows for
21 fish and wildlife habitat.

22 So I would suggest that in addition to the
23 fact that the basin is closed for appropriation, that
24 the numbers that are presented based on flow
25 measurements don't accurately account for what water

1 has in fact been appropriated because those are
2 beneficial uses that are being made of that water
3 already.

4 I won't spend a significant amount of time
5 on this issue, but the applicant has presented a lot
6 of information that tries to suggest or state that
7 that this project is economically feasible, that it's
8 viable. And they presented information today that
9 that suggests that nuclear power is a cheap power
10 supply and that it's much cheaper than gas and it's
11 much cheaper than coal. And I think we could sit
12 here and argue about it for a substantial period of
13 time.

14 I just would like to make two, you know,
15 fairly pointed comments. One is that, you know, that
16 the cost estimates for nuclear power plants are
17 calculated in a number of ways, and it depends on
18 which calculation you use with respect to operating
19 expenses and other things to really get a clear
20 understanding of what the cost is of these plants and
21 how feasible it really is, whether we're tying our
22 water up for a resource that's actually is
23 economically feasible.

24 And I would note that just recently a
25 nuclear power plant is being constructed near

1 San Antonio. And cost overruns -- the estimates were
2 far less than the cost of that nuclear power plant
3 were going to be and what they concluded in that
4 circumstance is that -- they far exceeded what the
5 economic viability is to the consumers of that plant.
6 And I don't want to sit up here and make naked
7 statements. I actually have a paper that I would
8 like to submit -- I don't have it in front of me --
9 that addresses the operating cost calculations. And
10 I'll present this for the record.

11 Just for reference, it's the Economic
12 Infeasibility of Nuclear Power Generation in Utah.
13 And it's a statement that was prepared by Bernell K.
14 Stone, who is the Harold F. Silver Professor of
15 Finance at Marriott School of Management at Brigham
16 Young University. So I'll present that to the record
17 that way it will be available to everybody that is
18 here.

19 Another point that I would like to make too
20 and what I felt like was glossed over a little bit
21 during the applicant's presentation is this issue of
22 whether or not this project will get built. We've
23 been presented with the scenario that says "We've got
24 these investor and everything is going to work out
25 and we're going to get this power plant funded and

1 we're going to get this built." And one of the
2 questions that I intended to ask as an additional
3 question was how many of these power plants in the
4 last 15 or 20 years have been funded without federal
5 loan guarantees, because the projects that are being
6 built are only being financed if the federal
7 government makes loan guarantees. And as the
8 applicant has correctly stated, there are four
9 projects in the pipeline right now. They are ahead
10 of the queue. And there's just over \$18 billion that
11 has been appropriated for federal loan guarantees.

12 And most -- I think there's little
13 disagreement that all of that money is probably going
14 to be used up by the first three of those four
15 projects, and that doesn't leave any federal loan
16 guarantees available for anybody that's coming along
17 in the future. That's not to say Congress may not go
18 in and appropriate that, but they've tried and
19 they've tried a number of times.

20 In fact, they tried this last year, and
21 they were -- you know, it was not passed, and so you
22 know to paint the picture that this project is all in
23 the pipe and it's going to go through and these
24 monies are available I think is not giving the
25 complete picture.

1 And I think what's important about this and
2 why this particular water right filing is more
3 important than it usually is is because these water
4 rights that this is based on have already been
5 sitting around for 45 years without being perfected.
6 You know, we're coming up on 50 years, and if this
7 application is approved and the contract for the
8 lease is solidified and they want to keep holding
9 this -- we were presented with a lot of years of, you
10 know, "We can hold this application or this permit
11 for 20 years, and we can develop this project later
12 on, and all these things can fall into place." You
13 know, you start getting out there 70 years or 80
14 years before this water is ever put to use.

15 And, you know, the applicants have made the
16 point of saying several times that it should be the
17 state's policy to try to use up our allocation of
18 Colorado River water, that we want to try to use that
19 within the state. But, you know, I would suggest
20 that letting the applicant hold onto this water and
21 change it from all of these different purposes and
22 you've gone -- on both water rights you've gone from
23 coal-fired generating plants that were never
24 constructed, that were never built, and no water was
25 ever diverted to these applications that, you know,

1 seek to really do the same thing and just keep
2 perpetuating this holding of water into the future
3 for a long period of time.

4 One of the other things that I wanted to
5 have addressed was -- I still don't -- and maybe I'm
6 a little bit thick, but I still don't have a very
7 clear understanding of how this whole plan seems to
8 be coming together on the part of applicants. It
9 sounds to me from the statements they made in their
10 presentation that really they are more involved in
11 the siting and the permitting of these projects. I
12 didn't hear any real definitive statement that says,
13 you know, "It's us that's wants to build this plant,
14 and we're going to be the ones responsible and we're
15 going to be the ones diverting this water and using
16 this water in the future."

17 What it sounds to me like is an investment
18 plan that says, "Hey, this is a really great idea.
19 We've got an energy corridor here. We can take
20 advantage of that, and we will go ahead and put
21 together this package and put some money upfront on
22 the risk that we'll get this project permitted with
23 the NRC and then look what our license is going to be
24 worth when we get down the road. We'll get all these
25 big entities to come in and buy into this project."

1 Well, you know, if that's the case and
2 there really isn't the ability, the intent -- I heard
3 a little bit about management. I didn't hear about
4 operations -- that raises the specter of speculation.
5 And, you know, Utah has been loathe in the past to
6 really jump into the speculation, but I think one
7 place that is very clear and especially taking the
8 guidance from Colorado cases on speculation is that
9 if you don't have the land and if you don't really
10 have the ability to put this water to use and it's
11 just a far-fetched goal, the state policy suggests
12 that we don't allow these applications to be held on
13 the river system for a long period of time without
14 actually having anything done.

15 And, you know, the recent extension request
16 approved by the State Engineer made it known that
17 "Hey, you know, this is a relaxed standard here.
18 We've got this water, and we're relying on Kane
19 County's ownership of the water as a basis for
20 saying, you know, 'You don't really have to do
21 anything. As long as you tell us you're holding it
22 for the public, you're holding it for the public.'"

23 One thing I would note is if you really add
24 up time frames, this is a 60-year project. We were
25 told at the beginning of this hearing, and you've got

1 this contract out there that, yeah, has an initial
2 term of 40 years but the sole discretion to be able
3 to renew that is for an additional 30 years on the
4 part of the developer of the nuclear power facility.
5 If it took a long time to get out there, you held
6 this water out much longer than the statutory period
7 allows potentially.

8 And I know that there are a lot of water
9 users here in the area locally that would be able to
10 use a new appropriation, you know, next year. If
11 this water were available somehow for the irrigators
12 and the other users that could actually place it in
13 beneficial use now, I think that that would be the
14 case. And, you know, certainly looking at, you know,
15 the public welfare, I'm not sure that the applicants
16 have met the burden of showing this really is a plan
17 that is going to all come together and it's going to
18 work.

19 I am concerned that this process is being
20 dictated by the agreements that the applicants have
21 entered into. And when I speak of applicants, I'm
22 speaking of both the conservancy districts and Blue
23 Castle because, you know, this application has really
24 not been fleshed out very well, and I think today was
25 a major step in getting understanding of what's

1 proposed and how it's all going to work and how it
2 plays off here is important.

3 One -- there's a few housekeeping matters
4 that I would like to address and frankly just with a
5 point of -- the protestants need additional time, and
6 I'm happy to hear that the applicant is willing to
7 grant that additional time so we can review that
8 because I think that it's important for the State
9 Engineer, and I think it's important for all of us in
10 this room to know that all of the issues are being
11 looked at and that the State Engineer has all of the
12 available information to make the best decision for
13 everybody.

14 But a couple of housekeeping items, I do
15 have a few things I would just ask the State Engineer
16 to clarify, but one is I heard a statement during
17 Mr. Olds's testimony that he would address what the
18 peak flows would look like beyond the 70 second feet,
19 and I think he referred to the refilling of the
20 ponds. My assumption is that that will be, you know,
21 a fairly insignificant additional amount of water in
22 the order of maybe a couple second feet at the most.
23 But I think that raises an important issue for the
24 State Engineer to look at, and that is that in
25 addressing this application, the statement was made

1 "We'd like to have the flexibility and we'll deal
2 with that at the NEPA process."

3 I think the State Engineer has a duty to
4 define what that diversion rate is, and I think it
5 makes a difference whether even at 72 second feet or
6 70 second feet, I think that's a component part of
7 the water right that the State Engineer must look at
8 and determine the quantity of water because the
9 impacts are slightly different with respect to that.
10 And I just -- you know, my basis here in making this
11 protest is that, look, you've got a lot of
12 assumptions that are being made, and I think that the
13 State Engineer really needs to dig a little bit
14 deeper.

15 I think the State Engineer needs to make
16 sure that there's a full understanding, and I think
17 that one of the things we need to request also is
18 that the State Engineer justify the basis for his
19 findings in maybe a little more particularly in this
20 case because of the open questions that are out there
21 about how some of these policies are going to be
22 implemented and how these things are going to be
23 taken care of so the water users on the Green River
24 have a clear understanding moving forward about what
25 they are up against and what's going to happen with

1 their water rights.

2 And in particular I think this priority
3 question that was discussed is of, you know,
4 considerable importance because my understanding is
5 that you can't just have a priority cut system work
6 with this plant, and I think it makes perfect common
7 sense you can't shut off a nuclear reactor for the
8 farmer up the river. But given that is the case, I
9 think this application reviewed by the State Engineer
10 needs to be under a much higher standard of critical
11 review in terms of what the impacts are going to be.

12 You can't just assume that some of the
13 things that normally would be taken up would be taken
14 care of by the fact it has a 2009 priority because in
15 my mind it's going to end up with what I consider
16 super priority. It will be the first water right on
17 the system because the public safety will demand
18 that. Thank you. I appreciate your time.

19 HEARING CHAIRMAN: Thank you, Mr. Flitton. The
20 application has also been protested by the Grand
21 County Council members. I understand, Mr. Greenberg,
22 you're representing them.

23 BOB GREENBERG: Bob Greenberg. I was chairman
24 of the council in October when after considerable
25 debate and disagreement, the council voted to

1 formally protest Application a35874. We found
2 ourselves in an uncomfortable position between our
3 friends and neighbors to the north and west and in
4 Emery County and to the south in San Juan County who
5 have made this application and stand to have the
6 plant sited in their county.

7 Grand County is very concerned about a
8 number of issues including whether or not this
9 project might be detrimental to the public welfare.
10 As of now, we've been not part of the dialogue even
11 though we clearly will be within the emergency
12 planning zone for a nuclear reactor in Green River.
13 And we look forward to a process, if it continues,
14 that includes us in this.

15 In hearing today's testimony and reviewing
16 the matter, I won't reiterate our written protest but
17 I will note that the State Engineer's in a difficult
18 position because he's required to make a
19 determination based in part on whether or not the
20 plant is economically feasible, and that in fact will
21 not be known until way further down the road as the
22 applicants have so well presented today. They have
23 right now funding committed for roughly half the
24 permitting process and none at all for construction
25 or operation. That speaks to its feasibility and

1 also to the applicant's financial ability to complete
2 the proposed project, which again simply can't be
3 known at this time the way the project is structured
4 and the way projects like this are structured.

5 So, again, we appreciate the opportunity to
6 speak here today, and you have for the record our
7 protest from October 6. Thank you very much.

8 HEARING CHAIRMAN: Thank you very much,
9 Mr. Greenberg, and you're right, the applicant -- or
10 the State Engineer is in a tough position so -- the
11 application has also been protested by the United
12 States Bureau of Reclamation. We'll turn to them now
13 for a statement of their protest.

14 JUSTIN RECORD: My name is Justin Record
15 (phonetic) on behalf of the Bureau of Reclamation.
16 We protested this application. Our protest can be
17 summarized in two concerns: One, this water right --
18 this change application is relying on the flows in
19 the Green River below Flaming Gorge Dam, and in the
20 past those flows have been there, but we -- I'd like
21 to just point out that things -- the past may not
22 represent the future. As water in Flaming Gorge is
23 contracted for or as deliveries are needed to be made
24 for either in-stream flows or deliveries to Lake
25 Powell for the Lake Powell pipeline, we may opt to

1 deliver that water.

2 And when we deliver that water, then the
3 only water that would be available for this
4 application would be accretion flows that occur below
5 Flaming Gorge, and I don't have good numbers as to
6 what the accretion flows are on a regular basis, but
7 I would imagine with a 2009 priority date of this
8 application in the Green River, that that would be a
9 significant issue to look into. And we would just
10 point out that water may not always be available, and
11 we can't guarantee without a water service contract
12 that we would make storage water available to this
13 applicant.

14 Now, there's a process where they can come
15 to the Bureau of Reclamation and apply for the right
16 to use the storage water in Flaming Gorge. In that
17 situation then we would make special releases to keep
18 this water right whole based on conditions of that
19 water service contract, but that contract -- we have
20 no contract. And at this point, if we deliver that
21 water to another use, it's our position they would
22 only be entitled to the accretion flows.

23 The other concern which I would bring up is
24 the priority date of Water Right 89-74, and the other
25 two water rights in that application are simply

1 segregations of that parent application. I just
2 point out that water right is approximately one year
3 senior to the CUP water right. That's the water
4 right that we use to fill Flaming Gorge -- not
5 Flaming Gorge -- the Starvation Reservoir,
6 Strawberry, Jordanelle. It's the water we use to
7 make exchange to Utah Lake. If that water right is
8 ever cut out, the CUP project is put on hold, that
9 water right is the water right that supports the
10 project. And this water right being one-year senior,
11 we are concerned with the over-appropriated nature of
12 the Green River.

13 As Jerry Olds aptly pointed out, there's
14 only 361,000 acre feet left for appropriation. And
15 when you look at those numbers available at the State
16 Engineer's website a little closer, Utah is entitled
17 to 1.3 roughly million acre feet. There's already
18 1.7 million acre feet of senior water right to CUP on
19 the books. And without a process to eliminate those
20 water rights or the ones that aren't being used --
21 because we're using roughly a million acre feet of it
22 now -- we could be in a very tight spot down the
23 road. If all those water rights come on line, the
24 CUP project's water right would fall out of priority
25 because Utah would be constricted to its Colorado

1 River Compact allotment.

2 So those are the issues we are concerned
3 about. How will these undeveloped water rights come
4 on line and how will they impact water right that's
5 junior to them but is developed? And we have
6 millions of people dependent on the CUP water right,
7 and we invested over \$2.2 billion in that water
8 right. So it's a significant investment in the state
9 of Utah.

10 And those are the two points that we would
11 bring up. Now I know those are big issues that
12 you'll be working on for some time, but we want them
13 to be thought of and maybe a plan to be formulated as
14 you think about this application. Those are our
15 comments. Thank you.

16 HEARING CHAIRMAN: Thank you, Mr. Record. The
17 application has also been protested by Uintah Water
18 Conservancy District. Is there someone here
19 representing Uintah? Okay. We'll let their written
20 protest stand on its own on the record.

21 The application has also been protested by
22 the United States Department of the Interior. I
23 presume that's the Fish and Wildlife Service, but I'm
24 not a hundred percent sure. So we'll turn to the
25 Department of Interior for a statement of their

1 protest.

2 PAUL BATES: Hello, my name is Paul Bates
3 (phonetic) and I'm a biologist at the U.S. Fish and
4 Wildlife Service Utah Field Office. I don't know if
5 there's anything separate from DOI besides ourselves.
6 Our protest was filed by our Division of Water
7 Resources Office which is an office within U.S. Fish
8 and Wildlife Services Region 6 office in Denver. And
9 I will be reading a letter from that Division of
10 Water Resources office that was drafted by the chief,
11 Megan A. Estep. Her subject is the Blue Castle
12 Nuclear Power Project Change Applications. The
13 letter is written to Kent Jones, the State Engineer.

14 "U.S. Fish and Wildlife Service has two
15 primary concerns regarding the applications to divert
16 53,600 acre feet of water from the Green River for
17 the proposed Blue Castle Power Project." I'll start
18 with the first one. "The river reach downstream from
19 the town of Green River provides significant habitat
20 for all life stages -- spawning, nursery, and
21 adult -- of flannelmouth sucker, bluehead sucker, and
22 it provides an important migratory route for
23 roundtail chub. The fish are considered state
24 sensitive species and have experienced reductions in
25 their historical habitat of about 50 percent. In

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1 response to these reductions, many natural resource
2 agencies include Utah Division of Wildlife Resources,
3 the Bureau of Land Management, the National Park
4 Service, the Bureau of Reclamation, U.S. Forest
5 Service, the Nature Conservancy, and the U.S. Fish
6 and Wildlife Service have signed a Conservation
7 Agreement with the stated goal of preventing listing
8 through proactive conservation actions.

9 "The Service believes these additional
10 depletions would weaken this conservation agreement
11 and contribute to the further decline of roundtail
12 chub, flannelmouth sucker, and bluehead sucker
13 through multiple ecological stressors including
14 habitat degradation and reduced water quality.
15 Further decline of these species could potentially
16 lead to their listing under the Endangered Species
17 Act, resulting in more regulated water development
18 throughout their entire range.

19 "Because these species range nearly
20 statewide, this would likely result in significant
21 regulatory restrictions in the state of Utah and
22 affect citizens far from the town of Green River.
23 Therefore, the proposed water right transfers do not
24 meet the public interest criteria. This concern was
25 referenced in our previously submitted objections

1 dated May 26 and September 25, 2009."

2 And our second issue, "The additional
3 depletions associated with these applications could
4 inhibit protection of flows identified the Upper
5 Colorado River Endangered Fish Recovery Program as
6 necessary for recovery of the currently listed
7 endangered fishes. The large depletions associated
8 with this project would greatly reduce these flows
9 below the diversion point. Flows released from
10 Flaming Gorge Dam support endangered species are a
11 cornerstone to the species' recovery and meeting the
12 flow requirements has been requirement for other
13 regulatory decisions.

14 "Recognizing the importance of these flows
15 for recovery of the species, the Green River Water
16 Acquisition Team," which is an ad hoc committee of
17 the Recovery Program, "is currently working to
18 develop mechanisms to protect water released from
19 Flaming Gorge Reservoir to maintain this habitat for
20 endangered fishes. Flow protection options the team
21 is considering recommending to the State Engineer
22 include limiting the upstream movement of water
23 rights ... subordinating new water rights filed to
24 previously approved rights and flows that are needed
25 to assist in recovery of endangered fish, limiting

1 extensions of water rights that have not been put to
2 beneficial use, limiting new storage projects that
3 could reduce spring flows, encouraging the use of
4 water service contracts for delivery of water from
5 Flaming Gorge Reservoir versus new direct flow rights
6 from the Green River, and implementing adaptive
7 management under the Biological Opinion for Flaming
8 Gorge as the endangered fish demonstrate recovery.

9 "Protecting Green River flows is critical
10 to maintaining suitable habitat in this system.
11 Because these water rights have not been previously
12 diverted from the Green River system but rather have
13 been established in other watersheds, they represent
14 and additional depletion the system may not be able
15 to support. The Service believes this large
16 depletion would have considerable negative impacts to
17 the Green River ecosystem, impairing the overall
18 ecological function of the river for many species
19 including federally listed species.

20 The reach downstream from the town of Green
21 River provide significant habitat for all life stages
22 of Colorado pikeminnow and razorback sucker and
23 reaches of the Colorado River further downstream
24 provide important spawning and rearing habitat for
25 bonytail and humpback chub. Specifically, the lower

1 Green River supports the most stable and productive
2 population of Colorado pikeminnow in the Upper
3 Colorado River Basin. Of even more importance is the
4 fact that maintaining a viable self-sustaining
5 population of Colorado pikeminnow in the Green River
6 is required for recovery of the species."

7 So in conclusion, "We are concerned that
8 moving unperfected tributary water rights upstream to
9 become mainstem rights on the Green River would cause
10 negative cumulative impacts on existing uses and
11 flows in the Upper Colorado River Basin. Habitats in
12 the Green River are considered critical to recovery
13 of endangered fish and protection of other native
14 fish. For these reasons, the Service requests that
15 the State Engineer deny, or at minimum, delay the
16 Blue Castle Power Project water transfer until after
17 the Water Acquisition Team has developed a plan for
18 protection of Green River flows for endangered fish.
19 Our preferred option to supply water for this project
20 would be through a contract from Flaming Gorge
21 Reservoir as this water would be delivered in
22 addition to water for endangered fish flows."

23 And once again it is signed by our chief of
24 Division of Resources, Megan Estep. Any questions?

25 HEARING CHAIRMAN: No, sir.

1 PAUL BATES: Okay. Thank you.

2 HEARING CHAIRMAN: Thank you very much. The
3 application has also been protested by the Utah
4 Chapter of the Sierra Club. We would like to turn to
5 them for a statement of their protest. Please state
6 your name also for the record if you would, please.

7 DAN MAYHEW: Thank you for this opportunity. My
8 name is Dan Mayhew from Moab, Utah, and in the
9 interest of time, I would refrain from reading our
10 prepared statement at this time, but we would like to
11 go on the record in endorsing and sharing all of the
12 concerns that have been presented by HEAL Utah and
13 Mr. Flitton. We share in those concerns. We do
14 believe they have addressed most of the concerns and
15 issues that we are concerned with as have the other
16 protestors.

17 But we would also like to go on the record
18 and indicate that the Sierra Club is in opposition to
19 nuclear power as a power source for the future
20 because it is a non-sustainable power source. And
21 despite assurances to the contrary, after many
22 decades of nuclear power use, there still has yet to
23 be a viable method for storage put in place. So we
24 have great concerns about the storage of the nuclear
25 waste that would be created at this plant. Thank

1 you.

2 HEARING CHAIRMAN: Thank you, Mr. Mayhew. If
3 you have a written statement or something you would
4 like to present other than you're already existing
5 protest on the file, you can give that us to if you
6 would like. If not, that's fine too.

7 DAN MAYHEW: Okay.

8 HEARING CHAIRMAN: The application has also been
9 protested by the Moab Local Green Party/Utah Green
10 Party. We would like to turn to them for a statement
11 of their protest.

12 HAROLD SHEPARD: My name is Harold Shepherd, and
13 actually also on that -- the protest was Red Rock
14 Forest, Moab, Utah. I am the acting executive
15 director for Red Rock Forest, and I'd like to make my
16 statements on their behalf. I'd like to start out by
17 asking -- I guess we had actually asked for a
18 continuance of this hearing because we wanted to also
19 be able to provide experts who could testify as to
20 our protests and that hearing request had been denied
21 my understanding is because in order to accommodate
22 the experts who had already gone ahead and made
23 travel arrangements to make this hearing today.

24 So I would like to request that we be able
25 to respond -- the record be left open for a period of

1 time to allow the protestants to respond to the
2 experts and the testimony that was provided by the
3 applicant today and also to provide any documentation
4 that we have -- that in lieu of the testimony of the
5 experts that we were going to have at today's
6 hearing, to be able to provide expert documentation
7 so that the record be left open for that purpose.

8 And I will try to make my statements brief
9 as a lot of this material may have been covered by
10 some of the protestants. The transfer, of course, we
11 believe will affect existing water rights and we
12 believe that the State Engineer needs to -- must
13 determine the impact on the flows and the existing
14 water right holders before it can issue this permit.
15 And that's not something that we feel, as other
16 protesters, that the information that was provided
17 today by the applicant was lacking in providing that
18 accounting and that that is therefore a job that is
19 going to fall to the State Engineer and that this
20 permit application cannot be issued or this permit
21 cannot be issued until that is done.

22 And one of the things that I don't think
23 has come out yet is that -- I think it was Mr. Olson
24 (sic) that had testified that the application of the
25 water diversion will not have any impacts on water

1 rights on the Green River system. Well, this is a
2 transfer application that is asking to transfer the
3 water right permanent from down in the Lake Powell
4 area to Green River. So we haven't heard anything
5 about the impacts or number of water right holders on
6 the Colorado River downstream from the Green River,
7 what kind of impact that might have. And I imagine
8 there are a few of them.

9 So we would submit that the State Engineer
10 needs to find out who those water right -- existing
11 water right permit holders are, find out what their
12 water rights are, and whether or not this application
13 will have impact on those water rights before it can
14 issue it.

15 Also, the applicant had talked -- there's a
16 surprising lack of cumulative impact analysis. I
17 know there's no state requirement and I think the
18 applicant in response to some of these questions
19 about cumulative impact analysis had said, "Well, you
20 can't hold us accountable for the impacts of multiple
21 water diversions."

22 Well, maybe there's no state law that
23 requires holding them accountable for those types of
24 things, but in a practical sense, I don't think -- I
25 think what the applicant is asking the state to do is

1 to imagine the scenario that this is the last
2 application that will ever be issued on the Green
3 River and that will impact the water system, that
4 essentially -- we don't believe the door is going to
5 close after this application has been reviewed and a
6 decision made on it.

7 So you have to -- and you cannot look at
8 this application in a vacuum if you're trying to make
9 a determination on in-stream flows, if you're trying
10 to make a determination on whether you're going to
11 have to cut off existing water rights as a result of
12 the operations of this facility, especially a
13 facility which -- I think we heard a bit of
14 conflicting testimony about this as well -- as to
15 whether or not you can actually shut off the power
16 for a nuclear power plant in case the river is too
17 low to be able to accommodate all existing water
18 right uses.

19 We think that this is a speculative permit
20 application. The adoption of the prior appropriation
21 doctrine by definition -- I'll read here real
22 quickly -- this is out of a law review article by
23 Janet Newman, who is a water rights specialist at the
24 University of Oregon. This is the environmental law
25 journal. "By definition requires the appropriator to

1 apply the water to beneficial use thereby precluding
2 speculative hoarding in hopes of future gain." And
3 then there's a case, it's a Utah case, called High
4 Plants A&M, LLC versus Southeastern Colorado Water
5 Conservancy District, 120 P30 710, 2005 -- excuse
6 me -- it's not a Utah Case. It's a Colorado case.

7 It says, "The actual beneficial use was
8 required so that no one could acquire all of the
9 water and thereby monopolize a scarce and valuable
10 resource." And we think that fits very well into
11 this scenario. Also, feasibility, again, alluding to
12 the cumulative impacts analysis testimony that was
13 provided by Mr. Olson and also I think it was Dr. --
14 excuse me. I apologize. I don't remember his name.
15 Dr. Hardy, I believe it was. Nobody has talked
16 anything -- there was some mention I think about we
17 had very -- we have dry years and we have wet years.
18 There's no mention that the scientific -- the
19 enormous amount of scientific data showing that we
20 are about to have a lot of dry years, and no mention
21 of climate change as to how that's going to impact
22 the stream flows and therefore whether or not this
23 permit application is even feasible.

24 And there's a U.S. Geological publication,
25 again, I would like to submit later. I don't have it

1 with me now that says, "Because climate changes are
2 traditionally detected over a period that spans
3 multiple decades, decisions with an application
4 arises in greater than roughly 20 years might
5 reasonably be informed by climate change
6 information."

7 That basically means that because, for
8 example, we have a nuclear power plant that from what
9 it looked like from some of the testimony from the
10 proponent about licensing, we could be out 10 -- 40,
11 50 years on this, that this is definitely something
12 that will -- the impacts of climate change is
13 combined with the effects of the permit application
14 on existing stream flows is something that we're
15 going to have to get some information on before we
16 can even imagine issuing this permit.

17 I won't go into a lot of analysis. I have
18 another USGS study that I was going to quote from. I
19 would just ask if I can submit those from for the
20 record. One of the things that was said -- again, I
21 think it was by Mr. Olson (sic) -- was that -- and
22 this was said repeatedly, that "There are some
23 problems with this. There are some potential
24 conflicts with existing water uses and in-stream
25 flows, but we think the system is going to work."

1 And I understood mean that to mean that the prior
2 appropriation system is going to work as well. That
3 is what he was referring to as far as the system is
4 it going to work this out.

5 Well, there's also as part of that prior
6 appropriation system, it's my understanding, that
7 under the Colorado River Compact, the state of Utah
8 has an obligation, a 7.5 million acre feet on average
9 for every ten years that it must make available to
10 the lower basin states. If we are -- if we're
11 talking about the prior appropriation system, if we
12 have -- I think it's a realistic scenario that again
13 if you're talking about shutting down a nuclear power
14 plant when it comes as opposed to shutting off a
15 small farm, agriculture or fish needs, the farms and
16 the agriculture are going to lose.

17 And ultimately, if we cannot satisfy that
18 7.5 million acre obligation, then the courts are
19 going to step in and they are going to start shutting
20 people off, and I know who's going to lose that
21 battle too. It's not going to be the nuclear power
22 plant. I think it was even said, again, by the
23 applicant that, "Well, it's a possibility that we
24 could just buy people out." So that's another -- I
25 don't know if that is really what the people of Utah

1 desire.

2 Again, we think the application will
3 negatively impact the public welfare. There's been
4 some discussion just from the gentleman from the
5 Department of Interior about the impact on fish
6 species. We won't go over -- reiterate what his
7 statements are. We believe that the recovery program
8 needs to be considered in this decision. There are
9 in-stream flows that are critical for these listed
10 species that have been written down and that they
11 will be impacted by the granting of this application
12 in a negative sense.

13 And, again, I think Dr. Hardy was the one
14 who -- I don't think he even mentioned the existence
15 of these species in his testimony. One of the -- I
16 was going to ask him questions as well and one of
17 questions was -- I was going to ask him was whether
18 or not he had considered the impacts on these species
19 and how can it be said that the issuance of a water
20 right permit in the amount of water they are asking
21 for at least in a cumulative sense will not impact
22 these flows?

23 I don't think anybody can argue that it's
24 the multiple and cumulative effects of water
25 diversion, not only that but sedimentation and water

1 temperature, that's impacting these fish. If that
2 wasn't the case, they wouldn't be listed on the
3 endangered species list. So we really need to have
4 that addressed, and I think there's a substantial
5 lack of information on the applicant's part in,
6 again, I think, painting this picture to make it look
7 like "Well, if this one application is issued, then
8 again we're going to close the door behind the
9 application and we're not going to look at the
10 combination of this application with other actions
11 and environmental impacts." Thank you for your time.

12 HEARING CHAIRMAN: Thank you, Mr. Shepherd. The
13 application has also been protested by Moki Mac River
14 Expeditions, Inc. We'll turn to them for a statement
15 of their protest.

16 ROBERT QUIST: I'm Robert Quist, part of Moki
17 Mac. We have a river outfitting business in town.
18 We run river trips down the Green, down Desolation
19 Canyon and through Cataract Canyon. The application
20 doesn't sound like a lot of water, but in flows like
21 the '02 season was, it's a significant amount of
22 water, will make a big impact on our operation. I
23 also have a small farm very close to the point of
24 diversion that they pointed out on the map. I don't
25 see how that wouldn't impact me considerably. Where

1 they are pointing out where the diversion would be
2 there would have to be significant construction in
3 that area to be able to do that. That's a very
4 shallow part of the river. It's right at the end of
5 those islands down there. It's a very shallow part
6 of the river. I can't see how that can be
7 accomplished without major construction in that area.

8 I would also like to protest on behalf of
9 the UGO, Utah Guides and Outfitters. We don't feel
10 that it's a good use of the water. Thank you very
11 much.

12 HEARING CHAIRMAN: Thank you. The application
13 has also been protested by the Green River Canal
14 Company. We'll go ahead and turn to them for a
15 statement of their protest.

16 DEAN KING: Dean King. I'm president of Green
17 River Canal, and I'm going to tell Jerry Olds I've
18 been given directions to Green River: You go to hell
19 and that's 30 more miles. By listening to Jerry
20 today we protested on point of diversion, and it
21 appears if we follow what he suggested that's below
22 where our diversion is, and also he's recognized our
23 old granddaddy rights to be accepted. And with that,
24 I guess we have no protest.

25 HEARING CHAIRMAN: Thank you very much. The

1 application has also been protested by the Green
2 River Cooperative. Are they represented today?
3 We'll turn to them for a statement of their protest.

4 VAUGHN BERRYMAN: Hi, I'm Vaughan Berryman
5 (phonetic) representing the Green River Cooperative.
6 Our cooperative is mainly working on the diversion
7 dam at Tusher Wash. It's the same thing. That point
8 of diversion was our protest of water above the dam
9 and being how it's below that, we don't have a
10 protest.

11 HEARING CHAIRMAN: Thank you very much. The
12 application has also been protested by the Green
13 River Companies. Are they represented? Are they an
14 entity distinct from -- okay. Mr. Vetere please come
15 forward.

16 TIM VETERE: I know all of you guys on a first
17 name basis.

18 HEARING CHAIRMAN: For good or ill, huh?

19 TIM VETERE: Is Green River Companies my own
20 separate?

21 HEARING CHAIRMAN: I'm not sure. I'm going from
22 a list that doesn't have it. We have Green River
23 Companies and we have you individually, so if you
24 would like to speak at both of them, that would be
25 fine.

1 TIM VETERE: Okay. I'm just going to make a
2 small statement. Tell you a little bit about me.
3 I'm a third generation mill farmer. We farmed in
4 Green River value my whole life. We're putting 8,000
5 acres in production. We have spent hundreds of
6 thousands of dollars in diversion points and
7 agriculture projects. More and more restrictions are
8 being put on the Colorado River, which is making it
9 harder to get our water. The state said that the
10 Colorado River is already over allocated. Until they
11 know for sure how much water is in the Colorado, I
12 don't think they should allow this change to be made.
13 I'm the person that has the Wayne County water. We
14 plan on fully depleting that by our date in 2011. So
15 that's something the state needs to look at, you
16 know, when they do -- when they give this. One other
17 thing, I scribbled out a lot but -- I think they just
18 need to look at it really close.

19 In our farming operation we'll be spending
20 4 to \$5 million to put our crop in. We have May,
21 June, July to make our crop produce. If any of those
22 months are -- if we don't have water any of those
23 days during those three to four months, we lose
24 thousands of dollars. And I guess if they could show
25 me how we won't lose thousands and millions of

1 dollars, then maybe I can look at it a little bit
2 different. Thank you.

3 HEARING CHAIRMAN: Thank you, Mr. Vetere. The
4 application has also been protested by Living Rivers,
5 Uranium Watch, and Glen Canyon Group of the Sierra
6 Club. We'll turn to them for a statement of their
7 protest, and again I would encourage you that if some
8 of the issues that you are concerned about have
9 already been raised by other protestants, you're
10 welcome to simply reference those other protestants'
11 statements.

12 SARAH FILEDS: Yes, my name is Sarah Fields, and
13 I'm representing Uranium Watch, and actually the
14 Sierra Club is being represented by the Utah Chapter
15 of the Sierra Club. I am in Grand County in Moab,
16 and Grand County is within the plume exposure
17 pathway, emergency planning zone which would have a
18 10-mile radius from the proposed reactor, and Moab is
19 in the ingestion pathway, emergency planning zone.

20 First of all, I'd like to request that the
21 record of the hearing being held open for additional
22 60 to 90 days so that the parties can respond to the
23 information that has been presented in this
24 proceeding and that will be placed on the record. If
25 there is additional information at the end of that

1 period of time presented by the applicant, then I
2 would like an additional 30 to 60 days to respond to
3 that information.

4 First of all, I would like to go over --
5 respond to a few things that were made in the
6 presentation. First of all was the hearing process,
7 the NRC -- if the applicant lets the NRC know that an
8 application is about to be submitted, the NRC would
9 come to Green River and hold a public meeting. They
10 might also come to some of the surrounding counties
11 to hold a public informational meeting. The hearings
12 would have to do with the NEPA process, so there
13 would be a scoping hearing and then there would be a
14 hearing on the Draft Environmental Impact Statement
15 to take oral comments and then there would be
16 opportunity for written comments.

17 But at this time we haven't been given any
18 information as to exactly the type of application
19 that Blue Castle Holdings intends to submit. We
20 don't know whether they are going to submit the Early
21 Site Permit first and then later the construction and
22 operational application. So if they were submitted
23 at two different times, then there would be two NEPA
24 processes. There would also be an opportunity for
25 formal adjudicatory proceedings.

1 Mr. Diaz said that an Early Site Permit is
2 good for ten years, renewable for ten years. It's
3 actually good for 10 to 20 years and is renewal from
4 10 to 20 years. Therefore, if Blue Castle Holdings
5 got an Early Site Permit, they could hold that permit
6 for up to 40 years before -- I think within that
7 latter period of time they would have to -- someone
8 would have to submit a construction operation permit.

9 So it's likely that if they get these water
10 rights, that those waters rights would be held for
11 almost 40 years, maybe even 50 years, if you go
12 through the final application and construction
13 process. It might be 50 years before that water
14 would actually be put to use for a nuclear power
15 station.

16 One thing I'm concerned from the testimony
17 is apparently they are shifting some of the
18 responsibilities for providing information and for
19 addressing issues to the NRC's licensing process when
20 these issues should be addressed now in this process.
21 Mr. Tilton indicated that they do not own this site,
22 that they have a some kind of a purchase agreement,
23 and he didn't exactly make clear who the purchase
24 agreement was with. And I know a representative of
25 Emery County is here and maybe at some time that

1 representative could come forward and explain exactly
2 the nature of the agreement between Emery County and
3 Blue Castle Holdings.

4 However, Blue Castle Holdings made clear at
5 this time they do not own the site, but on their
6 website they have two press releases where they claim
7 they own the site. One press release says -- I'll
8 take the latest one, October 5th, 2009, "Blue Castle
9 Holdings, owner of the Blue Castle Project, a
10 proposed nuclear plant site in Utah." Well, I don't
11 understand why this company is making a false claim
12 to own this site to the media, to the public, and to
13 potential investors.

14 I made a written statement, but I won't go
15 over all of it. I think that one of the criteria for
16 approval of this project by the State Engineer that
17 was not fully addressed was whether the proposed
18 plant is economically feasible. You've got a lot of
19 generalities but no real facts and figures.

20 Also, with respect to the applicant's
21 financial ability to complete the proposed work. As
22 Mr. Greenberg said, at this time you really can't
23 tell whether the applicant -- first of all, the
24 applicant isn't going to be completing the proposed
25 works. It is some unknown entity. You at this time

1 have no idea whatsoever who will complete the
2 proposed work let alone if they have the financial
3 ability to do so.

4 As far as the physical feasibility of the
5 project, the applicant did submit some information
6 having to do with their feasibility studies. Right
7 now I'm looking at an NRC Regulatory Guide that
8 discusses general site suitability criteria for
9 nuclear power stations. The information that has
10 been presented thus far does not address all those
11 site suitability criteria that the NRC would be
12 looking at. They indicate in this regulatory guide
13 that the safety issues that would be addressed are
14 geologic, seismic, hydrologic, and meteorological
15 characteristics of the proposed site. Meteorologic
16 characteristics is very important, and no information
17 has been submitted about the meteorological
18 characteristics of this site.

19 There's the exclusionary, the
20 low-population zone, population considerations, and
21 potential hazards to the general public, emergency
22 planning, ecological systems, land use, atmosphere,
23 aesthetics, and socioeconomic. So we have no
24 information related to those issues being presented
25 by the applicant.

1 As far as the economic feasibility
2 sections, the Utah Code Section 73-814 requires that
3 the applicant have a financial ability to complete
4 the proposed works and Section 73-311 provides the
5 State Engineer with the authority to request
6 additional information about the financial ability of
7 the applicant to complete the works. And I think
8 more information must be put on the record regarding
9 the financial and then the economic feasibility of
10 this project.

11 Also, I feel that the application is
12 incomplete because it did not fulfill all the
13 requirements in Section 73-3-2, which sets out the
14 requirements for an application to appropriate water.
15 There are about four of these that they didn't
16 address. One is the nature of diverting works.
17 Earlier they said, "Well, that would be presented to
18 the NRC." Your state statute says that information
19 is supposed to be included in the application. It
20 was not included in the application. The application
21 is supposed to include the dimensions grade, shape,
22 and nature of the proposed diverting channel. That
23 too has not been submitted as part of the
24 application.

25 Other facts that clearly define the full

1 purpose of the proposed appropriation were all
2 supposed to be included. That was not submitted.
3 And you have a requirement if the water is to be used
4 for developing power, and that section says, "The
5 application shall show the purposes for which and the
6 places where the power is to be used." You have no
7 information about the purposes of the power or the
8 places where the power is to be used. It's all
9 speculative. It's all what somebody thinks might
10 happen. There's no actual data and information.

11 Let's see if I have anything else that I
12 want to cover -- another -- I'm about to wreck this
13 up. There was no information in application about
14 how the electricity would be supplied for the
15 construction and operation of the plant, and there
16 are no particulars about how and where the energy
17 would be transported. I talked with PacifiCorp which
18 is -- here in Utah it's Rocky Mountain Power which is
19 part of PacifiCorp, and I asked them if Blue Castle
20 Holdings had come to them and talked to them about
21 this project, discussed the possibility of developing
22 a feasibility study, which is something that would be
23 required for such a project and they said that they
24 had not heard -- they had not heard anything from
25 Blue Castle Holdings. So that leads me to believe

1 that they really haven't done due diligence when it
2 comes to looking at the feasibility of this project.
3 Thank you.

4 HEARING CHAIRMAN: Thank you, Ms. Fields. The
5 application has also been protested by Mitchell B.
6 Vetere.

7 SARAH FILEDS: Oh, John Weisheit of Living
8 Rivers also is going to make a presentation. We were
9 two different organizations, Living Rivers and
10 Uranium Watch.

11 HEARING CHAIRMAN: Mr. Weisheit, if you have
12 anything additional that's new and different from
13 what we've already heard, we'd like to hear it.

14 JOHN WEISHEIT: It is new and different. Thank
15 you very much. As a matter of housekeeping, I would
16 like to share my concern that I think the
17 administrative record should remain open for 90 days.

18 My name is John Weisheit. I'm the
19 conservation director of the Living Rivers and the
20 Colorado Riverkeeper, which is -- I'm a member of
21 Waterkeeper Alliance. I'm also a licensed river
22 guide in the state of Utah and have been so for three
23 decades. At the end of my testimony, I have a CD
24 here with the documents that I'm about to make
25 mention to. What I'm going discuss is climate

1 change, the future, and the water budget that people
2 seem to be interested in. I actually have an idea of
3 what the future water budget may look like.

4 "The staff and volunteers of Living Rivers
5 would like to provided wisdom and knowledge about
6 water supply and demand in the Colorado River Basin.
7 There is sufficient information available to make a
8 determination that surplus water in the Colorado
9 River Basin does not exist. We insist it is in the
10 interest of the state of Utah to deny this transfer
11 and allow the water right to expire. Since the state
12 of Utah presently has more water on paper than actual
13 wet water and that this condition of over-allocation
14 has been tolerated for over 50 years.

15 "One of the first hydrology studies that
16 analyzed long-term data to determine the annual yield
17 of the Colorado at the Compact point in Lee Ferry,
18 Arizona, was written by Raymond A. Hill in 1953 for
19 the State of Colorado -- Lee Ferry, Arizona -- and
20 this document by Hill has prevailed for 50 years
21 hence, which stated that for the 20th century the
22 yield was 15 million acre feet and not 17.4 million
23 acre feet as is assumed by the commissioners of the
24 Colorado River Compact of 1922.

25 "The subsequent study after Hill that

1 arrived at the same conclusion included the report in
2 1965 by R.J. Tipton for the Upper Colorado River
3 Commission, and the hydrologic determinations of 1988
4 and 2007 by the Bureau of Reclamation. This would
5 also include the spreadsheet of Colorado River
6 natural flow comprised by James Prairie of the Bureau
7 of Reclamation that's revised in 2009.

8 "A significant peer reviewed document was
9 issued in June of 2009 by scientists from the
10 University of Colorado at Boulder, the National
11 Atmospheric Oceanic Administration, and a company
12 called AMEC. This paper was a component of a project
13 by the Western Water Assessment called Reconciling
14 Projections of Future Colorado River Stream Flow.
15 The document indicates that under the current interim
16 guidelines, the management of the Colorado River
17 system reservoirs will remain robust and flexible
18 until 2026. However, for the subsequent decades to
19 2057, water managers will need to find solutions to
20 mitigate an annual system loss of 3 million acre
21 feet, or 20 percent, and at the consequence of
22 climate change caused by greenhouse gas emissions.

23 "The authors of this report have also
24 looked at the present conditions of supply and
25 demand. For example, Kenneth Nowak presented a water

1 budget of the basin based on the 15 million acre feet
2 annual yield of the Colorado River. The budget
3 indicates what remains in the system right now for
4 depletion is a mere 400,000 acre feet.

5 "If no one had created this water budget
6 based on the annual yield according to tree ring
7 record of the last 1200 years, there would only be a
8 mere 100,000 acre feet remaining in the system for
9 depletion. And this yield is derived from the most
10 conservative of tree rings studies, namely,
11 14.7 million acre feet," which Connie Woodhouse calls
12 the Lee Ferry A subset.

13 "Furthermore, if Nowak had created this
14 water budget based on the estimate that climate
15 change has already depleted the Colorado River by
16 6 percent, or 900,000 acre feet, then water managers
17 need to find ways to put a half million acre feet
18 back into the system right now to balance the water
19 budget. This amount may be conservative as well
20 since the annual yield of the Colorado River for the
21 last decade has only been 11.7 million acre feet, not
22 to mention that the elevation of Lake Mead is only
23 18 feet from reaching the first tier of water
24 curtailments for the states of Nevada and Arizona.

25 "I am aware that the political leadership

1 in Utah is not convinced that we need respond to the
2 impact of climate change immediately. However, I
3 think it is important to state for the record that
4 16 professors from Brigham University were recently
5 motivated last November to write an open letter to
6 the state and congressional delegation stating that
7 anthropomorphic climate change is real and, quote,
8 'These changes pose risk to humanity and many other
9 forms of life,' unquote.

10 "The priorities of the state of Utah is to
11 solve the pending water supply crisis and to
12 eliminate jeopardy to the critical habitat of
13 endangered fish. Living Rivers would be happy to
14 serve as a partner with the state of Utah to assist
15 in creating solutions to these problems, but if harm
16 comes to humans and to animal life, in particular the
17 endangered fish, we would probably develop strategies
18 to take this matter to the courts.

19 "I urge you again to deny this transfer and
20 recommend that the governor and legislature work with
21 the people toward the goal of securing our
22 ever-diminishing water supplies without causing harm
23 to people and wildlife." That concludes my
24 statements. I would like to approach the bench and
25 give you this document and my CD of --

1 HEARING CHAIRMAN: You're welcome to do that,
2 Mr. Weisheit. We'll gladly receive it.

3 JOHN WEISHEIT: Thank you.

4 HEARING CHAIRMAN: As I mentioned before, the
5 application has been protested by Mitchell Vetere.
6 If he's present, we'd like to have a statement of his
7 protest. Doesn't look like Mr. Vetere is with us, so
8 we'll allow his written protest to stand on its
9 merit.

10 The application has also been protested by
11 Lee Thayn. Mr. Thayn, if you're present, we'd like
12 to have a statement of your protest.

13 The application has also been protested by
14 Holiday Expeditions, Inc. If they are represented,
15 we would like to have a statement of their protest.
16 Maybe what I could do is read through these, and just
17 indicate -- if you're present and want to make a
18 statement, please feel free to come forward to the
19 podium. These are mostly individuals now.
20 Nancy Dunham.

21 NANCY DUNHAM: I'm here.

22 HEARING CHAIRMAN: Ms. Dunham, we would be glad
23 to hear from you.

24 NANCY DUNHAM: I think things -- I'm
25 Nancy Dunham, 50-year resident of Green River and

1 farmer. I have water rights that are below where you
2 will take out this diversion, but I just have a
3 question or concern. They did say that in Palo Alto,
4 Arizona, they were able to establish a nuclear plant
5 that uses about the same amount of water using
6 municipal waste water. Can't we, as a state, look at
7 other sources? We know we need the energy. Why do
8 we have to focus on taking it from our resource here
9 that is such a permanent part of our livelihood and
10 the beauty around our country. Let's have the state
11 look at other sources before they make final
12 decisions. That's all my comment.

13 HEARING CHAIRMAN: Thank you, Ms. Dunham. Are
14 you also representing Chris Dunham or is he here?

15 NANCY DUNHAM: I guess he's here.

16 HEARING CHAIRMAN: We'll go ahead and turn to
17 you, Mr. Dunham.

18 CHRIS DUNHAM: I'm Chris Dunham, and I was
19 curious if there had been any, you know, in this
20 whole scenario of trying to sort this out -- in the
21 event of contamination -- I mean, this is the source
22 of water for millions of people in the western United
23 States. You know, is there any thought of that in
24 this whole process? That's just something -- and how
25 can anybody stand up here and say that it's really

1 safe? I mean, there's, you know, in ten minutes I
2 pulled off on the computer a whole list, you know,
3 nuclear reactors that have melted down and leaked
4 millions of gallons of water, et cetera, et cetera,
5 and I just wonder how somebody can stand here and
6 say, "Yeah, it's safe, guaranteed." Anyway, that's
7 my comment, concern for the project. Thank you.

8 HEARING CHAIRMAN: Thank you, Mr. Dunham. I
9 think suffice it to say that the Division of Water
10 Rights and the State Engineer's office is not capable
11 of making decisions on all aspects of the safety of
12 the nuclear power plant and that would be more of a
13 function of the Nuclear Regulatory Commission and the
14 permitting process that the applicant is going to
15 have to go through as they continue to pursue all of
16 the permits that are necessary for this. We
17 acknowledge there are safety concerns, and we'll do
18 our best to weight those in the spectrum of best
19 public interest, I guess you might say.

20 The application has also been protested by
21 David Erley. Is Mr. Erley represented?

22 DAVID ERLEY: My name is Dave Erley. I'm a
23 resident of Grand County. I'd like to agree with the
24 testimony of HEAL Utah, Living Rivers, Department of
25 Interior, Uranium Watch. I support all of that.

1 Many of those issues I share. I thought I would take
2 my time to ask just a couple question about the
3 conveyance structure in the reservoir to get the
4 water over to the project. So it's my understanding
5 that the reservoir is for 2,000 acre feet; is that
6 correct?

7 MR. MABEY: That's correct.

8 DAVID ERLEY: And the monthly consumption of
9 each one of the reactors would be about how many acre
10 feet?

11 MR. MABEY: That was presented in the initial
12 presentation.

13 DAVID ERLEY: And that was around 24,000, was it
14 not?

15 MR. MABEY: Around 25,000 acre feet per unit.

16 DAVID ERLEY: Per month.

17 MR. MABEY: Per year.

18 DAVID ERLEY: So how long then -- your 2,000
19 acre feet is -- how much of a window if you would
20 have to shutdown, say, something went down with the
21 conveyance structure?

22 MR. MABEY: I'll hand the mike over to the
23 expert, Jerry Olds.

24 MR. OLDS: Okay. The daily demand for the
25 project would be about 140 acre feet per day, and,

1 again, they are required to maintain 555 or four days
2 water on site. And so there would be somewhere
3 around 1,400, so it would be a supply of about
4 ten days.

5 DAVID ERLEY: And how long does it take to turn
6 the reactor off when it's hit full?

7 MR. OLDS: I don't know.

8 NILS DIAZ: Very short. Reactors go off line
9 all the time because of lightning strike or whatever
10 it is. They just shutdown. They go off line.

11 DAVID ERLEY: Do they still have cooling
12 demands?

13 NILS DIAZ: Absolutely, sir.

14 DAVID ERLEY: So how long do they still have
15 cooling demands?

16 NILS DIAZ: Just the water necessary to cool the
17 reactor. The reactors have emergency cooling system,
18 and they have water that will cool the reactor,
19 safely shut it down, and that's why the requirements
20 to have a near supply of minimum four days.
21 Actually, they like a little more, but the reactors
22 go on line and off line all the time and nothing
23 happens.

24 DAVID ERLEY: Thank you. The conveyance
25 structure, is Green River below the site as far as

1 elevation so you'd have to pump; is that correct?

2 NILS DIAZ: That's correct.

3 DAVID ERLEY: On that route is that then in the
4 energy corridor or what's the route over to the site
5 from the river? How is that figured?

6 AARON TILTON: There have been multiple paths
7 identified for -- events for that, and existing
8 public utilities can also be used for -- you know,
9 basically, it's a water line, so we have multiple
10 options to choose from getting it out to the site.

11 DAVID ERLEY: Do you envision that being a
12 pipeline?

13 AARON TILTON: It will be pipe.

14 DAVID ERLEY: All right. Thank you.

15 HEARING CHAIRMAN: Thank you, Mr. Erley. The
16 application also been protested by Kathryn Baker.
17 Ms. Baker, we'll turn to you for a statement of your
18 protest. Ms. Baker does not appear to be present.
19 Another protestant, David H. Brown. Presume
20 Mr. Brown is also not represented. The application
21 has also been protested by Kathleen Corr. The
22 application has also been protested by Mark and Tammy
23 Dalton. If they are present, we would like to hear
24 from them. Ellen Darger. Moving right along here.
25 How about that. The applicant has also been

1 protested by Jeff and Penny Feldman. Okay. The
2 Feldmans are not present.

3 The application has been protested likewise
4 by Margot Ford. Naomi Franklin. Norm G-u-i-c-e. I
5 am not sure how you pronounce that. The application
6 has also been protested by Carol Martin, Stephanie
7 Martini, Helen McMahan, Tom and Pamela Mooney, Lisa
8 Rutherford and Paul Van Dam, Dasch Houdeshel. Sorry
9 if I butchered your name. Elfreda Lou Mortensen,
10 Christine Oravec, Waid and Cheryl Reynolds, Charles
11 and Kimberli Rosier, Gregory and Alison Sayer, Sheila
12 Smith, Martha Smythe, Richard Spotts, Kelly Squires,
13 Meghan Taylor, Amy and Matt Trebella.

14 I'm assuming, Mr. Flitton, many of these
15 were probably protestants who were part of the HEAL
16 Utah protest. Is that likely?

17 MR. FLITTON: Yes.

18 HEARING CHAIRMAN: Okay. Thank you. Greg
19 Vetere also Jade Vetere, Lindsay Washkoviak, Judy
20 Wheeler, and Kristin White. Okay. None of those
21 individuals seem to be present. It's also been
22 presented by the Utah Rivers Council. Are they
23 represented here today? We have also the Center for
24 Biological Diversity. Are they are represented?

25 TAYLOR MCKINNON: We are.

1 HEARING CHAIRMAN: Very good. Thank you.

2 TAYLOR MCKINNON: Thank you for the opportunity
3 to present today and for your impressive fortitude.
4 I have a written statement that I would like to
5 submit to the record.

6 HEARING CHAIRMAN: Thank you.

7 TAYLOR MCKINNON: I'll just put it up here.

8 HEARING CHAIRMAN: Can I interrupt for one
9 moment. Can I get your name for the record.

10 TAYLOR MCKINNON: I'm sorry. Taylor McKinnon.
11 I am a public lands campaigns director for the Center
12 for Biological Diversity. I'd like to incorporate by
13 reference into these comments my written testimony,
14 the testimony of HEAL Utah, Living Rivers, and the
15 U.S. Fish and Wildlife Service. What I have are just
16 some notes that I jotted down as I listened today to
17 the various presentations. I'll read those notes.
18 "The analyses presented today did not consider the
19 proposed diversions in combination with other
20 diversions that would reasonably result from
21 appropriated water rights. As another protester
22 said, the past may not represent the future.
23 Similarly, analyses have roundly ignored the
24 potential future impacts of climate change and
25 regional drying on water availability and river

1 flows.

2 "This isolated view of the proposed
3 diversions fails to afford the State Engineer, other
4 agencies, or the public the information necessary to
5 reasonably evaluate the biological and hydrological
6 implications of the proposed diversion nor have
7 applicants disclosed a peak maximum diversion. We
8 heard that the volume of the diversion could extend
9 beyond the 70 CFS base, but we don't know still how
10 far beyond 70 it would extend. This omission too
11 starves the Engineer and the Division and other
12 agencies and the public of the complete information
13 necessary to make an informed and reasoned
14 evaluation.

15 "Analyses presented today did not evaluate
16 potential impacts against critical habitat
17 requirements set forth in the recovery plan, the four
18 endangered fish, the RIP, and corresponding plans for
19 management of flows from the dam. Applicants have
20 presented no information to demonstrate the proposed
21 diversion would not inhibit the protection of those
22 flows necessary for survival and the recovery of the
23 Colorado pikeminnow, humpback chub, bonytail and
24 razorback sucker.

25 "We believe the proposed withdrawals, when

1 considered cumulatively with other diversions --
2 global warming and other factors affecting Green
3 River flow -- would likely preclude flow requirements
4 necessary for the survival and recovery of the
5 endangered fish resulting in prohibited take of the
6 endangered fish pursuant to Section 10 of the
7 Endangered Species Act and requiring formal
8 consultation pursuant to Section 7 of the act.

9 "Finally, applicants have not disclosed any
10 information about the human and other biological
11 impacts that might attend a serious nuclear accident.
12 It is hard to imagine a body of information more
13 relevant to decision-making that involves the
14 public's interest. Here that information is wholly
15 missing."

16 I request that the administrative record
17 remain open for 90 days following today's hearing. I
18 thank you for your time and I urge you to deny the
19 subject permits. Thanks.

20 HEARING CHAIRMAN: Thank you very much,
21 Mr. McKinnon. The application has also been
22 protested by Pamala R. Hackley. Ms. Hackley, are you
23 available?

24 PAMALA HACKLEY: Thank you for the opportunity
25 to comment. At this time I'll let my written comment

1 stand, but I would like to invite Robert Lippman to
2 provide supporting documentation to what I presented
3 to you in writing, and I also would like to reserve
4 the opportunity to provide more written comment upon
5 reviewing the applicant's presentation earlier.

6 HEARING CHAIRMAN: Thank you. We have a variety
7 of individuals who are also late protestants. Under
8 the procedures that the Division --

9 PAMALA HACKLEY: May I introduce Robert Lippman
10 to speak in support of my document?

11 HEARING CHAIRMAN: Sure. Go ahead.

12 ROBERT LIPPMAN: Thank you for these proceedings
13 here. I don't have a statement on record, and I
14 would request on behalf of the public that the
15 proceedings do remain open 60 to 90 days, as we've
16 heard repeatedly today, to respond to what was heard
17 today. I would like to note that I believe it's
18 ironic that we're here at the John Wesley Powell
19 Museum. 140 years ago John Wesley Powell recommended
20 to the irrigation congresses of the west and the
21 United States Congress that the west be settled on
22 the basis of watershed governance and that without
23 that there would be a heritage of conflict piled up
24 through water monopoly and interbasin transfers.

25 Here with this proposal we have that very

1 case in point, and unfortunately nobody yet is
2 listening to the bioregional and watershed ideas of
3 Mr. Powell. I would also dare to invoke that along
4 with Mr. Powell that Brigham Young is probably
5 turning in his grave too because the policies of
6 state of Utah encourage the highest and best use of
7 water for agriculture, collective use for the people.
8 And the statute is very clear that the water belongs
9 to the people in the state of Utah.

10 This proposal is for an interbasin transfer
11 that does not benefit the people of Utah. It creates
12 a detriment as precluded by the statute to the people
13 of Utah, so I would therefore recommend that the
14 water in this proposal should be better used to
15 provide for agriculture, the needs of municipalities,
16 and environmental and sustainable needs for the state
17 of Utah.

18 I would like to point out in regard to
19 Mr. Olds's graphs and materials that the 70 CFS
20 depletion from average and annual stream flows is, I
21 think, alarmingly misleading because, as we've heard
22 repeatedly today, it leaves out the present
23 additional uses, the proposed unappropriated uses,
24 and depletions that can be anticipated from what
25 studies show to be the unequivocal fact of climate

1 change and depletion of snow packs in the Rocky
2 Mountain west.

3 And therefore this proposal is being taken
4 in a vacuum, and to better evaluate proposals such as
5 this or any proposal for water rights in the state of
6 Utah, that a comprehensive water budget does need to
7 be put forward proactively by the State Engineer's
8 office. I would add to this that if we put all those
9 numbers in on Mr. Olds's graph, that it would likely
10 flatline at zero.

11 I would add further that anticipated future
12 compact calls from the lower basin who hold senior
13 water rights to the Colorado River system would
14 result in a shutdown of this plant as a 1964 water
15 right would be very junior to the downstream demands
16 and the statutory and Compact demands of the lower
17 basin, which is guaranteed to receive its allotment.
18 And any shortage will come out of the upper basin
19 first and that will come out of junior water rights
20 in the upper basin as we all know.

21 As repeatedly mentioned today, the proposal
22 again is a case in point that interbasin water
23 transfers are a shell game involving changes in water
24 diversions, points of diversion, and these are in
25 direct conflict with the realities of wet water that

1 is provided within each sub-basin such as the
2 Colorado, the Green, and the San Juan, not to mention
3 the wild card of Native American water rights that
4 have not been quantified as of yet and the ongoing
5 climate change factors that need to be placed into
6 this calculus here.

7 I would also submit that the present
8 proposal ignores critical externalities of
9 feasibility regarding the nuclear power situation.
10 It ignores the impacts of the nuclear fuel cycle,
11 uranium mining and milling as well as the treatment
12 of the nuclear waste security issues and so forth.
13 And the simple assurances that are not in the record
14 as being documented by practical and legal realities
15 are not sufficient for this panel to act upon.

16 I would also add that local infrastructures
17 are going to be significantly stressed and affected
18 by the kind of numbers that the applicant is using in
19 terms of construction impacts, population and
20 demographic changes to the region, not to mention the
21 quality of rural life in the region. So I would
22 simply submit at this time that the agency do a
23 comprehensive study and keep proactively in its
24 purview the highest and best uses of Colorado River
25 Compact water and the protection of such uses for

1 agriculture, in-stream flows, and the people in the
2 state of Utah.

3 I would also submit that the applicant has
4 failed in its burden to show that it meets the
5 statutory provisions and tests in that the proposal
6 flies in the face of true water availability, being
7 wet water and future trends, that it does in fact
8 impair other water rights and uses, and that the
9 Compact calls from downstream have not been addressed
10 yet and poses detrimental impacts on the general
11 public welfare of the region.

12 Finally, I would submit that the public
13 interest provision does allow the creation of a
14 sustainable water budget, and I believe it creates
15 the obligation for the State Engineer's office to
16 create a sustainable water budget for Utah, again,
17 based on highest and best uses of water and present
18 environmental and economic and agricultural trends.
19 And I would submit that as we heard mentioned from
20 the company, the applicant, that energy for pumping
21 water can come from local renewable projects as an
22 alternative to large projects that would simply
23 export most of the energy from the region. Thank you
24 very much again.

25 HEARING CHAIRMAN: Okay. Thank you. As I was

1 about to state a moment ago -- hold on just one
2 second here. I want to make you are aware -- I hope
3 you understand that under Utah law the State Engineer
4 is under the obligation to publish notice of an
5 application, and individuals who desire to protest
6 that application have 20 days from the final
7 publication date of that application in which to file
8 a written protest with the State Engineer's office.

9 There are some individuals who did not meet
10 that deadline and are late protestants and I have
11 them on my list. I'm going to go through those
12 individuals and give them an opportunity to speak
13 also inasmuch as they probably paid their \$15 filing
14 fee and filed something with the Division. So we
15 would like to acknowledge them now. Can you hold
16 your comments until after these folks speaks?

17 RAY TIBBETTS: I would just like to say that I
18 am over here on a public deal. It was announced, and
19 if we didn't protest, we don't get to say anything.
20 Your time is running out we've got to be heard too
21 just like that guy probably wasn't.

22 HEARING CHAIRMAN: What was your name, sir?

23 RAY TIBBETTS: Ray Tibbetts. I'm from Moab.

24 HEARING CHAIRMAN: So you've appeared here
25 without being a formal protestant.

1 RAY TIBBETTS: I'm not a protestor. I come over
2 to support the damn thing, and I just about wore my
3 pants out.

4 HEARING CHAIRMAN: Okay. I hear you. I think
5 my seat's a little harder than yours. I am looking
6 enviously at yours, so --

7 RAY TIBBETTS: I'm ready to pat you on the back
8 for taking this kind of gobbley goop.

9 GARY KOFFORD: I am with him. I think we ought
10 to have a couple of positive comments here for a
11 minute.

12 HEARING CHAIRMAN: We would welcome your
13 comments in a moment. Let me go through these
14 individuals who are late protestants who have filed
15 something with the Division, and then we'll turn to
16 you to allow you to speak whatever you would like to
17 go ahead and say, I suppose. One of the late
18 protestants is Joni Pace. Ms. Pace, are you
19 represented? Another one, William H. and Geniel
20 Raey. Another one, Theresa Butler. I believe
21 Ms. Butler, you had the opportunity to speak earlier.
22 Was that sufficient?

23 THERESA BUTLER: That was.

24 HEARING CHAIRMAN: Thank you. Another one,
25 Curtis and Kerry Rozman. Are they represented? Is

1 there anything additional, Mr. Rozman, that you might
2 have to present?

3 CURTIS ROZMAN: Yes, sir. My name is Curtis
4 Rozman. We own a farm ranch down below the point of
5 diversion that's being proposed. I have a couple
6 concerns with the information that was brought
7 forward today by the proponents. Talk about a
8 70 cubic feet per second withdrawal from the river,
9 and that's an isolated situation, but the
10 appropriations that have already been made to this
11 river in this area have exceeded all historical
12 appropriations in the last few years. And as we just
13 heard from Timmy Vetere, he plans on executing
14 another 8,000 acres. That's another over a hundred
15 cubic feet per second withdrawal from the river.

16 Also, some of these new appropriations, it
17 was indicated or kind of glossed over that as of
18 October 31st that these should all be done and so
19 we've already seen that net affect. That is not the
20 case. Those grounds have been perfected, but we have
21 yet to see on most of those grounds one full year of
22 pumping to those fields. We haven't seen the net
23 effect of what's going to take place. You combine
24 those two together and we're looking at over 140
25 cubic feet per second net effect yet to be seen, that

1 we have not put in these graphs and in these tables
2 as far as an overall result.

3 You add 70 cubic feet per second to that,
4 and we're up over 150 plus. Now, we heard from the
5 doctor, Dr. Humphrey, (sic) and he was saying a
6 low-water situation, we could be looking at 70 cubic
7 feet with a withdrawal of 10 percent of the river
8 flow. Well, if you combine that with everything
9 that's already appropriated and in the process of
10 being completed, that's much more than like a 20 or
11 30 percent withdrawal from the river. And are we
12 okay with that? And I just want to know that.

13 I mean, these are concerns I have. I don't
14 feel like the 70 cubic feet per second withdraw from
15 the river and presented that on the graphs of
16 historical nature took into reflection everything
17 that's coming about in the next few years. And these
18 are not things that maybe will be done. These are
19 not things that will probably be done. These are
20 things that are in the process of being done right
21 now and will be done. And so that's a total
22 cumulative effect of more than 20, 30 percent of our
23 river's flow at low water. And that's a serious
24 concern to me.

25 As far as the statements that were made

1 that there will be no net impact on the water users,
2 I want to see how that's going to be protected. I
3 want to see how that's going to happen. As far as
4 not effecting recreational use or other water use, I
5 live on the river every day of my life. In low water
6 I watch the canoes and rafts being drug down the
7 river by people that are trying to float the river.
8 You take 20 or 30 more percent out of that, I don't
9 see that. Every summer we can walk across the river
10 at my place and not even get your waist wet. But I
11 think there's some serious concerns that need to be
12 addressed that haven't been addressed here today.

13 HEARING CHAIRMAN: Thank you, Mr. Rozman.
14 Another late protestant is Jake and Jeni Shirley.
15 Are they represented? Very good. We've expressed an
16 interest in some other individuals who are here, and
17 would like to address us. We'll turn to you now if
18 you would like to speak.

19 BART MILLER: Mr. Hearing Officer, Bart Miller,
20 I'm one of the late protestants. I was on your list.

21 HEARING CHAIRMAN: Okay. Are you Western
22 Resource Advocates?

23 BART MILLER: Yes.

24 HEARING CHAIRMAN: Okay. I apologize. I had
25 that on my list and I omitted you. I'm sorry.

1 BART MILLER: Thank you very much, Mr. Hearing
2 Officer. Bart Miller with Western Resource
3 Advocates. We are a public interest conservation
4 organization. We have offices in many western states
5 including Utah. And notably we are a member of the
6 Upper Colorado Endangered Fish Recovery Program. I'm
7 here today to urge the Division of Water Rights to
8 deny the change applications or withhold approval
9 until further factual investigations can be made into
10 whether all the statutory requirements have been met.

11 I'll spend three or four minutes giving a
12 very pointed discussion of the history of the
13 Recovery Program, the critical role of the Green
14 River, and the analysis I believe is needed to ensure
15 that these water right applications, Blue Castle
16 applications in particular, do not impair Recovery
17 Program flows.

18 As many in the room have made mention of,
19 the Recovery Program has been set up 20 years ago, in
20 fact, to address the concern over four endangered
21 fish. It's a cooperative effort including the state
22 of Utah, state of Colorado and Wyoming as well as
23 conservation organization like mine, water users, and
24 federal agencies. It has several purposes. Among
25 them are to protect and recover endangered fish of

1 the Upper Colorado and also protect development of
2 water in the basin. The important part of that is it
3 had identified critical habitat for the four listed
4 endangered fish including the entirety of the Green
5 River from the confluence of the Yampa River all the
6 way down to Lake Powell.

7 The role of the Green River cannot be
8 overemphasized. The Fish and Wildlife Service
9 biological opinion for many, if not most, of the
10 large-scale water projects that have currently
11 developed water, including elements of the Central
12 Utah Project and a project in the Duchesne River
13 Basin, all rely upon Flaming Gorge Reservoir to
14 deliver flows to cover the impacts on endangered
15 fish.

16 The final environmental impact statement is
17 now four years old. Mr. Olds reference, I think, a
18 draft of version of that from earlier in the decade.
19 The final Environmental Impact Statement was put out
20 in early 2006. It includes specific flows for the
21 endangered fish, which I will get to in ten seconds.
22 It's important also that the recovery goals -- that
23 is, the targets for populations of these fish set by
24 the Fish and Wildlife Service -- conclude that the
25 Green River may be the only river in the entire upper

1 basin with the capacity to restore the endangered
2 pikeminnow, some of the only -- two places to restore
3 razorback suckers and bonytail. So in short, it's
4 the linchpin for the recovery program.

5 The '92 biological opinion, Fish and
6 Wildlife Service developed the 2000 flow
7 recommendations which set targets for both flow and
8 temperature were implemented in that final EIS four
9 years ago, and importantly the recovery flows for the
10 Green River include minimum flows and peak flows on a
11 yearly basis, depending on the type of year. Water
12 years with larger snow pack have bigger peak flows
13 and larger base flows; drier years have less. And
14 it's important to point out that those peak flows and
15 base flows are throughout all the regions of the
16 Green River, what someone referred to as Reach 1, 2,
17 and 3, Green River, Utah being Reach 3.

18 A very important point kind of addressing
19 or responding to the presentations made by the
20 applicant today is that the minimum flows set up in
21 those flow targets for the driest of years are
22 considerably higher than the flows that were being
23 analyzed. The graph where we say a green line and a
24 red line were showing small increments or 10 percent,
25 which I would not say is small, but changes in a

1 700 CFS, that is well below the floor that the Fish
2 and Wildlife Service has called for as far as target
3 flows. The base flows even in the driest of years is
4 around 1300 CFS. So the fact we are taking a little
5 bit more from something that's already several
6 hundred CFS below the target flows is of important
7 note.

8 And, finally, I'm here today largely
9 because the proposed change applications would add
10 additional consumptive use from this reach of the
11 river where there are significant problems already.
12 And I believe it's imperative in the analysis that
13 your office does take a close look, not just back
14 records of the record of the past 30 years, but
15 indeed look forward. As of 2006, there's a new flow
16 regime that the Flaming Gorge Reservoir is
17 responsible for producing. So despite the
18 professor's look at what might happen over the last
19 30-year period of record that ended in 2007, the
20 important time frame to look forward -- the graphics
21 and analysis actually needs to be done on the
22 going-forward basis for meeting those endangered fish
23 flow.

24 So we support very strongly an
25 investigation and a modeling effort that I believe

1 the Fish and Wildlife Service spokesperson today and
2 the Bureau of Reclamation referred to as something
3 that can be done corroboratively between the state of
4 Utah, Fish and Wildlife Service, Bureau of
5 Reclamation and others. Therefore, Western Resource
6 Advocates respectfully requests that this hearing
7 reject or withhold approval of the Blue Castle
8 application until the Division of Water Rights can
9 ensure protection of the recovery flows and as a
10 result of that we also join the request of keeping
11 the record open for 90 days after the materials are
12 posted on the website. Thank you very much.

13 HEARING CHAIRMAN: Thank you. Okay. Now, we've
14 had several other people who have expressed an
15 interest in addressing the hearing today. Would you
16 state your name for the record, please.

17 GARY KOFFORD: Thank you. I'm Gary Kofford,
18 chairman of the Emery County Commissioners, and I
19 would like to go on record as being in favor of this
20 project and would encourage you to approve the
21 appropriation. A couple comments, Emery County is
22 traditionally a energy producing county. It's got
23 coal power plants. We have five power plants Rocky
24 Mountain/PacifiCorp owns. Combined they produced
25 1500 megawatts. You're talking one unit out here

1 will produce what's over there.

2 If you talk about endangered species in the
3 environment -- political arena that we live in today,
4 the coal-fired power plant is an endangered species.
5 It's got a life on it. Across the United States they
6 are converting them to natural gas quite rapidly. I
7 don't want to predict, but sometime in the near
8 future, not so distant future, these power plants
9 possibly will either go away or will have to change
10 fuel.

11 If this happens, if they were to go away,
12 most of the power in the state of Utah, part of
13 Nevada and part of Colorado would go black. I
14 respect the environmentalists. I respect what their
15 view points are, but at the same time I think they
16 need to consider what they are going to use for power
17 in the near future. I've sat in several meetings
18 across the state of Utah with PacifiCorp and other
19 people and I happen to come from an energy related,
20 natural gas industry. I spent 33 years in that. So
21 energy is not a new field to me.

22 But as you try to figure out where you're
23 going to go with the future energy, it's been quite
24 apparent that -- sure, there's a place for windmills
25 and there's a place for steam, out of the ground,

1 various other things like this, solar. But it is not
2 all that practical because the wind don't always blow
3 and the sun don't always shine. It's quite evident
4 here in Green River today. Sometimes the sun just
5 isn't out there.

6 You've got to have this base load, and I
7 feel like this group that did the presentation this
8 morning didn't possibly hit on that heavy enough
9 because it's been predicted -- and I've sat in
10 several meetings recently where as early as 2012 they
11 are talking about all these brown outs across the
12 western United States. They are talking about having
13 a power plant in production possibly by 2018 if they
14 hurry.

15 This water allocation is a necessary part
16 of that process, and the longer it's held up, the
17 longer they will sit here debating "Should we proceed
18 or should we not proceed?" I think -- as I look at
19 Emery County, the tax base that we have in Emery
20 County is on declining situation. The population of
21 Emery County is a declining situation. The schools
22 are on declining situation. Rural life in Utah is
23 disappearing. We have some citizens in Green River
24 and we have citizens in the western corridor that do
25 reply on agriculture, and I respect them. They are

1 hard-working individuals, and I respect their
2 opinions. But at the same time as a whole, if we are
3 going to provide life in Emery County as we know it
4 today, we have to jump at opportunities, and this is
5 an opportunity in my mind.

6 It's an opportunity not only for tax base;
7 it's an opportunity for our kids, my kids, other kids
8 to stay here and have employment and stay at home.
9 Otherwise, we're all going to be living on Wasatch
10 Front. I've lived there all my life. I spent about
11 30 years up there. I don't care to go back. This
12 morning I saw that it was pretty dirty air. It's
13 been that way for several days. Somewhere, as we
14 look at this process warranted, water is real
15 commodity that -- I think Mark Twain says it's for --
16 water is to fight over; it ain't for drinking. Or
17 something to that nature. I forgot the exact words.

18 But over the history of the ditch in Emery
19 County, people have fought over water forever and
20 will continue to fight over water just like they do
21 in Green River, but once this water goes back to
22 Green River, the state of Utah don't have too many
23 more chances to use it. It goes on down to Arizona,
24 Colorado, Nevada, whoever is downline to get it. We
25 sat here for 50 years and I sat in a meeting with

1 Jerry Olds and various others where they talk about
2 the water that the state of Utah supposedly owns in
3 Flaming Gorge up there. They talk about nobody
4 putting it to beneficial use. If we don't do
5 something with it, we're going to lose it. Sitting
6 here today, I am satisfied we've lost it. I think we
7 need to take it back. I think we need to stand up
8 and say Utah has a right to our water, and we're
9 going to use it right here in Green River.

10 I appreciate your time. I could go for
11 another hour because my feelings run deep and they
12 run thick. But I do appreciate these gentleman
13 putting up the idea and trying to come up with the
14 capital to help something. I appreciate Kane County
15 and San Juan County for saying "Use our water
16 beneficially some place and Emery County take
17 advantage of it." It just tickles the heck out of
18 me. I would hate to think the Division of Water
19 Rights, State of Utah is going to say, "Sorry,
20 People, we're already taking the water to the Wasatch
21 Front so it's up to Utah Water Project and you don't
22 have any rights to what's produced in Utah anymore."
23 And I don't agree with it. Thank you.

24 HEARING CHAIRMAN: Thank you, Commissioner
25 Kofford. We appreciate that. Anyone else?

1 RAY TIBBETTS: Yes, sir.

2 HEARING CHAIRMAN: We've got just a few minutes.

3 RAY TIBBETTS: I know it, and that's what's
4 bothering me. I want to thank you people for have
5 the intestinal fortitude to stay up and listen to all
6 this gobbley goop. These people have the right to
7 say it, but they plowed those damn fish to death
8 today.

9 HEARING CHAIRMAN: Would you state your name,
10 sir, please.

11 RAY TIBBETTS: My name is Ray Tibbetts. I'm
12 from Grand County and Moab. I've lived over there
13 all my life. I've been in business. I'm an x-county
14 commissioner, and I believe in nuclear energy. We
15 have to have it. And it's about time that we decided
16 that. I don't want to freeze to death in the dark.
17 Now, I'll tell you what, these people have put on a
18 very good seminar here today. I understood exactly
19 what they said. Probably not everything, because
20 some of them are a lot smarter than I am. But I
21 think they covered every issue, and I think that --
22 I've been to a nuclear plant down in Phoenix, Palo
23 Verde, and that is the state-of-the-art -- those
24 people took and bought all the water in the Phoenix
25 area from their septic -- from their sewage deal,

1 bought it, cleaned it up, and pumped it out there to
2 cool their plant with. That is state of the art.

3 Now, we probably don't have enough people
4 in Green River using the bathroom. Until we do, I
5 think it's time we make a decision. I've been doing
6 business with the state water division for 50 years
7 here, and I know you use your head. You don't let
8 anybody run anything over on you, and you're going to
9 take care of our water. Now, I have sympathy for
10 these farmers. I think it's very important we
11 protect them, but we've got to work them into this
12 equation. And I thank you for allowing me to finally
13 say something. Thank you.

14 HEARING CHAIRMAN: Thank you for holding your
15 peace until now, Mr. Tibbetts. We appreciate your
16 input.

17 Yes, sir.

18 RANDY DAY: Is that all right?

19 HEARING CHAIRMAN: Go ahead.

20 RANDY DAY: My name is Randy Day. I'm also from
21 Moab, Utah, County of Grand, of which I've been a
22 resident since 1972. Came there for one reason,
23 followed my dad because he was the bread winner and
24 we went mining. And it was called uranium, and we
25 still do it. And I still have a viable mine in White

1 Canyon, and we're mining today. The first permitted
2 mine for 30 years that I'm a part of. And I'm proud
3 to say that. I'm proud to say there's a uranium mill
4 that's still doing that, and it's in close proximity
5 to Green River, Utah, for the fuel for this.

6 It's been proven time and time again, if
7 you read the Wall Street Journal, France is all over
8 this -- 80 percent of their power, 80 percent. They
9 have fine rivers and waterways, and we do too, and we
10 can protect what is out there and what needs to be
11 protected. We can do that. Your issue today is
12 whether or not there's enough water.

13 I have been told through numerous letters
14 we need to appropriate the water that we have, and
15 I've done that. I've got several farms that I'm
16 working and I appropriate that water, and use it
17 because they tell me I will lose it if I don't. And
18 I've worked with Rick Wild and Mark, and this is a
19 classic example of the rhetoric I hear, and it comes
20 from people that don't, in my mind, understand the
21 gravity of what's going on.

22 We've talked about global warming. Now,
23 I'm not sold on it. It's not been proven, and
24 there's many debates going about it now, and freezing
25 to death in Green River, Utah is not my idea of

1 global warming, because that's what's happening
2 today. And Florida don't believe there's global
3 warming either. There's \$80 million worth of crops
4 at risk today for global warming. So if you want to
5 go on the national scene, we can do that.

6 We've forgotten in this meeting today that
7 strategically, the Nuclear Regulatory Commission
8 should put this plant right here today because it's
9 the best national security risk that we have. We
10 have Kirkland Air Force Base to the south and Hill
11 Air Force Base to the north. There would be a nerve
12 center for the United States Defense Department to
13 build a Camp Williams in Salt Lake City, and it's
14 going to take a lot of people to conduct that thing.

15 I was in a meeting Wednesday last week in
16 Salt Lake City, Utah, with the governor about such a
17 thing. Our power grid could use this plant. All of
18 the other ones that you see are on the East Coast,
19 and they are high risk for our enemies, and trust we
20 have enemies. This would be secure, not for us, not
21 just for the Green River, not just for Emery and
22 Grand and San Juan counties, but for the nation.

23 When are we going to stand up and do
24 something for our country? Everybody has their hand
25 out, and we have an opportunity to do something that

1 will last for at least 60 years and benefit our
2 nation, and we cry over some humpback chub that I
3 used to throw out because I couldn't eat it and fish
4 of some kind of species that they are calling
5 endangered because Jimmy Carter said so. And we're
6 doing things that's amazing to me. We're breaking
7 our country for things that don't make any sense.
8 They say we are over in a war fighting it because of
9 oil. Yet we have an opportunity to use our own
10 resources and they complain about that.

11 Throw all that stuff out, even the comments
12 that I made, and look at the facts, protect those
13 farmers that have fields. They deserve that. That's
14 an agriculture base we need to keep. Look at exactly
15 how much water you have and you figure it out, you're
16 the engineers, and put something here that's going to
17 do some good. If there's not enough water, then
18 don't give it to them, but this presentation today
19 was excellent. The group was excellent.

20 And when do we go to a meeting and start
21 worrying about the viability of somebody else's
22 business? When is it the public's responsibility in
23 this country to do that? I live in a county that has
24 a reclamation bond for private business. If you
25 fail, they want to put a reclamation bond on it that

1 you tear down the asset. Doesn't seem right in a
2 lien theory state and I'm not sure how it's going to
3 work out. But those are the people here talking to
4 you today, so give that the credence that it
5 deserves.

6 I appreciate everything that has been done
7 here today and the time that I had. Thank you very
8 much and good luck on it, and on let us know when we
9 can start building a power plant.

10 HEARING CHAIRMAN: Thank you, Mr. Day.

11 We've got time for one more person and then
12 we're going to turn back to the applicant for a
13 concluding statement.

14 DAN HARRISON: That's not quite fair, is it?

15 HEARING CHAIRMAN: Well, we're going to give you
16 a few moments.

17 DAN HARRISON: Oh, I might take a long time now
18 and help -- with some of my friends here to help me
19 say what I'm going to say, but we sat here all day
20 long and we haven't had 20 minutes.

21 HEARING CHAIRMAN: Would you state your name,
22 please, sir.

23 DAN HARRISON: Dan Harrison, Green River City
24 Councilman. Excellent presentation, Aaron. I'm in
25 your corner 100 percent. The council of Green River

1 voted to embrace you into our community, into our
2 valley. Nothing has changed there. The council of
3 Green River voted unanimously to bring in nuclear
4 power into our valley along with the county along
5 with the state. Green River Council voted
6 unanimously to allow you guys to use our property for
7 a POD. We've been in your corner all along and we
8 still are. I sat here all day long and listened to
9 the negativism. I've listened to the same thing over
10 and over and over that they answered originally this
11 morning, but they are stalling. They are burning
12 time up and you played right into their hands. This
13 really burns me. I kind of lost my train of thought.

14 But we stand in solidarity as a city
15 council behind you, Aaron, and I'm really impressed
16 with the professionals you brought today. As Randy
17 said, they made an excellent presentation, and all my
18 questions I had were answered if I brought any to the
19 table here today, and I want you to keep going
20 forward. I know a lot of this nuclear stuff has
21 nothing to do with the water transfer.

22 But the City of Green River is 100 percent
23 behind them getting water to do this project, and I
24 want the water board to know that here today. If I
25 don't put anything across, I know that's what you're

1 trying to decide here, and I haven't got a lot of
2 numbers or anything to give you. I worked at IPP for
3 five years, and they were bringing on people to run
4 contracts along with Los Angeles Power down there,
5 LADWP, to buy the power out of that place. They we
6 were bringing on people after I was hired, and I was
7 in the maintenance people that run the plant. And I
8 didn't see anything they presented today that was
9 left in the gray or anything.

10 I know there's a lot of people that don't
11 know how all these things work. I don't know the
12 whole picture, but I do know that a lot of the things
13 they presented the questions about here today didn't
14 seem abnormal to me having worked at another power
15 plant. I agree with the idea that we do have to have
16 nuclear power because we can't keep burning fossil
17 fuel and depleting our ozone and adding CO2 to our
18 environment, so that's where I stand on this, and
19 that's where the city government of Green River
20 stands on it also. Thank you.

21 HEARING CHAIRMAN: Thank you, Mr. Harrison. I
22 know there are a few other people that may desire to
23 make statements for the record. By show of hands,
24 are there other individuals who want to say
25 something? Okay. We've got a few. I'm trying to

1 determine how long -- from the museum staff, do we
2 need to close down by 5:00 or not?

3 AUDIENCE MEMBER: The mayor is here. Ask him.

4 MR. MABEY: That was my question whether we are
5 on a hard 5:00 P.M deadline. If we are, we are
6 willing to turn over a few of our minutes to persons
7 that want to make statements in support. But are we
8 on a firm 5:00 p.m. deadline?

9 PAT BRADY: No, you're not.

10 MR. MABEY: Okay. Thank you.

11 HEARING CHAIRMAN: Okay. Very good. Why don't
12 we go ahead and take about a ten-minute break in that
13 case.

14 **(A break was taken.)**

15 HEARING CHAIRMAN: Before you get going, though,
16 we just broke for a small recess in this hearing on
17 Water Right No. 89-74, and so we're going to turn
18 back to some additional individuals who wanted to
19 make statements. Sir, I don't know your name. I
20 apologize.

21 LYNN STEVENS: My name is Lynn Stevens. I'm a
22 San Juan County commissioner. First of all, I
23 appreciate your sitting through this all day long. I
24 think we need to return the focus to the issue which
25 was water diversion, two applicants. We spent an

1 awful lot of time today challenging almost every
2 aspect of the 12- to 15-year process of the nuclear
3 plant doing what I consider everything we can to
4 avoid the issue of the water diversion.

5 We've had several requests for time delay.
6 I would just suggest everybody in the system have the
7 same amount of time to prepare for this issue and
8 this hearing, and I would respectfully request that
9 you focus on the two applicants, the question of
10 water diversion. This whole process we had explained
11 to us in great detail with very well-prepared charts.
12 It goes way, way down the track of time and process
13 and hoops to go through, concessions to be made, and
14 all of which will have future hearings, all of which
15 will hear the same question again that we heard
16 today. Please focus on the water diversion
17 applications and grant them. Thank you very much.

18 THE COURT: Thank you, Mr. Commissioner. There
19 were a couple of other individuals. Right here.

20 KEITH JOHNSON: Sir, I'm Keith Johnson, a
21 27-year resident of Green River. I don't have a lot
22 of money to go hire fancy attorneys. I know when I
23 hear a good presentation. I heard that here from
24 this Blue Castle organization today. I'd like to
25 question some of the protestors just why are they

1 protesting? They give more consideration to a little
2 guppy than they do to a human being. I didn't hear
3 one single protestant bring up anything about humans
4 other than for some unfounded safety concerns. They
5 are worried about a guppy in the river or a humpback
6 whatever. When are we going to start as a body of
7 people worrying more about the necessities of our
8 fellow man? The power that these protestors'
9 children are going to need, they are working against
10 their future children, against their future
11 generations.

12 We have got to have a viable power
13 solution, and there's no other place than this valley
14 that it will work. It's proved through the
15 applications. They are not wasting their time here.
16 They are not trying to tie stuff up for 40 years.
17 It's time to wake up. Thank you.

18 HEARING CHAIRMAN: Thank you very much. Any
19 other individuals here?

20 PAT BRADY: I want to thank you for coming down
21 to Green River for this hearing and the opportunity
22 to speak.

23 HEARING CHAIRMAN: We hope it was a boost to the
24 economy at least at noon.

25 PAT BRADY: We appreciate anything we can get.

1 I'm Pat Brady. I'm the mayor of Green River, and I'm
2 neither a nuclear expert nor a water expert, simply
3 someone trying to improve his community. I represent
4 the city council and the citizen of Green River and
5 am painfully aware of the sensitive feelings this
6 project has evoked. There are Green River citizens
7 for and against the power plant coming to our town.
8 From those I have talked to and heard from, the
9 majority in our community are in favor of it.

10 As a matter of fact, today I had the
11 opportunity to talk with a fellow that was here for
12 most of Blue Castle's presentation, and he was
13 wondering what all the fuss was about. He said Blue
14 Castle Project should go ahead. They crossed all
15 their T's and dotted all their I's in his opinions,
16 and he also talked to others that felt the same way.

17 It's true we are not the experts, but isn't
18 it true that all projects -- you know, I don't care
19 how big it is, it's speculative. You know, is it
20 going to be finally be built? Well, we don't know,
21 but we certainly hope so. And we need to take
22 chances on things that will help our community.

23 We -- the pro-citizens, the council, and
24 myself -- are in favor of nuclear power plant coming
25 to Green River because of the economic benefit it

1 would have on our community and Emery County. The
2 city has met individually with Blue Castle and with
3 the Emery County economic team, and we believe this
4 project is worth pursuing. You know, when someone
5 talked about the safety, nobody can guarantee a
6 hundred percent safety from everything. You walk
7 outside. Are you a hundred percent safe? No.

8 Green River desperately needs the economic
9 lift that the Blue Castle project will give us. This
10 will bring the kind of prosperity to our town that
11 will lift us out of the mire of poverty and allow our
12 citizens to work only one job instead of two or
13 three. It would mean families getting to be families
14 instead of ships passing in the night. I mention it
15 helping Green River. However, in reality it will
16 help the whole area and state economically and will
17 benefit Utah and the surrounding states by supplying
18 their ever-growing power needs.

19 I understand a great concern over the
20 water. However, I do not see it as a significant
21 reason to stop this project. And I, too -- you know,
22 most of our money comes from the service industry.
23 However, we do have large farms and ranches here and
24 their water rights do need to be protected and
25 included in this project. I recently read in the

1 Times Independent of Moab that the water is simply
2 not there. No new water rights are being asked for.
3 Again, I'm not an expert but it seems to me that we
4 are asking you to approve a transfer of water rights;
5 therefore, if Kane and San Juan County want to give
6 that up, there must be water there.

7 All Blue Castle desires is the approval of
8 the transfer of those water rights so that they can
9 get to the business of providing clean energy. And I
10 do not find it ironic that we are in a river museum.
11 What a great use of our water to provide clean
12 energy. And somebody mentioned that it wasn't a good
13 benefit to the people. Well, I think economically it
14 is a great benefit to the people.

15 No offense, but as mentioned early, it is
16 time to put us humans ahead of fauna and floral.
17 What I heard -- and I concur our community and
18 surrounding area will not be harmed by taking the
19 needed water out of the Green River. The city of
20 Green River, Emery County, State of Utah will all
21 benefit from the Blue Castle project being allowed to
22 be built here.

23 Let me say Green River is a wonderful rural
24 town and deserves at chance to go from a struggling
25 economy to a progressive one. Our town has been in

1 down cycle for many, many years. A lot of effort has
2 been put in by a lot of people to bring industry to
3 our area and get Green River out of this slump.
4 We're grateful for those that have faith in Green
5 River and want the chance to provide our citizens
6 with a better life. If not here, then where?
7 There's no better place in the country right now than
8 this area to put in a nuclear power plant.

9 What a tremendous loss it would be to not
10 have this project developed here. I hope that you
11 will find in favor of the water transfer, and let the
12 plans for the project proceed. Again, thank you for
13 allowing me to take a few minutes.

14 HEARING CHAIRMAN: Thank you, Mayor Brady. We
15 appreciate your attendance today.

16 Yes, sir, back in the back.

17 MIKE MCCANDLESS: I'm Mike McCandless. I'm the
18 economic development director for Emery County. Some
19 people accuse me of being the one who is responsible
20 for this. If you like it, I'm responsible. If not,
21 it's the commissioner's fault. But I am passionate
22 about Green River. I don't think there's anybody
23 that knows me that can argue that's not the case. I
24 spend probably more time in Green River trying to do
25 economic development than I do at home. My wife

1 accuses me of having a second family down here. I
2 live in Huntington but I am probably in Green River
3 three to four days a week most weeks because I think
4 we have potential here that needs to be recognized.

5 Mr. Tilton and these people are not the
6 first to recognize that. The history of this project
7 goes way before these guys got involved. This is the
8 fourth time that a nuclear power project has looked
9 at Green River, and that's because it's makes sense.
10 It's been looked at time and time again because of
11 the potential and because of the location that it
12 serves within the country and the needs that are
13 sitting there.

14 I've heard today many arguments about
15 whether or not this would benefit the state of Utah
16 and whether or not this is truly beneficial. But I
17 can certainly assure you as a person who works
18 because of the energy industry that Emery County is a
19 political subdivision of the state of Utah. You just
20 look purely at the taxes that would come in to
21 benefit the residents of Emery County. Those are
22 desperately needed funds for the school children, for
23 the county. We're looking at 10 to 20 million
24 dollars alone in property taxes, not to set aside the
25 amount that would come in for employees and other

1 kinds of uses, the other business that would come in.
2 That's a benefit to the state of Utah.

3 Look at the condition the state of Utah is
4 in currently economically. What does Utah need? We
5 need these kinds of projects. One reason I stood up
6 is I was asked to address very briefly a question or
7 concern brought by Ms. Fields relating to the
8 ownership because I am the one that manages the
9 property out there for Emery County. I'll address
10 that very quickly. And I can supplement this in my
11 comments that I'll send in writing.

12 Basically we have a relationship between
13 the state of Utah and Emery County and the third
14 party, Castleland RC&D Council. All the three are
15 part of that agreement. Emery County does not have a
16 fiduciary responsibility in that we basically pay for
17 the lease on an annual basis. The RC&D Council
18 actually holds the fiduciary carrier of the project.
19 That is who this group has the escrow account with,
20 not with Emery County. But they are falling well
21 within the agreement that's been established between
22 Emery County, the State of Utah, the Castleland RC&D
23 Council. Frankly, that is following exactly as that
24 was drafted, has gone through open and public process
25 a couple of years with the SITLA board.

1 Finally, I just want to mention just for
2 people's consideration. We talked about safety and
3 nuclear power. Think about really how much hypocrisy
4 there is when we talk about the safety of the nuclear
5 power. Never in the history of the United States's
6 nuclear power industry has there been a fatality from
7 the nuclear -- radiation leak or anything related to
8 that. You can't claim that with almost any other
9 industry in the United States.

10 Trucking, dozens are killed per week. How
11 dangerous is fast food? We talk about this in terms
12 of safety we're really being not honest with
13 ourselves. This is the most safe, most regulated
14 industry we have in the country, and I think that
15 needs to be factored in when we're discussing the
16 public interest. Once again, the commissioners, the
17 city, and even the state, as Mike Noel has mentioned,
18 have supported the concept of bringing nuclear power
19 in Green River. Once again, our office will do all
20 that we can in our power to make that happen, and I
21 thank you for your time.

22 HEARING CHAIRMAN: Thank you, Mr. McCandless.

23 Are there others in the audience that would
24 like to go ahead and address the hearing?

25 BILL ADAMS: Thank you. My name is Bill Adams.

1 I liver here in Green River -- actually, not Green
2 River but eight miles out of town up at Willow Bend.
3 I'm a photographer. I used to live in Santa Barbara,
4 California, the third most beautiful city in the West
5 Coast. My doctors out there said I should move
6 because of the dense fog and the cold, dampness. I
7 ended up in Green River in the area around Green
8 River being a photographer and a builder and a few
9 other things. I was one of the photographs in Glen
10 Canyon Dam. Also, I was a photographer with a big
11 heavy tripod and cameras that was in Glen Canyon
12 before there was a reservoir. I have some very
13 spectacular film of Glen Canyon before there was a
14 reservoir and before there was the dam. The
15 University of Utah seen some of my footage and they
16 say, "Why don't you give that to the University. We
17 could really use it." I said, "Well, show me a
18 little green maybe we'll talk."

19 But I'd like to say this: I appreciate our
20 mayor. Since I've been here for 20 years now, he has
21 been one of the finest men I've met, and he does
22 thing which I really appreciate. The last mayor we
23 had before him, he and I fought constantly. In Santa
24 Barbara, I was on the Architectural Board of Review,
25 and we had color codes. One day he asked me, "What

1 would you suggest for Green River?" I said, "Well,
2 you live in a beautiful valley. You have some
3 beautiful views all the way around us." I said, "Why
4 don't you change your color code a little bit and
5 make Green River a beautiful little city just by a
6 little bit of paint. It won't cost a whole lot, but
7 you could change the appearance. It would look very
8 nice." Nothing was happening about it.

9 The Chow Hound was sold, and another person
10 bought it. They painted it an orange roof, a yellow
11 soffit, and gray walls, and some other specs of
12 color. And the owner saw me one day, and he said,
13 "Oh, Bill, how do you like the colors of my cafe?" I
14 said, "Well, it looks to me like it's a Mexican
15 brothel." She ran to the mayor complaining, said,
16 "That Bill Adams, he's trying to get me to change the
17 color of my cafe." Anyway, the mayor said, "Don't
18 pay attention to him. He's just an old fart and it
19 doesn't make any difference anyway." So anyway I
20 resigned my position. I was on the outs with a few
21 of the people.

22 But I came to Green River because I believe
23 that this valley and Southern Utah is the most
24 spectacular place on the face of the earth. I've
25 been all over the orient. I've been many places

1 shooting pictures and all, but Utah is a gorgeous
2 state. It's beautiful. And Green River is really a
3 dump. There are buildings that have been here for
4 the 20 years that I've been here, and no one will
5 tear them down. In California they shut them down.
6 Right now, get rid of them.

7 What are they afraid of? I'd like to see
8 our new mayor -- and he is a man of action -- do
9 something about these old buildings. You're talking
10 about a nuclear plant, good, let's put it right in
11 the middle of Green River. We'll knock down the old
12 Ray's Cafe and put one of the tubes right there.
13 We'll take up that old miniature golf course over
14 there, bulldoze and put another cylinder over there.
15 I know this is facetious, but do something. Do
16 something for Green River.

17 I heard that the new governor of our state
18 on I-70 was going to put a checking station west of
19 Green River, and they are going to charge toll to see
20 the new generating plant here in Green River. Well,
21 that might be on the funny side, but towers are ugly.
22 A hundred miles north of Santa Barbara is San Louis
23 Obispo, they had a city, beautiful city, San Louis
24 Obispo. And they built a nuclear plant right on the
25 ocean -- ugly. You see the ocean. You see the

1 waves. You see the islands, and you see these towers
2 sticking up -- no paint, no color, no anything. They
3 should do something, and they did. They beautified
4 the areas surrounding them to help camouflage them,
5 to hide them.

6 But I think it would be wise for us to
7 consider where we're going to place this unit. Right
8 on I-70 where everybody travels back and forth, back
9 and forth -- all the truckers, they'll use it. But I
10 wonder how many civilians and families will no longer
11 use I-70. Something to consider.

12 HEARING CHAIRMAN: Okay. Thank you very much,
13 Mr. Adams. Is there anything additional?

14 BILL ADAMS: Just to say that I wish you luck,
15 and I wish that you would see that somehow Green
16 River could turn into the oasis that speaks of Green
17 River.

18 HEARING CHAIRMAN: Thank you very much. We do
19 all need a little luck now and then. Would it be
20 safe to assume that there are no other parties in the
21 audience that would like to speak? Very good. We'll
22 go ahead and turn back to the applicant then to go
23 ahead and offer a concluding statement addressing any
24 comments of the protestants if they would chose to.

25 MR. MABEY: Thank you. Yes, let's get back to

1 business here. We reserve our right to, you know,
2 present some rebuttal here under the time we have
3 remaining. We'll be very circumspect on how we use
4 that. The majority of our response in rebuttal will
5 most likely be in writing in response to things that
6 are submitted by protestants after the record is kept
7 open. But in that regard we would ask the record be
8 kept open for 30 days until February 15.

9 We'd like to here just for a few minutes in
10 response from Mike Noel from Kane County Water
11 Conservancy District and from Jerry Olds and then
12 from Dr. Tom Hardy, and then David Wright will make a
13 few closing arguments and then myself.

14 HEARING CHAIRMAN: Okay. Very good. Mr. Noel.

15 MIKE NOEL: Thank you. I do appreciate your
16 indulgence today. I just have a few comments I want
17 to make. It's not very often in life you can see the
18 end from the beginning, and I feel like I've gone
19 full circle, not only this water right, but also on
20 this point where was once a potential for coal-fired
21 generating plant in Kane County, Utah, back in the
22 1960's, which was actually at that time approved
23 initially by groups like the Sierra Club because they
24 didn't want to have anymore hydropower on the rivers.
25 So they said, "Let's go to coal fire generation."

1 Then they subsequently opposed that.

2 That project was stopped by environmental
3 groups. Many of you remember Robert Redford came out
4 against that. Then the Grand Staircase -- then the
5 Analex project came along which was going to be a
6 coal mining project, about 30 acres of surface
7 disturbance in that entire area. That project was
8 stopped by President Clinton with the creation of a
9 1.9 million-acre national monument, again, about
10 5 billion tons of coal that could have been developed
11 not only for Kane County but the people and citizens
12 of Utah, could have provided through a process of
13 hydrogasification, enough fuel to last the country
14 over a hundred years. Gasification is something
15 South Africans seem to do very, very well.

16 The water right then now belongs to
17 citizens of Kane County after going through a
18 process. We talked about replacing this with wind
19 generation. We talked about the possibility of that.
20 I am supportive of that. One of my districts that I
21 represent in the legislature, Beaver County, had one
22 of the largest wind generation facilities. They also
23 have geothermal in that area, very supportive of
24 that, will not provide the baseload power. It's
25 very, very expensive, somewhere around twice as

1 expensive as nuclear and some of the other types of
2 power.

3 I'm a farmer myself. I raise cattle, raise
4 upwards of 200 head of cattle and farm hay. I do
5 need to have cheap power or at least competitive
6 power. We will be shifting a lot of our resources if
7 we buy into this climate change argument. Again,
8 with my chair on the public utilities committee and
9 the gentleman mentioned that the legislature does not
10 support the man-caused climate change. Neither does
11 our governor. So we've had several policy statements
12 that we've made in terms of legislation. One was to
13 get us out of the Western Climate Initiative and with
14 many of the recent discoveries with IPCC panel and
15 the East Anglia release of many, many documents, we
16 think that climate change certainly has some problems
17 right now.

18 Farmers and ranchers should support this.
19 I'm strongly supportive of them being able to be
20 protected. I don't think this is going to impact it.
21 I think the presentation that has been given here
22 today focuses on the policy decision, what will be
23 the impacts of withdrawal of this water on any of the
24 water users in the area and also the ancillary
25 effects to threatened endangered species.

1 Mr. Hardy did an excellent job on that.
2 I'm not sure that people listened to that argument.
3 I think he could reiterate that, but I would
4 encourage you to follow our state policy. In
5 government, if we provide a pathway for companies
6 such as Transition Power, Blue Castle, to follow, we
7 need to stay with that policy because in order to
8 have a business plan and make that business plan
9 work, there has got to be predictability. This
10 process and water rights in Utah are very
11 predictable.

12 If you go through the process and show that
13 there's no interference or if you're willing to
14 replace water that you may somehow affect, you should
15 be able to use those water rights. These water
16 rights again belong to the people of the state of
17 Utah. This is a viable project. Nuclear power is
18 certainly viable. You can see how the panel of
19 people that came up and spoke to this, many of which
20 are senior partners in the company. They have the
21 expertise. They have the knowledge, and they have
22 the means and feasibility to complete this project.

23 So Kane County is very supportive of this,
24 the Water Conservancy District. These are right now
25 our water rights. We have a right to develop those

1 water rights. Every step of the way in being able to
2 develop these water rights, this same group of
3 environmentalists have come in and tried to stop this
4 project. Ranchers and farmers should be very, very
5 concerned when a group like the Center for Biological
6 Diversity, Utah Rivers Council, Southern Utah Water
7 Alliance comes in and protests this project and
8 purport to say, "We're doing this to protect farmers
9 and ranchers." I've also fought that battle for
10 30 years.

11 What's happening on the other front is at
12 the same time they are trying to shutdown cattle
13 production, close down roads and access to public
14 lands, while they then say they embrace the farmer
15 and the rancher. It's hypocrisy and it's most
16 evident to that they don't care about the people in
17 this area or the people in this state. It's strictly
18 their own selfish motivations. So I would encourage
19 you to disregard many of the statements made here and
20 support this change application.

21 HEARING CHAIRMAN: Thank you very much,
22 Mr. Noel.

23 JERRY OLDS: Jerry Olds, again, I just want to
24 cover a few issues. There's a number of inaccurate
25 statements that have been made. Rather than go

1 through each one of those individually, we have
2 confidence that you as a staff will be able to decide
3 what was truthful and what was not. Couple of points
4 though I would like to just hit on because it was
5 brought up numerous times.

6 First of all, these two change applications
7 that are before you are not trans-basin diversions of
8 water. They are water rights that were historically
9 filed on the Colorado River and the San Juan River,
10 and now the change application before you are
11 transferring that water up, and the Green River flows
12 into Lake Powell and so it is part of the supply for
13 the Kane County one specifically.

14 The other thing I would like to cover is
15 with regard to the considering water rights looking
16 forward. As we looked at the water rights that are
17 being developed or recently been developed on the
18 Green River, there were a number of issues there.
19 Many of those have had proofs filed this past year,
20 and they are still under the process of being field
21 reviewed and so forth. And rather than prejudge what
22 was going to happen there, it was my objective to
23 raise it to your level of consciousness. And again I
24 think Mark Stilson and his staff are very aware of
25 the things that are going on down here, and they can

1 factor that into the decision-making.

2 Needless to say though, from what I have
3 heard, it has not changed my opinion that there is
4 unappropriated water in the Green River. I
5 appreciate the concerns of the water users because
6 the water here in Green River is the life blood of
7 this community, and again, I think the project will
8 honor those water rights. As a result of this
9 project is not going to change how Utah administers
10 water rights. We're not doing away with the priority
11 system. It is part of Utah water law and will be
12 into the future. Thank you.

13 HEARING CHAIRMAN: Thank you, Mr. Olds.

14 TOM HARDY: This is Tom Hardy. Again, I would
15 like to address some of the comments that were made
16 relative to endangered species and the existing
17 biological opinion of the recovery implementation
18 program and reoperation at Flaming Gorge. I want to
19 clearly state it in the record that the first thing I
20 did was read that document again and review the
21 current in-stream flow recommendations both in terms
22 of peak flows, the reason for them as well as the
23 base flow recommendations.

24 I purposefully did not highlight those on
25 any of my graphs because I did not want to presuppose

1 to the State Engineer's office at this point what
2 they would do with the Recovery Program. I did
3 provide in the peak flow analysis a green line at
4 8,000 CFS, fully aware that the minimum peak flow
5 recommendation in dry years was 8300 CFS and that
6 analysis would permit anybody to evaluate the peak
7 flow recommendation and the change in volume of flows
8 or any of the physical characteristics.

9 Also, on the base flow analysis, that
10 analysis was run from 8,000 down to 700 for two
11 reasons. First of all, it covers the base flow
12 recommendation of 1300 CFS. I want to note that that
13 represents a 96 percent exceedance level. That's
14 only a 5.2 percent change in flow volume of the
15 70 CFS reduction and again, as I indicated in the
16 associated graphs in my presentation, de minimis
17 changes.

18 I also purposely was provided with graphics
19 in the cross section geometry. One of those was at
20 1340 CFS, which is very close to the 1300 CFS minimum
21 flow so as to inform the State Engineer's office of
22 issues around that base minimum flow. I just
23 extended that analysis to lower flows knowing that
24 through the process of the Environmental Impact
25 Statement and working with the Recovery

1 Implementation Program, there will be issues of
2 critical flow management that will have to be
3 addressed and felt it was beyond the purview of this
4 hearing to go into those analyses because it's not
5 this forum. Thank you.

6 HEARING CHAIRMAN: Thank you, Mr. Hardy.

7 DAVID WRIGHT: Mr. Mann and others on the
8 hearing panel, my name is David Wright, co-counsel
9 with John Mabey. I'd like to talk briefly just about
10 a couple of factors to start with. The burden of
11 proof that we've got here -- you're probably aware of
12 the Millburn Irrigation case. It's actually a case
13 that John and I tried together. We were on the same
14 side as the Division of Water Rights in that matter,
15 and there the court established what the burden of
16 proof is for an applicant at this stage and at the
17 trial stage should a matter be challenged in district
18 court.

19 The court determined that the burden of
20 proof is somewhere lower than preponderance of the
21 evidence, which is standard burden of proof in a
22 civil action in court, and somewhere above the
23 standard that was argued for by Justice Oaks in the
24 Crafts versus Hansen case. His was quite low. The
25 court said it's got to be something higher than that.

1 It's got to be something more than the State Engineer
2 acting as rubber stamp for any applicant, but by the
3 same token the court recognized that the policy of
4 state of Utah is to put water to beneficial use.

5 And with that standard in mind, the court
6 said, "We're not going to require a preponderance
7 level. Instead the applicant has to give the State
8 Engineer a rationale basis, sufficient evidence to
9 form a reasonable belief, or in the words of the
10 statute, "a reason to believe." I think what the
11 court is saying is the reason has to be reasonable in
12 order to approve the application.

13 With that in mind, we can talk about just a
14 couple of factors regarding this project. Physical
15 feasibility, we provided two preliminary site
16 evaluations that discuss seismology, paleontology,
17 and other issues, water access, of course, is clearly
18 part of that physical feasibility process. And the
19 source of water is nearby. There is unappropriated
20 water available, and the Green River can handle it.
21 Dr. Hardy's presentation was essentially air tight on
22 that question about whether the Green River could
23 handle this diversion.

24 Economic feasibility, I think that in order
25 to make that aspect of the statute make sense in

1 light of the other financial feature in the statute,
2 which is whether the applicant has the financial
3 ability to complete the proposed works -- because
4 they are both there, they have to mean two different
5 things. To me, the economic feasibility aspect is
6 sort of asking the macro economic question, which is
7 to say, is there a demand? Is there a market for the
8 thing, the service, the item that the applicant is
9 proposing to produce, whether it's some sort of
10 agricultural product, if we we're talking about hay.
11 Is it cows? Is it a dairy farm? Is there a market
12 for the milk?

13 Well, in this case we're talking about
14 production of electricity. And there is really no
15 doubt, of course, there is a significant demand for
16 electricity, and it's growing. I'm going to present
17 to you sort of a bullet point outline on this issue
18 rather than read through it because we don't have
19 that time, but Utah's need -- just Utah, Utah's need
20 for electricity is growing faster than its
21 population, and that seems to be typical across the
22 western United States. As the population grows, the
23 demand for electricity is growing at a faster rate.
24 Everyone's got a computer. The more we plug in our
25 cars to charge them, the more we need electricity to

1 do that. So the question then is is there a market
2 for this electricity? Of course there is.

3 Now, on this economic feasibility or on the
4 financial ability question, there were remarks by
5 some of the protestants about whether Blue Castle has
6 the wherewithal to build a nuclear power plant.
7 Right now, no. No one does. No one is going to walk
8 in this door or any hearing of this nature with
9 \$18 billion in the bank ready to build. That's not
10 how it works. It would be the same way if we were
11 talking about a coal-fired plant. No one has that
12 kind of liquidity or assets at the initial stage and
13 Mr. Tilton explained quite clearly how this kind of
14 project is developed, and it is developed in stages.

15 In fact, as a result of legislation by
16 Congress 1992 act of 2005, energy act, the whole idea
17 is to protect investors thereby encouraging
18 investment. So you don't require somebody to commit
19 the 8 billion or whatever it could cost to get an
20 entire plant from nothing to operating, rather you
21 get them to commit a piece at a time -- a million
22 here, 5 million there and so on. And that's the
23 process that we are undertaking, and it's the only
24 economically realistic process.

25 I think the factor in the statute

1 concerning good faith, speculation, monopoly are
2 really rather wrapped up in the other two, which is
3 to say if you can establish an economic feasibility,
4 then it's far less likely that you're moving in bad
5 faith certainly or that you're speculating or that
6 you're trying to monopolize anything. And as a
7 result, when you look at the array of expertise that
8 we brought here today, a couple of Ph.D.'s including
9 the former chairman of the Nuclear Regulatory
10 Commission explaining this process, plainly Blue
11 Castle is for real. They are not here gambling with
12 someone else's water rights. They are here gambling
13 with significant resources already spent, already
14 pushed into this process, and this project in order
15 to bring it to fruition. We're along way from
16 producing any electricity out of a nuclear power
17 plant near Green River, but it all begins with the
18 first step.

19 We heard several comments about climate
20 change. We can waste a lot of time debating its
21 reality and the evidence for and against it. That's
22 really not the point. Let's just assume that our
23 climate changes. You don't have to look very hard in
24 the fossil record to know that. The question is what
25 do we do about it? Well, I don't understand those

1 who want to come here and talk about how climate
2 change could wreck the river and its flows and yet
3 don't want to do anything about cleaning up what we
4 push into the air to produce energy. And we can all
5 talk all we want it about wind and solar, but as has
6 been explained in great detail, that will never get
7 us to the base power that we need just to keep these
8 lights on a day like today.

9 And so as a result, we're either going to
10 clean up the air by developing energy that produces
11 zero CO2 from the actual delivery and production of
12 that nuclear-based electricity. I have a number of
13 items that I can quote to you. I'm not going to do
14 that. We can supplement it in writing including I
15 might add the report from the United Nations IPCC
16 commission or committee that got this whole climate
17 change debate really going in earnest. In that very
18 report produced by the IPCC, they talk about nuclear
19 power and how it can be an important part of solving
20 or at least addressing the question of climate change
21 because it's such a clean energy. So, anyway, that
22 will be supplemented in writing.

23 On the question of waste, that's been
24 thoroughly covered, but I can give you -- to put some
25 of that in perspective just this point, if you were

1 to take the amount of nuclear waste produced by the
2 electrical needs of one individual for that
3 individual's entire life, just the electrical needs,
4 by the time that person lives their life, the amount
5 of nuclear waste produced would fit into a soda can.
6 And the amount of nuclear fuel it takes to produce
7 the same amount that would be produced with one and a
8 half metric tons of coal, it's about 1 centimeter.
9 It's half your pinky. We're talking an
10 extraordinarily efficient fuel that doesn't produce
11 very much waste, certainly not when you compare it to
12 what a coal plant pumps into the air.

13 So with that said, the applicant has
14 established a reason to believe on those points --
15 physical feasibility, economic feasibility -- this
16 application is plainly not filed for purposes of
17 speculation or monopoly. And I might add on this
18 question of economic feasibility the Utah Supreme
19 Court, while not speaking directly to this question
20 as -- the phrase "economic feasibility" as used in
21 this statute, it did defined that term as used in
22 another similar statute. The Court said, "It must be
23 proven that the potential use is economically
24 feasible, meaning that there is sufficient demand for
25 the potential use." And that goes back to where I

1 began, and that is if we have a market for
2 electricity, that's the economic feasibility that
3 we're talking about. Clearly not going to be
4 producing something that no one needs or that no one
5 will buy. Thank you.

6 HEARING CHAIRMAN: Thank you, Mr. Wright.

7 MR. MABEY: Thank you. To follow up with that,
8 the remaining criteria not addressed by Mr. Wright
9 includes the fact that there is unappropriated water
10 available. As testified by Jerry Olds, there is
11 reason to believe that there is unappropriated water
12 available in the source at Green River to support
13 these change applications. In addition, there is
14 reason to believe that these change applications can
15 be approved without impairing other water rights.

16 State Engineer -- former State Engineer
17 Jerry Olds has presented that to you, and that is his
18 opinion and he welcomed you to evaluate all of the
19 water rights on the system to come to your own
20 conclusion. We submit that upon evaluation of that
21 you will also determine that there is reason to
22 believe that these can be approved without impairing
23 other water rights.

24 On the question of whether or not it's
25 detrimental to the natural stream environment or

1 public recreation, Dr. Thomas Hardy has made that --
2 reiterated his testimony again that he did consider
3 all of the biological and environmental aspects
4 raised in the Environmental Impact Statements that he
5 has thoroughly reviewed that and concluded that there
6 will not be any unreasonable effects to the natural
7 stream environment or to public recreation. But he
8 readily admits -- and this is part of the process --
9 that the eventual final evaluation will be conducted
10 as part of consultation with the U.S. Fish and
11 Wildlife Service. It will be conducted in
12 consultation with the Recovery Program, and it will
13 go through that entire federal Environmental Impact
14 Statement process.

15 In addition, the remaining criteria is
16 whether or not it is detrimental to the public
17 welfare. We've heard many statements from public
18 officials supporting the application, supporting this
19 use of water, supporting the project. They carry a
20 lot of weight. The state legislature opinion carries
21 a lot of weight, and in addition with regard to
22 public welfare issues, there, of course, are safety
23 issues.

24 There's one important part I need to point
25 out. Is that in evaluation of safety matters related

1 to nuclear power plants, there is, of course, federal
2 law that covers that, and that under the doctrine of
3 preemption, when there's a federal law in place that
4 is in the purview and the venue of the federal
5 government to fully review and make findings and
6 adopt sufficient safety plans for the project to go
7 forth, and that will take place.

8 And the only reason I raise that is because
9 you don't have to make that determination of safety,
10 of spent fuel issues. That is not within your
11 purview, but it is sufficient to say that the
12 diversion of water will not prove detrimental to the
13 public welfare under these applications. With that I
14 would conclude and urge that the State Engineer
15 approve these two change applications.

16 Now, I think we have the remaining issue of
17 how long the record will be open. We have suggested
18 and asked it be open for 30 days until February 15.
19 We've heard numerous requests for it to open for
20 90 days. We think that's unreasonably too long, but
21 we would like to, you know, have you address that
22 now.

23 HEARING CHAIRMAN: Okay. Thank you very much,
24 Mr. Mabey. We appreciate all of the information
25 that's been presented today, the varying points of

1 view and the various concerns that all of the parties
2 to this application have expressed. We would like to
3 go ahead and leave the record open, if it's
4 acceptable, until March 1st, which is a Monday, and
5 that would be approximately 45 days from today.

6 I think that would give sufficient time for
7 the protestants to wind up reviewing the information
8 that has been presented by applicant today, and then
9 for the applicant also to present any additional
10 information to supplement their application they deem
11 necessary. So at that point in time, we'll go ahead
12 and review what we have on file and then should
13 additional time be needed, we'll go ahead and
14 consider it at that point. If that would be
15 acceptable, that's what I would propose, that we wait
16 until March the 1st to close the record.

17 MR. MABEY: Could I clarify that? With the
18 submission of additional material by the protesting
19 parties, we understood that there would be a response
20 time for the applicant to review that and also
21 respond to that and at that point the record would be
22 closed.

23 HEARING CHAIRMAN: Okay. I think again that we
24 can review it on or shortly after March the 1st and
25 wind up concluding whether or not additional time is

1 needed, and we would be glad to review with you
2 whether or not you would desire additional time or
3 feel the need to wind up responding to whatever may
4 be submitted by the protestants. I hope that's
5 acceptable.

6 MR. MABEY: So you have reserved the right for
7 us to respond but subject to further -- another
8 determination by the State Engineer's office but that
9 option is still open?

10 HEARING CHAIRMAN: Correct.

11 MR. MABEY: Okay.

12 HEARING CHAIRMAN: It's only fair that if the
13 protestants raise new issues or submit additional
14 data that you have the opportunity to respond to
15 that, so we would be glad to afford you that
16 opportunity, but we want to wait and see what the
17 protestants actually submit.

18 MR. MABEY: We're okay with that schedule,
19 Mr. Mann.

20 HEARING CHAIRMAN: Okay. Very good. We'll go
21 ahead and correspond in writing with the protestants
22 and the applicant at the end of the March 1st
23 deadline to inform them if additional time is to be
24 allowed to extend the proceedings. And I hope I'm
25 not misspeaking, that the State Engineer doesn't

1 correct me when I get back.

2 Anyway, as I've indicated, we're very
3 appreciative, again, of the museum and the staff and
4 the extra time they put in to wind up accommodating
5 us here in this hearing and for each of you making
6 your appearance, and I would like you to rest assured
7 that the State Engineer is aware of these concerns
8 and considers his duties in a very serious manner.
9 So these will be difficult decisions for the State
10 Engineer to make, that undoubtedly the information
11 that we've acquired today is very helpful. So with
12 that we'll go ahead and conclude this hearing. Thank
13 you very much again.

14 (Whereupon the taking of this hearing was
15 concluded at 5:34 p.m.)

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C E R T I F I C A T E

STATE OF UTAH)
)
COUNTY OF UTAH)

THIS IS TO CERTIFY that the foregoing hearing was taken before me, Letitia L. Meredith, Registered Professional Reporter in and for the State of Utah and State of California.

That the hearing was reported by me in Stenotype, and thereafter transcribed by computer under my supervision, and that a full, true, and correct transcription is set forth in the foregoing pages.

I further certify that I am not of kin or otherwise associated with any of the parties to said cause of action, and that I am not interested in the event thereof.

WITNESS MY HAND and official seal at Spanish Fork, Utah, this ___ day of _____, 2010.

Letitia L. Meredith, CSR/RPR