

ATTACHMENT D

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1 these periods. And I submit that although we see in
2 there recently you have several drought periods, that
3 there isn't necessarily a strong trend into those
4 lower flow periods.

5 JUDGE TRIKOUROS: It just appears that
6 when there's persistent rainfall in the 35-inch range.
7 I'm sorry. Can you hear me now?

8 MR. VAIL: Yes.

9 JUDGE TRIKOUROS: When rainfall is in the
10 35 inch range, that's kind of a low rainfall for this
11 area it looks like and over the last -- from about
12 2000 to today it's been hanging in that 35 inch range
13 for fairly long periods of time. It's hard to tell
14 with this chart really how it correlates to the dam
15 flow because, yes, it is counterintuitive. But you
16 didn't see a trend here either. In other words,
17 rainfall trend did not concern you in doing these
18 evaluations. You looked at that and you feel --

19 MR. VAIL: Yes, we clearly acknowledge
20 that we had two relatively recent drought periods.
21 The 2000 drought and the one that we're currently in
22 were significant droughts. But we don't see those as
23 necessarily being indicative of long term trend.

24 JUDGE TRIKOUROS: Thank you.

25 MR. VAIL: So the next slide, slide 16.

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1 These are my conclusions and then I'll be handing it
2 over to Dr. Kincaid. We acknowledge that the wet
3 cooling towers will reduce the flow whenever they do
4 consumptively use water. So we will have a reduction
5 in flow.

6 The consumptive water use of the plants is
7 nearly constant. It doesn't vary seasonally
8 significantly. It's basically a constant consumptive
9 loss rate. So the fraction of reduction --

10 JUDGE JACKSON: Your microphone.

11 MR. VAIL: I just heard myself. Wow,
12 that's scary.

13 The fractional reduction in flow will
14 increase as the upstream flow decreases. There's not
15 any real mystery in that and that the consumptive
16 water uses between Thurmond Dam and the Vogtle site
17 are more than offset by the flows that we are picking
18 up between Thurmond Dam and the Vogtle site.

19 And that we believe that the 3800 cfs was
20 appropriate for the NEPA analysis, although we did
21 include values at 3000 and 2000. And the staff at
22 this point has no reason to believe that the ongoing
23 drought is representative of a persistent trend into
24 the future and that we believe that our conclusions of
25 the water cumulative impacts being small is

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1 appropriate.

2 JUDGE JACKSON: So after having looked at
3 this for a long time and evaluated it you would say
4 that the long-term impact according to your best guess
5 right now, your best estimate, would be on the order
6 of perhaps three to four percent of the river flow.
7 Is that --

8 MR. VAIL: That's correct.

9 JUDGE JACKSON: Okay. Thanks.

10 (Off the record comments.)

11 DR. KINCAID: We'll move onto the
12 groundwater segment. Slide 17 please. My name is Dr.
13 Charles Kincaid. I have a Ph.D. from Utah State
14 University in Engineering and I've been working at the
15 Pacific Northwest National Laboratory in the area of
16 surface water, actually in the area of soil physics
17 and groundwater, for the better part of 29 years.

18 The topics I'll touch on are four. One is
19 on groundwater resource use and then there will be
20 three on quality aspects. One of those is on tritium
21 and the groundwater aquifer, the Savannah River Site
22 groundwater plumes and saltwater intrusion and then
23 I'll have a slide again on just concluding remarks.
24 Next slide please.

25 On slide 18, I have some summary remarks

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