

From: Siva Lingam
To: njstring@southernco.com
Date: 10/4/2007 10:45:03 AM
Subject: Re: FW: FW: Vantage-5 (V5) versus Vantage+ Fuel Assemblies

Thanks for the clarification.

>>> Diane Jackson 10/4/2007 10:16 AM >>>

Yes, it does. I have sufficient information to begin my review.

Diane

Diane Jackson
Reactor Systems Branch
U.S. Nuclear Regulatory Commission
O-9 D19; MS/O-10 B3
301-415-8548; DTJ@nrc.gov

>>> Siva Lingam 10/03/2007 4:59 PM >>>

Please provide your concurrence/comments on the licensee's response to your concern.

>>> "Stringfellow, N. Jack" <NJSTRING@southernco.com> 10/3/2007 4:51 PM >>>

Siva:

In addition to Bob's discussion below, please note that at the end of the e-mail, Vantage 5 and Vantage + are equivalent from a safety analysis perspective.

Does this address the question?

Thanks,
Jack

-----Original Message-----

From: Florian, Robert J.
Sent: Wednesday, October 03, 2007 3:46 PM
To: Stringfellow, N. Jack
Subject: RE: FW: Vantage-5 (V5) versus Vantage+ Fuel Assemblies

Jack,

As described below, the NRC approved the use of V5 fuel by way of Amendments 43 & 44 for Unit 1 and Amendments 23 & 24 for Unit 2 on 9/19/91.

In our submittal, we documented the reanalysis or evaluation of Chapter 15 events. Events were either reanalyzed or evaluated depending on the impact of the change in fuel type. The NRC's review and concurrence is documented in their SER for the above-referenced amendments. The analyses documented in Chapter 15 are applicable to operating with a full core of Vantage 5 fuel.

Bob

-----Original Message-----

From: Stringfellow, N. Jack

Sent: Wednesday, October 03, 2007 10:50 AM
To: Florian, Robert J.
Cc: George, Ben J.
Subject: FW: FW: Vantage-5 (V5) versus Vantage+ Fuel Assemblies

Bob:
Can you respond?

Thanks,
Jack

-----Original Message-----

From: Siva Lingam [mailto:SPL@nrc.gov]
Sent: Wednesday, October 03, 2007 10:38 AM
To: Stringfellow, N. Jack
Subject: Re: FW: Vantage-5 (V5) versus Vantage+ Fuel Assemblies

Please provide your response for Diane's concern regarding FSAR Chapter 15 analysis.

Siva P. Lingam
Project Manager (NRR/DORL/LPL2-1)
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>>> Diane Jackson 10/3/2007 11:34 AM >>>
Siva -

Thank you for your response. I accept the review. However, given that the fuel is different. I need them to confirm or update the accuracy of the FSAR Chapter 15 analysis.

Diane

Diane Jackson
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>>> Siva Lingam 10/01/2007 11:57 AM >>>
Diane,

Here is the explanation. The licensee agreed with your observation that they have to revise Section 4.1 of FSAR in future. They don't use LOPAR fuel at all, and they mainly use Vantage+.

>>> "Stringfellow, N. Jack" < NJSTRING@southernco.com > 10/1/2007 11:27 AM >>>
FYI

>
>

> From: Florian, Robert J.
> Sent: Monday, October 01, 2007 10:26 AM
> To: Stringfellow, N. Jack
> Subject: Vantage-5 (V5) versus Vantage+ Fuel Assemblies
>
> Jack,
>
> As requested, here is a description of Vantage-5 (V5) versus Vantage+ Fuel Assemblies.
>
> We originally started with LOPAR (Low-parasitic) fuel. Then, by way of Amendments 43 and 44/23 and 24 (Unit 1/2) in 1991, we introduced the Vantage-5 fuel design. One of the major design differences was that the Vantage-5 design had smaller diameter fuel rods. We continued to operate for several fuel cycles with a combination of both LOPAR and V5 fuel in the cores. Both these fuel designs used Zircaloy-4 as the fuel rod cladding material. By way of Amendments 94/72 (Unit 1/2) in 1996, we introduced a variant of V5 called Vantage+ (V+). The key difference is the introduction of the zirconium-based alloy ZIRLO (tm) as the fuel rod cladding material. This amendment is based on the NRC-approved topical WCAP-12610, "VANTAGE+ Fuel Assembly Reference Core Report". This is Reference 2 in Vogtle UFSAR Section 4.1. In the discussions where the materials in the fuel assemblies are described, the distinction between Zircaloy and ZIRLO (tm) are noted. From the standpoint of nuclear design and thermal hydraulic design, the V5 and V+ assemblies are treated as being equivalent and the continued reference to V5 remains applicable.
>
> Bob

Mail Envelope Properties (4704FC6F.1F3 : 13 : 35786)

Subject: Re: FW: FW: Vantage-5 (V5) versus Vantage+ Fuel Assemblies
Creation Date 10/4/2007 10:45:03 AM
From: Siva Lingam

Created By: SPL@nrc.gov

Recipients	Action	Date & Time
southernco.com	Transferred	10/4/2007 10:45:26 AM
njstring (njstring@southernco.com)		

Post Office	Delivered	Route
		southernco.com

Files	Size	Date & Time
MESSAGE	9017	10/4/2007 10:45:00 AM

Options
Auto Delete: No
Expiration Date: None
Notify Recipients: Yes
Priority: Standard
ReplyRequested: No
Return Notification: None

Concealed Subject:	No
Security:	Standard
To Be Delivered:	Immediate
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