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RE Tennessee Valley Authority

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NUCLEAR REGULATORY COMMISSION

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PRE-DECISIONAL ENFORCEMENT CONFERENCE

RE

TENNESSEE VALLEY AUTHORITY (TVA)

(DOCKET NO. EA-19-092)

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WEDNESDAY

JULY 22, 2020

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The conference was convened at 8:00 a.m. EDT via Video Teleconference, Kenneth O'Brien, Region III, Deputy Regional Administrator, presiding.

NRC STAFF PRESENT:

KENNETH O'BRIEN, Region III,
Deputy Regional Administrator
ALEX ECHAVARRIA, Region II,
Office of Investigations
IAN GIFFORD, Office of Enforcement
JOE GILLESPIE, Attorney,
Office of the General Counsel
NICK HILTON, Senior Enforcement Advisor,
Office of Enforcement,

CRAIG KONTZ, Region II,
Office of Investigations
MAURI LEMONCELLI, Acting Assistant General
Counsel
MARK MILLER, Region II, Director,
Division of Reactor Projects
MARCIA SIMON, Senior Attorney,
Office of the General Counsel
ANDY SHUTTLEWORTH, Director,
Office of Investigations
SCOTT SPARKS, Region II,
Senior Enforcement Specialist

ALSO PRESENT:
JIM BARSTOW, TVA, Vice President,
Nuclear Regulatory Affairs
TIM RAUSCH, TVA, Chief Nuclear Officer
TRICIA ROELOFS, TVA, Director,
Data Governance & Analytics
CHRIS RICE, TVA, Director, Plant Operations,
Watts Bar Nuclear Plant
RANDY STAGGS, TVA, Director, Plant Support,
Watts Bar Nuclear Plant
TONY WILLIAMS, TVA, Site Vice President,
Watts Bar Nuclear Plant

BRENDAN HENNESSEY, Pillsbury Winthrop Shaw Pittman

MONICA HERNANDEZ, Pillsbury Winthrop Shaw Pittman

TOM HILL, Pillsbury Winthrop Shaw Pittman

MICHAEL LEPRE, Pillsbury Winthrop Shaw Pittman

DAVID LEWIS, Pillsbury Winthrop Shaw Pittman

DREW NAVIKAS, Pillsbury Winthrop Shaw Pittman

HOWARD FELDMAN, Blank Rome

BARRY LEVINE, Blank Rome

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

8:01 a.m.

MR. O'BRIEN: Good morning, everybody I have us at the top of the hour, 7 o'clock my time, 8 o'clock your time, so I thought we might begin.

I think we might still have some people join us in a few minutes, but we'll start with some of the preliminaries and then go from there.

I'm Ken O'Brien, I'm the Deputy Regional Administrator for Region III, and I'm Also the Director for the Office of Enforcement's Special Project Team.

Before we get started I'd like to ask Ian Gifford of the Office of Enforcement to review a few details of today's video teleconference and answer any questions you might have. Ian.

MR. GIFFORD: Everybody should be able to see the participants of today's meeting on the right side of their screen. If you can't see the participant list, please select the participant button at the top right.

In order to control your own audio you can mute and unmute yourself by looking for your name in the attendee list. Hovering over that name with your mouse, and you will see the video on and off in the

audio mute and unmute button appear.

If you're having technical difficulties during the meeting, please contact the host through the chat box below. If the chat box does not automatically appear, it's a button at the top right next to the participant button. And you can select that. Then you select host as the send to and notify them that you're having issues.

To see a list of the video for all the panelists that have their video activated, you can see three horizontal lines in the bottom right corner. If you select that drop-down menu you can toggle between lists and thumbnails.

The thumbnail view will give you the videos for everybody, in addition to the active speaker, that takes up the top right corner. This is what your screen would like as the thumbnails are activated.

During the presentations today when there are a PowerPoint you may want to go to full screen mode. You can select full screen in the bottom left corner. That will make the PowerPoint slides take up a larger point of the screen and you'll see that your menu to control your own audio and see the participants moves.

You have to hover your mouse to the top center portion of the screen. The menu will drop-down and you can select mute me.

You can also select the participants tab and you will get a video in the top right corner where you have the active speaker. You can actually resize that by dragging the bottom left corner. You can also select the participants tab to get the thumbnail views for everybody.

That popup window is also re-sizable. And if you're running a dual monitor setup, you can drag that popup window onto a separate screen so that it doesn't cover any of the PowerPoint slides. You can also move that throughout a single screen if you are covering up some of the PowerPoint material with the video that you'd like to see.

If you do not want to see the PowerPoint slides or we're at a portion of the meeting where it's Q&A and there aren't PowerPoint slide, you can prioritize video by selecting the top right corner of the active speaker box. You see two arrows, one that points to the top right and one that points to the bottom left.

That will expand the video feed to take over the entire screen. And you'll see the active

speaker box in the center of the screen as well as all the video thumbnails along the bottom.

They'll show five video thumbnails simultaneously. If there are more active videos then the five you'll see arrows appear under the thumbnails and you can scroll left to right.

In order to exit the full screen mode and go back to see the PowerPoint slides, in the top right portion of your screen you'll see exit full screen view. Thanks, Ken.

MR. O'BRIEN: Thank you, Ian. Today we're about to conduct a predecisional enforcement conference between the NRC and TVA, but before we begin, I'd like the NRC Panel Members and then the other observers for the NRC to introduce themselves.

And then, Mr. Rausch, if I may ask you to introduce yourself and your representatives for TVA I would appreciate it. As I said, we'll introduce ourselves from the Panel first.

Again, I'm Kenneth O'Brien, I'm the Deputy Regional Administrator for Region III, and also the Director for the Office of Enforcement's Special Project Team.

MR. HILTON: Nick Hilton, Senior Enforcement Advisor, Office of Enforcement.

MR. SPARKS: Scott Sparks, Senior Enforcement Specialist for Region II and an OE Special Project Team member.

MR. O'BRIEN: I'm missing Marcia here. Marcia, are you having difficult, there you go. Marcia?

MS. SIMON: Yes, sorry. This is Marcia Simon, I'm a Senior Attorney in the NRC Office of General Counsel.

MR. O'BRIEN: Thank you. And then if we can begin, I know George Wilson is unable to join us this morning. Andy, would you like to begin?

MR. SHUTTLEWORTH: Andy Shuttleworth, Director, Office of Investigations.

MR. MILLER: Mark Miller, Director of the Division of Reactor Projects in Region II.

MR. ECHAVARRIA: Alex Echavarria, Special Agent-in-Charge, Office of Investigations, Region II field office.

MR. KONTZ: Craig Kontz, Senior Project Engineer, Office of Investigations.

MR. GILLESPIE: Joe Gillespie, Attorney, Office of the General Counsel.

MS. LEMONCELLI: Mauri Lemoncelli, Acting Assistant General Counsel.

MR. O'BRIEN: Mr. Rausch, may I ask you to introduce your representatives please?

MR. RAUSCH: Yes. Good morning. My name is Tim Rausch and I am the Chief Nuclear Officer for TVA.

I'm here today with TVA's outside counsel Mike Lepre, Tom Hill, Dave Lewis, Monica Hernandez, Drew Navikas, Brendan Hennessey, from the law firm of Pillsbury Winthrop Shaw Pittman, and Barry Levine, Howard Feldman, from the law firm Blank Rome.

I also have Jim Barstow, from TVA's Corporate Office, Tony Williams, Randy Staggs and Chris Rice, from TVA's Watts Bar Nuclear Plant. They're here to provide some comments and also assist in answering any questions that the NRC may have after it hears TVA's presentation.

Also joining us this morning is Tricia Roelofs, from TVA, with her serving as the team lead for TVA's response to the apparent violation. Thank you.

MR. O'BRIEN: Thank you, Mr. Rausch. Today we will conduct a predecisional enforcement conference between the NRC and TVA. In accordance with the NRC's enforcement policy manual, this conference is closed to public observation because it

involves the findings of an NRC Office of Investigation report that have been publicly disclosed.

This meeting is also being transcribed therefore it's important that all individuals speak clearly, identify themselves to assist the transcriber.

A written transcript will provide the NRC with a record of the information that is presented today and will be used in reaching a final Agency decision on matters that we are about to discuss.

The transcript is not normally released to the public, however, if a request under the Freedom of Information Act is received, the release will be considered subject to the redactions allowed by the Freedom of Information Act. With the exception of the transcript, no portion of this PEC shall be recorded.

Following my brief opening remarks, Mr. Scott Sparks, a team member of the Office of Enforcement Special Project Team, will briefly discuss the Agency's enforcement policy.

I'll then discuss the apparent violations that we plan to discuss today based upon a schedule we had agreed upon. And then, Mr. Rausch, you'll be given an opportunity to respond to the apparent

violations.

I wish to reiterate to all those in attendance today of the decision to hold this conference, does not mean that NRC has determined that a violation has occurred or that an enforcement action will be taken. This conference is an important step in arriving at that final decision.

Following the presentation today we'll take a break for lunch and then caucus according to the schedule we've identified and then we'll follow-up with questions and answers this afternoon.

Lastly, we'll have some closing remarks for today in preparation for completing today's activities and opening for tomorrow's activities. This conference will take place over today, tomorrow and Friday, as we previously discussed.

As I indicated, this is a predecisional enforcement conference to discuss the apparent violation that were identified during an investigation completed on May 17th, 2019 by the NRC's Office of Investigation regarding activities the Tennessee Valley Authority Watts Bar Nuclear Plant.

The purpose of the investigation was to determine whether TVA employees deliberated submitted incomplete or inaccurate information to the NRC and

whether TVA employees deliberately violated plant procedures.

At the request of the Director of Office of Enforcement, the NRC convened a multi-office team, which I led, to review the enforcement aspects of the OI investigation report.

As a result of this review, an apparent violation were identified and they're documented in a letter I sent to Mr. Barstow on March 9th.

At this conference we are affording TVA the opportunity to provide information relative to the apparent violations, including whether TVA believes the violations occurred, the circumstances of the issues and whether TVA employees engaged in deliberate misconduct, the severity or safety significance of the apparent violations from TVA's perspective, any errors that are noted in the NRC's letter of March 9th, and any escalation or mitigation considerations TVA would like us to consider.

At this point I'd like to ask Mr. Sparks to discuss the Agency's enforcement policy. Scott.

MR. SPARKS: Thanks, Ken. After an apparent violation is identified, it's assessed in accordance with the NRC's enforcement policy.

The assessment process involves

characterizing the apparent violations to one of four severity levels, based on safety and regulatory significance.

For cases where there is a potential for escalated enforcement action, that is where the severity level of the apparent violation could be characterized at Severity Level 1, 2 or 3, a predecisional enforcement conference is held.

There are three primary enforcement sanctions available to the NRC. They are notices of violations, civil penalties and orders.

Orders may be issued for violations, or, in the absence of a violation because of a significant public health or safety issue, the NRC will not normally impose a civil penalty against an individual.

A predecisional enforcement conference is essentially the last step in the inspection investigation process before there NRC makes its final enforcement decision.

The purpose of the conference today is not to negotiate an enforcement sanction, our purpose today rather is to obtain information directly from TVA that will assist us in determining the appropriate enforcement action, such as a common understanding of the facts, root causes and missed opportunities

associated with the apparent violations, a common understanding of the corrective actions taken or planned, and a common understanding of the significance of the issues and a need for a lasting comprehensive corrective action.

We would also appreciate your views as to whether there is any information that may be relevant to the application of enforcement discretion for any resulting and enforcement sanction.

The apparent violations discussed at this conference are subject to further review and may change prior to any resulting enforcement action.

It's important to note that the decision to conduct this conference does not mean that the NRC has determined that violations have occurred or that enforcement action will be taken.

Following this predecisional enforcement conference, the NRC will reach a final enforcement decision. This process could take approximately two months or more.

Finally, if the enforcement action involves a proposed civil penalty or an order, the NRC may issue a press release after the enforcement action is issued. Mr. O'Brien will now briefly discuss the apparent violations. Ken.

MR. O'BRIEN: Thank you, Scott. Mr. Rausch, in the letter we sent to Mr. Barstow dated March 9th of this year we documented 12 apparent violations. We had also included a factual summary of the OI investigation as an enclosure to that letter.

Today I understand that you and the Staff that you have with you are planning to discuss your perspective on five of the 12 apparent violations. Numbers 1, 2, 3, 5 and 6.

In summary, these apparent violations involved a failure to follow procedures during a plant startup associated with using the standby main feed pump to maintain steam generator levels, a deliberate failure to follow procedures associated with a change to a procedure, which allowed the plant to draw a bubble in the reactor coolant system at a lower temperature than previously authorized, a deliberate failure to follow procedures during a plant startup associated with not assuring that required actions were completed prior to entering Mode 4, a deliberate failure to follow procedures associated with the maintenance of control room logs during a plant startup and a deliberate failure to follow procedures associated with the return to service of the residual heat removal system during a plant startup associated

with an uncontrolled rise in the pressurizer water level.

We'll now turn this portion of the meeting over to you, Mr. Rausch, so that you and your staff can give your opinion and perspective on the issues and any information that you believe is relevant to the NRC's enforcement determination. At this point I'll ask you to proceed. Thank you, sir.

MR. RAUSCH: Okay, good morning. I appreciate the opportunity to be here today and provide the NRC with more information about the March 9th apparent violations.

I've worked in commercial nuclear industry for over 30 years. I've held leadership roles in operations, maintenance, engineering, outages, training, quality, process re-engineering and project manager.

I have senior reactor operator certifications from a BWR-2 and BWR-6. As well as a licensed operation training instructor certification.

I joined TVA in October of 2018 after serving nine years at the Susquehanna Nuclear Power Plant as a chief nuclear officer for PPL and Talen Energy.

My personal experience at Susquehanna

informs my view of the events that we are here today to talk about. When I began working there in 2009, the site had recently received the chilling effects letter and led the nation in the number of anonymous allegations to the NRC.

By 2017 the site had produced industry excellence in safety, reliability and generation results. And those results remain sustainable today.

I mentioned this to show that I personally know what it takes to recover, continuously improve and sustain excellent performance. And based on my experience, I am confident that TVA is on the path to achieving similar results as a fleet.

Events that led to the apparent violations we're here to talk about today happened more than four years ago. And while unacceptable, do not indicate our current performance or culture.

Watts Bar is a different site and a different leadership team. During the past several years we've taken actions to improve our nuclear safety culture.

If you were to step on the site at Watts Bar today, you would observe and you would feel the energy of the team that has the attitude and behaviors to deliver safe, reliable and continuously improving

results.

TVA's improvements have been recognized by industry groups, by the NRC at public meetings, in assessment letters and during follow-up inspections.

At the end of this predecisional enforcement conference I want you to know three things. One, we want to move forward. TVA takes full ownership for past performance deficiencies and is committed to building upon the improvements we've already made.

Two, TVA wants to have a health regulatory relationship with the NRC. We want to be treated fairly, and we trust that any regulatory action will be based on objective fact and a reasonable interpretation of the NRC's own regulation.

And three, TVA stands behind its employees. Our employees were doing the best that they could while with working within a deficient environment.

And to respond to the NRC questions about an emergent situation with one limited exception, I firmly believe that none of our employees engaged in a deliberate misconduct that the NRC accused them of.

At Watts Bar we have a leadership team in place based on their knowledge, skills and abilities

to grow and sustain a health safety culture and environment.

At CNO, I am passionate about and committed to ensure our entire fleet leadership team now and in the future leads with trust and respect, with conservative operation that puts safety above all and that we demonstrate the value of a safety conscious work environment through our communication, our actions and results.

Before I turn the presentation over I'd like to comment on a few of the challenges that we've had in responding to these apparent violations. These events are nearly five years old. In many cases we were not provided all the information needed to efficiently and effectively evaluate and prepare it.

And while we haven't forgotten lessons we learned, the passage of time has made it difficult to respond to many of these allegations. This is especially true because TVA's understanding of the event was not the same as the NRC has outlined in the apparent violation.

Because of that we hired outside counsel to assist in developing our factual understanding so we could do our best to put those details together and help us decide if we needed to look at these events

differently in light of the apparent violation.

TVA is happy to answer any questions that you have today. But because our attorneys have assembled the facts, we will often rely on them to assist TVA in answering our questions.

With that, I will turn it over to Tony Williams, our Site Vice President at Watts Bar for an overview of past and current performances at this site. Tony.

MR. WILLIAMS: Good morning. I am Tony Williams, I am the Site Vice President at TVA's Watts Bar Nuclear.

My previous work experience includes positions as site vice president at the Sequoyah Nuclear Power Plant, Palisades Nuclear Power Plant as a plant manager and the operations director at Indian Point Nuclear. I've obtained a senior reactor operator license at both Indian Point Nuclear Station and Salem Nuclear Station.

As Tim stated, we have learned a lot over the last several years and we are committed to moving forward to be better every day. We are dedicated to maintaining a health nuclear safety culture, including a health safety conscious work environment at all of our facilities.

We have already acknowledged that the chilled work environment developed in the Watts Bar operation department in 2015. The time when the events that are the subject of the apparent violation happened.

TVA has implemented its corrective actions to successfully address the environment. Before focusing on the improvements we have made, I will briefly talk about where we were in 2015 and how we got there.

MR. O'BRIEN: Mr. Williams?

MR. WILLIAMS: Yes.

MR. O'BRIEN: My apologies for interrupting you, but your camera doesn't seem to be on, and we like to have the camera on for anybody that's speaking.

MS. ROELOFS: Is it on now?

MR. O'BRIEN: Yes, it is. Thank you very much. My apologies for interrupting you again.

MR. WILLIAMS: All right, thank you, Mr. O'Brien. Before we focus on the improvements I've made I want to briefly talk about where we were in 2015 and how we got there.

Watts Bar operations organization did not perform in an expected way. Human performance

standards and operator fundamental shortfalls were causing consequential errors.

In comparison to other utilities, the operations department's performance was the bottom quartile of the industry. Department performance gaps existed in the following areas.

Human performance error prevention tools, placekeeping, as seen in the document reviews for placing RHR letdown in service to address the rising pressurizer level, also proceeding using (audio interference), as seen in operations logs and condition report initiating.

A common factors analysis was identified among other commonalities that documentation of issues in log and corrective action program were not timely. And in some cases, did not occur. In the absence of this documentation it could be misconstrued as deceptive and not just admission by an error.

Equipment monitoring as seen in October 21st, 2015 event, associated with entering Mode 2 with both source range detectors inoperable.

Operator fundamentals, plant control and conservative bias and this is associated with RCS heat up on excess letdown with two evolutions, associated with over, and two evolutions associated with

overflowing the Unit 2 reactor vessel during a reviewing outage.

Leadership behaviors. The OCC's rigor in response to the main control room challenge of initial assumptions associated with the activity of heating up on that first letdown. Ineffective communications leading to trust and safety culture issues within the operations department.

Watts Bar was facing a number of challenges which increased their workload and fatigue at the site. TVA was near in the final completion of Unit 2 for licensing fuel load in startup.

Several major work activities were ongoing to support these efforts. The site faced multiple planned and unplanned events including, a Unit 1 refueling outage, forced outages, and multiple operational errors on both units.

Numerous site challenges, including the ones listed above, led to site employees spending significantly more time at work. Normal work schedules were revised and provided additional coverage. Which resulted in outage lite staffing levels and hours on a routine basis. As a result, attrition of time.

Safety culture and trust declining. At

the same time the site was facing these downs, TVA was seeking to raise the performance of Unit 1 in line with the fleet objectives and to achieve top quartile performance. TVA sought to do so through an accountability model and a zero-tolerance initiative.

Several disciplinary actions were taken in the operations department. Although these actions were taken with the intent to raise performance standards, the rationale and basis for these actions were not always adequately communicated with the workforce and negatively affected the environment.

Also, as part of this initiative, Watts Bar began tracking rule deviations. This involved expectation for employees who had violations of a rule, be a greeter at the plant the following day to discuss lessons learned with others. Although it intended to be a learning opportunity, the initiative was reviewed as negative by the workforce.

These are examples of what was, in hindsight, an overly aggressive management style. That was not objective at achieving the change within the site culture.

As a result of the corrective action, the site is as different today than it was in 2015. We have made great strides in improving the work

environment by also improving operator fundamentals and operational performance at Watts Bar.

Today the senior leadership team is made up of different individuals, with a different leadership style. Operations department, due to performance and fundamentals, has significantly improved.

This department has not had a consequential error since October of 2018. Current performance is top quartile in the industry.

Our safety culture monitoring process are now effective at identifying issues, that can impact safety culture at a department level. And we are committed to continuously monitoring and then taking action to improve our safety culture.

The operations department is fully staffed and developing a healthy pipeline supporting other departments.

For operations safety culture, the corrective actions are numerous. We have taken (audio interference) and these initiatives have been laid out in more detail, in written material that TVA has submitted for the NRC before today's conference.

I want to highlight a few of these examples here. We conducted a case study studying all

of the issues associated with the November 11th, 2015 incident. We presented this to licensed operators, outage control center staff, and the senior leadership team.

The case study included the discussion of the performance gap associated decision-making, with management stop when unsure, and the use of the corrective action program to document and resolve these issues. And the procedure use and adherence that we see in our review of this event.

Additionally the roles and the dynamics between the main control room and the outage control room were discussed.

Senior leadership conducted oral boards in January of 2016 with all shift managers, to evaluate and reinforce conservative decision-making, responsibility and authority for stopping when unsure, and procedure user adhering, including the use of n/a's.

Following the completion of all these oral boards, the same senior leadership team met with all the shift managers to discuss the commonalities identified in these oral boards as learnings and expectations going forward to the shift managers. The shift managers then formally sign their understanding

of these expectations.

To include repetition of the chilled work environment, TVA implemented the Watts Bar business planning initiative and improved senior leadership behaviors. Specifically related to managing a changing work environment in effective communications within the workplace.

Additionally to improve the safety culture and trust at the site, we are strengthening our support of our employee engagement initiatives. The shop steward meetings are now constructive and meet regularly with the senior leadership team to get a good feedback on the leaders in the (audio interference).

We have craftsmanship council that is functioning to assess their own performance and weaknesses in the fundamentals of stations learnings.

A union-led code of excellent initiative is held to alleviate the challenges of communication. With our ambassadors getting engaged with communicating with management and union on issues, to ensure we all share the same understanding of the challenges. And employee advisory council that takes initiative, works within the department and then filters them up to the leadership team for action.

I am proud of the progress we have made, and I am confident that the issues associated with the apparent violation, have been fixed. I trust that the NRC will take TVA's already extensive corrective actions into account when evaluating the timeliness adequacies in comprehensive of our action that can address these areas of concern identified in the March 9th, letter so that we can continue to move forward with our improvement and focus on the future.

I will now turn it over to Mr. Jim Barstow to briefly address the regulatory aspect of the apparent violation.

MR. BARSTOW: All right, thank you, Tony. Good morning. My name is Jim Barstow, I am the Vice President of Nuclear Regulatory Affairs and Support Services.

I have worked in the nuclear industry for over 30 years beginning with my service in the U.S. Navy. I have been with TVA since the fall of last year and previously served in leadership roles and areas of work management, performance improvement, licensing, regulatory affairs, organizational effectiveness and radiation protection.

Additionally, I hold a senior reactor operator certification for Clinton Power Station.

I would like to note a few relevant, specific personal experience in 2005. At that time I was assigned to the Exelon management team as part of the operating agreement at Salem and Hope Creek during the period when NRC had issued crosscutting issues in the areas of corrective action programs and safety conscious work environment.

I had the responsibility at that time, as the chief corrective action program manager had made many changes that resulted in satisfying our self and the NRC that the program was effective and sustainable and would support a strong safety conscious work environment.

I bring this experience up only to provide context of my own personal exposure and understanding of issues similar to the ones we are going to talk about in the coming days.

I want to state emphatically and unequivocally the TVA values, this relationship with the NRC. TVA has been, and continues to be, committed to maintaining an honest and open communication with the NRC.

TVA leadership understands that timely and open communication is vital to ensuring that there is a health and trusting relationship between the NRC and

TVA. Before our counsel gets into the details of the AVs, the apparent violation, I would like to share with you two concerns I have based on my 30 years of industry experience and my discussions with industry colleagues.

The proposed apparent violations for 50.9 are troubling because they would set a new precedence for what the NRC considers enforceable. The proposed escalated enforcement relies on information from drop-in meetings, backup slides that apparently were not provide to NRC and narrow interpretations of information used in informal and non-regulatory decision-making form.

In reality, the basis for the apparent violations represent misunderstands for knowledge gaps on the part of the individuals regarding evolving issues.

TVA understands that it is essential to provide NRC complete and accurate information in all venues. With one exception we believe this occurred.

TVA also believes that the apparent violation of the 50.9 would set new precedence in all but one case. This is troubling because the new precedence would likely have a detrimental effect on feature industry communications with the NRC during

inspections and management discussion.

My second concern is regarding the unstated theme that appears to underline the majority of all the apparent violations. TVA believes that the investigators developed a theory that Watts Bar orchestrated a cover-up of operational decision in November of 2015, the level of management involved in this decision in an attempt to conceal the issues.

This theory is absolutely incorrect and has been wrongly used by the NRC as support for the proposed apparent violation.

The NRC appears to presume that the individuals must have intentionally violated requirements and then tried to cover it up. This is not the case. Rather, there were well documented performance and safety culture issues at Watts Bar in 2015, as Mr. Williams just outlined for you.

The issues identified in Apparent Violations 1 through 6 represent consequences of that degraded work environment and safety culture. The information accuracy identified in Apparent Violation 7 through 12 are, for the most part, the result of viewing our facts from that time frame through the lens of an inappropriate cover-up theory.

The body of evidence shows that the

individuals were independently acting in good faith with un-received consequences in terms of either process or perception. The safety of the nuclear plant was never in question nor was there any significant risk to public health and safety.

I'd like to now ask our legal counsel to give a few additional opening comments.

MR. O'BRIEN: Mr. Barstow, before you move it on, may I ask everybody that's not speaking to mute their mics, as there are a few that are not. And then also in your room may I ask if you'd make sure that the microphone for whoever is speaking is very close to them. We're having a little bit of difficulty with feedback.

MS. ROELOFS: Mr. O'Brien, this is Patricia Roelofs, the TVA lead, we have one audio in the room so we're not using audio on our computer. Can you hear me okay?

MR. O'BRIEN: I can hear you okay, it's the background noises that are causing a little bit of difficult in your room. And then there are a few people that are also on the line that have their microphones open, and they should close them.

MS. ROELOFS: Okay, yes, sir. Tell us if you still have problems after those folks' mute

because I can get our IT person here. But we're using the room audio, not the computer audio.

MR. O'BRIEN: Thank you very much. I'll let you go ahead and I'll wait till we're finished with the next speaker before I interrupt again. Thank you.

MS. ROELOFS: Okay, thank you, sir.

MR. HILL: Thank you, Jim. My name is Tom Hill. I'm with Pillsbury here representing TVA.

I'm a litigator who has spent more than 40 years, first prosecuting as an Assistant United States Attorney and then representing and defending companies and individuals accused of some form of misconduct. Whether in a criminal, civil or administrative context.

Although over the years I've represented other companies and individuals in NRC related criminal and administrative matters, I'm pretty confident that of all the people in this virtual room, I'm the least familiar with nuclear matters generally and with the NRC.

But I do know a lot about due process and fairness in conducting proceedings that are designed to learn the truth. So I want to take just a few minutes to talk about this process.

TVA and the ten accused individuals have collectively spent thousands of hours trying to uncover all the facts surrounding the events of November of 2015 and their aftermath.

In March of this year these ten people, and TVA, were issued apparent violations accusing them of deliberate misconduct. This very serious and high standard has been defined by the NRC to require proof of essentially criminal conduct.

So as you might imagine, it was very upsetting to these people, and to TVA, to be so accused.

But what made these allegations all the more troubling was that they were made without disclosure of most of the underlying facts that led the NRC to make these serious accusations. That, of course, includes the unwillingness of the NRC to disclose and make available to the accused its OI report upon which presumably these allegations are based.

It has also become apparent that the NRC is relying heavily on TVA OIG memoranda. Reporting to summarize interviews conducted by the TVA OIG and/or the United States Attorney's Office beginning in January of 2016 and continuing for several years.

Over my 40 plus years, first as a prosecutor, now as a defense counsel, I have become all too aware of how inaccurate and misleading these investigative memoranda of interviews can be. Whether by the TVA OIG, the FBI or other investigative authorities.

These memoranda tend to be relied upon as transcripts, yet nothing could be further from the truth. Rather, hours long interviews are reduced to two or three page memos.

And whether through sloppiness, time pressures, inadvertence or otherwise, these memoranda often mischaracterize, misquote, distort and fail to contextualize the interviews they purport to accurately summarize.

For the NRC now to be so heavily relying on these memoranda with at least, without at least giving TVA access to full underlying notes, recordings or transcripts, is contrary to an objective of determining what the truth is and what a proper outcome of these PECs should be.

Of course, if any of these matters proceed to litigation, we will get access to all these investigative memoranda and the underlying notes and other materials. And we will have the opportunity

ourselves to interview directly, not only those interviewed, but the interviewers themselves.

But to have to wait to learn what actually occurred during the OIG interviews would come at the cost of reputational, financial and emotional harm, which could have been avoided by a more transparent policy of sharing the information now.

Indeed, once we began exploring the actual allegations, it became obvious to us that many of them were predicated upon facts which appeared to simply be incorrect. Thus by way of one example, four individuals from TVA are accused of deliberate misconduct in connection with a January 6th drop-in meeting at which, according to the NRC, a slide was presented characterizing certain conclusions as "causes," even though the slide referred not to "causes" but to "insights."

It turns out of course that this was a backup slide that no one believes was ever shared to the NRC. So why is the NRC relying on it?

Presumably the NRC has some undisclosed evidence that contrary to all evidence TVA is aware of, the slide was actually shared and that it was somehow characterized as causes and not insights, as was written.

So how were these four individuals and TVA to confront evidence and facts that have been withheld from them?

Of course, if we were compelled to go to litigation we would be able to find out the answers to these questions from the NRC attendees and from the TVA OIG, who I suspect may well be the source of the slide. But without having that information now, we are led to speculate, and that is not as it should be.

I mention this only as one example. But the apparent violations are filled with what seem to be factual inaccuracies. Or at least conclusory allegations with no factual information to support them.

Emails are simply referred to generically as emails, leaving everyone to guess as to which emails the NRC might be referring to. Individuals are unnamed, leaving the accused to speculate as to who they might be.

All of which is to say this process of forcing the accused to guess and speculate as to what the NRC may be referring to is not one conducive to learning the truth. And I might add is totally unnecessary.

This is not a drug distribution case where

one might feel the need not to disclose certain information for free of it being misused, rather this should be a search for truth. And in that process the accused are entitled as a matter of fundamental due process and fairness, know all the facts that form the basis for the allegations against them so they can confront them directly and head on.

Presumably, the purpose of these PECs is to find that truth. And for the NRC to be certain that it's correct when, and if, it makes public any violation or order.

This is serious business with very serious implications for the livelihoods, the reputations and emotional well-being of these ten people. For the reputation of TVA and for the confidence of the public in TVA.

I know I speak for (b)(7)(C) and Todd Blakenship, Pillsbury's other clients in these apparent violations. And I am very confident that I also speak for the eight other charged individuals.

It is simply not enough that if charged through a litigation process each person in TVA will have the opportunity to learn all the facts, which had previously remained hidden and undisclosed.

To really have a meaningful PEC which

allows the NRC to make its most considered judgement about these allegations, it would have been far preferable and far fairer to lay out all the evidence the NRC was relying on and let the accused confront it.

As it is, we are unfortunately left with speculating and guessing about much of the bases, these allegations. And we can only hope that we have guessed and speculated correctly as we have now turned to address these allegations.

I think you heard Mr. Rausch state in the beginning that TVA's goal is to move forward and build upon its work in improving performance at Watts Bar. I sincerely hope this is a goal that the NRC shares.

Having a PEC that is not fair or meaningful does not help us reach that goal. Instead, it puts TVA in the position where it will potentially have to focus its energy on years of further litigation, just to discover facts that if it had now known, would use for the productive purpose of addressing any of the NRC's concerns in using them to drive further continuous improvement.

From here I will turn it over to my colleague, Mike Lepre, to preliminarily list some of the allegations specifically and give you a roadmap

for the next remaining days.

MR. LEPRE: Good morning. I'm Mike Lepre with Pillsbury.

As TVA's Counsel we'd like to thank you for the opportunity to assist TVA in providing you with information regarding these apparent violations. As you know, we've already provided you with some more detailed written responses, as well as an exhibit book.

We've done that because although we do have three days to discuss these AVs, there are many details and arguments that we might not specifically cover orally or just simply better explained in writing. So we just wanted to make sure that the NRC has the benefit of all the information that TVA has gathered in response to the AVs.

I'd like to spend a few minutes this morning discussing the relevant legal standard, as well as giving you a roadmap to some of the, to the responses that you'll hear from TVA in greater detail over the next few days.

So beginning with the legal standard, as you know TVA has been accused of 12 apparent violations alleging that its employees engaged in deliberate misconduct. But to define deliberate

misconduct the Staff must determine, under 10 CFR, Section 50.5, that individuals working for TVA intentionally sought to violate an NRC requirement. This is an extremely high standard.

Commission's regulations, orders and statements interpreting its regulations make clear that a finding of deliberate misconduct requires an intent to commit wrongdoing. The rule states that "deliberate misconduct by a person means an intentional act or omission that the person knows would cause the licensee to be in violation of a commission rule, regulation or order.

The facts you've heard over the last few weeks, and what TVA will explain over the next few days, said that even if some violations may have occurred, they were no deliberate violation so this extremely high standard can't be met.

Before I get to the facts, it's important for the Commission to consider its own words when it promulgated 50.5 because the Commission said the deliberate misconduct should apply only in extremely circumstances where an intent to commit wrongdoing is clear.

When it put 50.5 in place the Commission explicitly stated that the rule applies only to

individuals who deliberately set in motion events that would cause a violation. The Commission also said that an individual acting in this manner, in this manner, has the requisite intent to act in a wrongful manner.

The Commission made clear that the deliberate misconduct rule does not apply in cases of negligence, honest mistake or ignorance. And it doesn't apply where people made mistakes while they were acting in good faith.

The Commission also explained that 50.5 does not include acts done in careless disregard or requirements. Instead it's a narrower rule that applies only to deliberate misconduct.

And finally, just to emphasize that high standard, the Commission found that "under this rule the range of action that would subject an individual to action by the Commission does not differ significantly from the range of actions that might subject the individual to criminal prosecution.

In that point it's significant to note that both the United States Attorney's Office for the Eastern District of Tennessee, as well as the main Justice Department in Washington, has evaluated all the facts in this matter and concluded that no

criminal prosecution was warranted.

TVA wants the NRC to know, as it will explain, that it doesn't dispute that certain violations occurred. But as you've heard over the last few weeks, and will hear over the next few days, nobody at TVA, with the exception of Billy Johnson during parts of his December 18th, 2015 NRC interview, nobody else intentionally violated any requirements.

To give you a preview of the next few days at a high level, TVA plans to address the AVs in three groups. Or as we've been calling them, three buckets.

The first bucket is AVs 1, 2, 3, 5 and 6. Second bucket will be AVs 4, 7 and 9. And the third bucket is AVs, consistent AVs 8, 10, 11 and 12.

Turning to the first group we'll discuss AVs 1, 2, 3, 5 and 6 together, since they all involved TVA procedures. We'll explain that TVA doesn't dispute that aspects of these violations occurred but will also explain why there was no deliberate misconduct.

With respect to AV 1, TVA will acknowledge that an unintentional violation, Technical Specification 5.7.1, did occur.

Regarding AV 2, TVA will acknowledge that a non-deliberate violation occurred, given how the

procedure change at issue was interpreted and applied.

For the reasons Mr. (b)(7)(C) explained during his PEC, TVA has also concluded that Mr. (b)(7)(C), in good faith, believed at the time that the procedure change was minor or editorial. And that's really what matters here of course, what Mr. (b)(7)(C) understood at the time.

He showed during his PEC how he's a person of high integrity. And he more than credibly explained that it never occurred to him that the change would, or even could, be used to draw the bubble before the RCS temperature reached 135 degrees. And as he said, he actually had no idea that the bubble was even drawn at below 135 degrees until just a few months ago when he did some research in connection with his apparent violation.

We understand that in his written submittal Mr. Sprinkle, now a benefit of hindsight, does not dispute that he was mistaken when he thought the procedure change was minor or editorial. When he also explained that he honestly believed at the time that the change was minor. And that Mr. (b)(7)(C) correctly processed it.

Moving to AV 3, TVA won't dispute that it failed to meet certain startup procedures. But TVA

does dispute that those acts were intentional.

TVA found that the shift manager, Billy Johnson, wasn't aware there was a Mode 5, Mode 6 restraint before he authorized the main control room to enter Mode 4. TVA also found that it was entirely reasonable for Mr. Johnson to rely on information that was provided to him in the main control room, which showed that the unit was ready to enter that mode.

TVA also will not dispute the allegation in AV 5. It's true that the RHR event was not properly logged.

This was a result of a hectic day in the main control room. Frankly, TVA had a history of poor logging. Which is long since corrected.

This was really just an unacceptable case of sloppy work during a very busy time. But there is absolutely no evidence showing you ten.

In fact, it's quite a leap without any factual basis whatsoever for the NRC to speculate and then to allege that there was in effect some sort of coordinated effort by Billy Johnson and all of the control room operators on that day, to hide information from the NRC or anybody else.

Finally, for our first bucket, TVA will concede under AV 6 that the RHR pump was not started

as required. But that also wasn't an intentional violation.

Mr. Johnson previously stated that he wasn't within the procedure at issue so he couldn't have intended to violate it. Instead, he said he was taking prudent operator action to address the rise in pressurizer level.

He said that he didn't think there was any need to put RHR back in service because they were only establishing letdown. And he believed it wouldn't have been prudent to start the RHR pump unnecessarily.

I'll now move on to TVA's second bucket, AVs 4, 7 and 9. As for AV 4, as you've already heard, TVA acknowledges that there were issues with its workplace environment. TVA will also acknowledge that as its root cause analysis found, non-conservative decision-making did occur while the plant was heating up.

But as you've heard from Mr (b)(7)(C) and Mr. (b)(7)(C), they obviously didn't intent to create a workplace environment where employees would make non-conservative decisions or favor production over safety. They were attempting, in good faith, to improve accountability in a workplace that had been performing poorly.

AV 4 involves a lot of other issues and individuals, too many to cover here in my summary. But for now I'll just add that TVA will deny that those employees engaged in deliberate misconduct, as the NRC alleges, in AV 4.

We'll explain the basis for those denials in substantial details during the conference. And we've also done that, at lengths, in our written submittal.

Moving on. TVA will also deny the allegations in AV 7. Mr. (b)(7)(C) and (b)(7)(C) explained in their PECs, certainly appears they didn't even provide the NRC with the written response that they're a subject of AV 7.

But based on the evidence available to it, TVA believes that the NRC likely has alleged violations against TVA for providing inaccurate or incomplete information in an internal TVA document that they didn't even give to the NRC.

But even if the written response, that appears to be at issue here, had been provided, Mr. (b)(7)(C) and Mr. (b)(7)(C), excuse me, Mr. (b)(7)(C) and Mr. (b)(7)(C), excuse me, technical difficulties. But even if the written response that appears to be at issue had been provided, Mr. (b)(7)(C) and Mr. (b)(7)(C)

showed the document, showed that the document in question was clearly accurate and complete when looked at in the proper context.

The evidence has shown that the written response, if it was provided to the NRC at all, would have been part of an exchange of information during an in-person meeting. Both Mr (b)(7)(C) and Mr. (b)(7)(C) record discussing, recalled discussing verbally with Mr. Nadel on December 12th and December 14th that RHR letdown was used to control the pressurizer level.

And it's simply not plausible that Mr. Nadel, an experienced NRC inspector, didn't notice or was misled by TVA. The only reasons for putting RHR letdown into service in Mode 4 would have been to control pressurizer level.

But in any event, the document that Mr. (b)(7)(C) and Mr. (b)(7)(C) allegedly provided to Mr. Nadel on December 14th included dataware graphs clearly showing that the pressurizer level was rising until the RHR valves were opened. They would not have included those graphs if they were trying to hide that very information from the NRC.

TVA will also deny, at least in part the last allegation in our second bucket, AV 9. As we'll explain in greater detail, TVA doesn't dispute that

Mr. Johnson made certain statements on December 18th, 2015 to the NRC that were inconsistent with the subsequent emails and statements.

And although TVA doesn't contest that his statements were deliberate, nor does TVA condone them whatsoever, TVA acknowledges that his lack of candor apparently was due, at least to some extent, by a fear of losing his job.

We'd also like to point out that as his written submittal to this panel showed, Mr. Johnson corrected his statements to the NRC soon after he made them.

Also with respect to AV 9, TVA will describe why it sees no basis, whatsoever, for finding that Mr. (b)(7)(C) provided the NRC with inaccurate or incomplete false testimony on December 18th.

The NRC alleges that Mr. (b)(7)(C) made three statements that were inaccurate or incomplete. But as we'll explain, two of the alleged statements are simply mischaracterizations of his testimony and those should be easily dismissed.

The third statement by Mr. (b)(7)(C) is complete and accurate when understood in the context of his entire interview. His answers on December 18 regarding the lack of operator concerns related to

what had been communicated to him on November 11, 2015, when the heat up on access letdown was being planned and when the actions were taken.

TVA's third and final bucket at AVs consisted of AVs 8, 10, 11 and 12, each of which TVA will deny. TVA will deny the alleged violation in AV 8 relating to the January 6th, 2016 management visit between TVA and NRC Region II management.

For the reasons that various witnesses explain to you in your PECs, it appears from the evidence available to TVA that the backup slide, which forms the very basis of AV 8, wasn't even presented or discussed at the meeting.

This is the second example where it appears to TVA that based on the evidence available allegations were inaccurate, were incomplete statements to the NRC, are based on documents that TVA believes it never even gave you and never even discussed with you.

And if it had been, and even if it had been presented to the NRC, which TVA does not believe to be the case, the slide explicitly provided "insights into the RHR event." TVA's concern about how the NRC has converted the term insights into causes, and then based an apparent violation on that

by the slides very terms, it was not a discussion of the events caused.

In addition, in TVA's view it's simply not logical to claim that TVA personnel would have discussed causes of the event at this meeting when TVA had not yet even started its apparent cause analysis.

TVA will also describe, it's found that TVA's participants in the January 6th meeting had no apparent awareness at the time that main control room operators had raised concerns with outage center control managers. It could not on January 6th discuss with the NRC matters that they weren't yet aware of.

Licensees of course must always provide complete and accurate information to the NRC, in any context, as TVA's employees did here. Nevertheless, TVA is concerned about the NRC setting a precedent here that would put up a serious barrier to free exchanges of information during management or drop-in meetings.

TVA will also deny the apparent violations described in AVs 10 and 11. First, as you heard during the individual PECs, the apparent cause analysis report, or the ACA as we'll refer to it, was not incomplete or inaccurate.

The overwhelming weight of the evidence

clearly shows to TVA that as the ACA reports found, members of the OCC, other than Mr. Sprinkle, were not aware of operator concerns on November 11th.

Regarding the NRC's allegation that the ACA report failed to say that the OCC was involved in discussions and decision-making on November 11th, TVA has found that the report accurately reflected what was known to the ACA team on the date the report was finalized. And the report also did attribute appropriate responsibility for the OCC.

The NRC can't expect an ACA to include information that the preparers didn't know about at the time. TVA will explain that the ACA should of course be viewed as the result of an investigation that identified what was apparent to the ACA team at the time, not things that were subsequently identified.

In any event, the NRC also knew that TVA's investigations were not complete because the ACA report told them that when it specifically recommended further inquiry.

AV 11 implicates a presentation that TVA made to the NRC regarding the ACA. In denying AV 11, TVA will present many of the same arguments that I just discussed.

February 2 presentation at issue in AV 11 was a high-level summary of the ACA. Again, it was based on what the ACA team knew at the time. And again, the NRC knew that more was coming.

TVA expressly told the NRC that a root cause was in progress. And that a root cause analysis had been initiated "to evaluate other factors associated with decision-making and critical thinking, including extent of cause and condition." And that's exactly what the root cause analysis did just a few weeks later.

Absolutely no intent whatsoever to hide information from the NRC. Finally, AV will deny -- TVA will deny AV 12.

TVA will explain how the evidence supports a conclusion that Mr. (b)(7)(C) used the term "completed" in his informal talking points to accurately convey that TVA had completed the employee concerns program investigation and the special review team investigation and that both teams had come to the same critical conclusion as the NRC. That a degraded work environment in operations existed at Watts Bar.

While there would be some editorial changes before the document was formally issued about a week later, that ultimate conclusion that a degraded

work environment existed in operations did not change.

The evidence Mr. (b)(7)(C) presented also showed that it was entirely accurate for the talking points to describe the two reports, quote, as independent because of the makeup of the teams preparing the reports. And while it's true that the ECP report was an input to the SRT report, both teams understood this but they did their work separately. And that's what Mr. (b)(7)(C) meant by independent.

TVA's concern that the NRC is considering banning Mr. (b)(7)(C) from the industry in finding intentional misconduct because the talking points used single words, completed and independent, that the NRC apparently interpreted differently from what Mr. (b)(7)(C) very reasonably intended.

Also clear to TVA that Mr. (b)(7)(C) was not withholding information when he didn't tell the NRC that one purpose of the SRT would have been to influence the NRC.

In TVA's view, Mr. (b)(7)(C) had every reason to believe the NRC understood that this would have been one aspect of TVA's efforts and that it did not need to be explicitly stated. That's what licensee submittals typically do, seek to influence the NRC.

In summary, over the next few days TVA

will not dispute certain violations and will deny all or parts of others. But with the exception of AV 9, regarding certain parts of Mr. Johnson's December 18 interview, TVA will dispute that any of its employees engaged in intentional, deliberate misconduct as the NRC has interpreted at extremely high standard.

In closing, a common and unspoken theme that seems to run through the 12 apparent violations is that TVA directed some type of concerted effort to hide the events of November 11th from the NRC on that day, and then to cover up what actually happened and why it happened.

This began with a preposterous, and frankly offensive suggestion that somehow TVA planned and choose Veterans Day for this evolution in order to avoid detection. There was no such concerted effort here. Inconceivable to suggest otherwise. There is simply no evidence of any kind to support that conjecture.

Mistakes were made regarding failures to follow certain procedures and TVA will acknowledge those. And the work environment, unfortunately, was not the greatest, as TVA has also acknowledged.

But TVA will show that the challenge, the honesty and the integrity of ten of its valued

employees, to accuse them all of intentionally coordinating an effort to cover up an event, lie to the NRC and withhold information, that's unconscionable and inconsistent with the actual evidence here.

Impact their livelihoods with industry bands and to assess penalties from TVA for those actions under the facts and evidence here would be a terrible injustice. Thank you. I'll now turn over the presentation to Jim Barstow and Dave Lewis to discuss Apparent Violations 1 through 3 and 5 through 6.

MR. BARSTOW: Okay, thank you, Mike.

MS. ROELOFS: Mr. O'Brien, this is Patricia Roelofs from TVA. I do think that we have a break in our agenda for today, but I don't know, from the NRC's perspective, how they wanted to continue.

MR. O'BRIEN: Tricia, you are taking the words directly out of my mouth. Yes, you're correct, we have a break scheduled after we completed these opening dialogues, so what I'd like to do is I'd liked to take a break from now until 25 minutes after the hour.

MS. ROELOFS: Yes, sir, thank you.

MR. O'BRIEN: Thank you very much. We'll

come back on the record at 25 minutes after the hour.

MS. ROELOFS: Thank you.

MR. O'BRIEN: Thank you.

(Whereupon, the above-entitled matter went off the record at 9:09 a.m. and resumed at 9:26 a.m.)

MR. O'BRIEN: Good morning, everybody. It is 25 minutes after the hour, so I'd like to begin.

Let me do a few checks to begin with.

Court reporter, can you hear us?

COURT REPORTER: Yes.

MR. O'BRIEN: Marcia, are you with me?

MS. SIMON: I am.

MR. O'BRIEN: Nick?

MR. HILTON: I had to get back.

MR. O'BRIEN: Understood. Thank you, Nick.

Scott?

MR. SPARKS: Yes, Ken, I'm up. I'm on and ready.

MR. O'BRIEN: Mr. Barstow?

MR. BARSTOW: Yes, Ken, we're here.

MR. O'BRIEN: The floor is yours, sir. Thank you.

MS. ROELOFS: This is Tricia Roelofs from TVA. Before Mr. Barstow gets started, we had a couple

of remarks that Mr. Rausch would like to make before Mr. Barstow proceeds.

MR. RAUSCH: Mr. O'Brien, can you hear me? This is Tim Rausch.

MR. O'BRIEN: Yes, I can, sir. Thank you.

MR. RAUSCH: Yes, we have been reflecting since the start this morning, and through previous correspondence with George Wilson, it had been made clear to us many times that he was the ultimate decision-maker regarding these proceedings. So, due to the fact that he's not present, we're questioning whether or not we should be postponing until he can be present.

MR. O'BRIEN: No. I appreciate your position, Mr. Rausch. I am the panel lead and I will make the recommendations to the Agency as a whole as to the course of action we take along with my panel members. But, in the case of any enforcement decision, the Office of Enforcement Director is the ultimate answerer to the Commission and to the EEO. So, normally, this is how we approach the process. So, the panel here will make the final recommendation to the Agency as we move forward.

MR. RAUSCH: Okay. I wasn't done with my question, but thank you for that information.

MR. O'BRIEN: My apologies. I thought you were.

MR. RAUSCH: I still would like to offer that, with your clarification, he's still an important component of the proceedings, and I still offer the question: does it make more sense to postpone until he is present?

MR. O'BRIEN: Thank you for your comments, Mr. Rausch. This is the way the Agency has chosen to move forward with the panel and how we'll go about our business.

MR. RAUSCH: Okay. I understand. Thank you for listening.

MR. O'BRIEN: Thank you very much for the question. I appreciate it.

MR. BARSTOW: Panel, I'd like to continue with our presentation now.

MR. O'BRIEN: That would be excellent. Thank you, sir.

MR. BARSTOW: All right. Thank you.

I'll start with TVA's position on Apparent Violation 1. As detailed in our written submission, TVA acknowledges that a performance deficiency and violation of Watts Bar Procedure 1-GO-2 occurred in October of 2015. The failure to follow procedures

occurred because 1-GO-2 required the use of auxiliary feedwater, or AFW, system to maintain the steam generator level and surveillance 1-TRI-3-903 required a flow to the steam generators from the standby main feed pump.

In October 2015, the Mode 3 procedure conflict was not recognized by operators when they established the conditions required by the surveillance procedure. While technically possible to meet the planning conditions required for the surveillance and maintain the steam generator levels with AFW, the guidance in the surveillance procedure was insufficient to establish this alignment. The surveillance procedure included generic language that said to feed the steam generators using the standby main feed pump.

This violation had no effect on safety because AFW was available to maintain steam generator level and was in operation to satisfy Tech Spec 3.3.2 requirements for the AFW system auto-start function during the time the standby main feed pump was in service to support the surveillance.

This was a verbatim compliance issue involving two conflicting procedures which was not recognized in October of 2015. More recently, the

need for additional guidance to establish the test configuration was identified by Watts Bar operators during the Unit 2 spring 2019 refueling outage. Condition Report CR-1516431 was written and appropriate actions were taken.

This example demonstrates that the site's focus on operator fundamentals since 2016 has made positive impact on procedure use and adherence at the station. Corrective actions were taken in response to the CR which restored compliance to support completion of this surveillance during the Unit 2 2019 outage. A one-time procedure change was processed to conduct the surveillance while the plant was in Mode 2 using a main feed pump to establish the test conditions.

Longer-term actions to modify the surveillance procedure for Unit 1 and Unit 2 for appropriate use of the standby main feed pump in Mode 3 are identified in the Corrective Action Program. These actions are due prior to the Unit 1 fall outage in 2021 and the Unit 2 outage in the spring of 2022.

In terms of the reactor oversight process, TVA does not believe this issue impacted objectives of either initiating events or mitigating the system's cornerstone because AFW is operable and capable of performing its intended safety function.

NRC Inspection Manual 0612, Appendix E, discusses, and I quote, failures to implement requirements that have significant safety or impact, and said that such failures should normally be categorized as minor.

I will now turn over the discussion to Mr. Lewis to discuss Apparent Violation No. 2.

MR. LEWIS: Thank you, Jim.

This is Dave Lewis from Pillsbury.

Apparent Violation 2 alleges that a change made to 1-GO-1, Section 5.2.1 --

MR. O'BRIEN: Mr. Lewis, you're nearly inaudible.

MR. LEWIS: Is this better?

MR. O'BRIEN: Yes, that's better, and your camera is not on at the moment.

MR. LEWIS: Is my camera on now?

MR. O'BRIEN: I don't see it yet. I'm waiting to see if it shows up, if it's a data delay, an electron delay issue.

MR. GIFFORD: It appears as though the camera may have one of the safety screens because it's just coming across black.

MR. LEWIS: Oh, it's this one.

MR. O'BRIEN: There we go. Now you're

present. Thank you, sir.

MR. LEWIS: Excuse me for not looking at the camera.

MR. O'BRIEN: That's okay. I understand completely. If you can move the microphone a little closer to your mouth, that will help us, too.

MR. LEWIS: I'll just and speak loudly.

MR. O'BRIEN: Thank you, sir. I appreciate it. Pardon the interruption.

MR. LEWIS: And excuse the glitch.

Apparent Violation 2 alleges that a change made to 1-GO-1, Section 5.2.1, Step 8, on November 9th, 2015 was improperly classified as a minor procedural change. It should not have been because it altered the technical intent, changed the sequence of steps by allowing the operators to draw a bubble without having to wait for RCS temperature to be --

MR. O'BRIEN: I apologize to interrupt you again, but, Mr. Lewis, we can barely hear you.

MR. GIFFORD: This may be a setting on the microphone itself. Do you say a gray audio button under the attendee list?

MR. LEWIS: Yes.

MR. GIFFORD: Can you please select that audio button? And you'll see a popup window that

says, Audio Conference.

MR. LEWIS: Yes.

MR. GIFFORD: There's a bar where you can manually increase the audio for your microphone.

MR. LEWIS: It's already maximized.

MR. GIFFORD: It's already maximized? Okay.

MR. LEWIS: Excuse me a second.

PARTICIPANT: Can everyone hear this better?

MS. ROELOFS: We can from the TVA, Tricia.

MR. O'BRIEN: Yes, we can hear it much better, yes.

(Pause.)

No, I can't hear you at all.

MR. LEWIS: Can you hear me now?

MR. O'BRIEN: A little. Microphone closer to your mouth would probably be helpful. I apologize.

MR. LEWIS: It's right next to it.

MR. O'BRIEN: There you go. You got it.

MR. LEWIS: Okay. I'll start over.

Apparent Violation 2 alleges that a change made to 1-GO-1, Section 5.2.1, Step 8, on November 9th, 2015 was improperly classified as a minor procedural change. It should not have been, as it

altered the technical intent, changed the sequence of steps by allowing the operator to draw a bubble without having to wait for the RCS temperature to be between 135 and 160 degrees Fahrenheit.

TVA acknowledges that the procedure change as it was apparently interpreted and applied in the control room to allow bypassing the temperature requirement was not a minor editorial change. TVA, therefore, does not contest a non-deliberate violation. NPG-SPP-01.2.1, Rev. 2, and, hence, 10 CFR Part 50, Appendix B, Criterion 5, occurred. TVA denies the violation occurred as a result of deliberate misconduct.

The procedure at issue here should be on your screen. Revision 4 to 1-GO-1, Step 5.2.1, Step 8, related to how operators prepare to draw a bubble during heatup.

In Revision 3, on the screen, Step 8 used the action verb raise. The action verb raise means to cause a parameter to be higher in magnitude. In Revision 4, on the screen now, that action word was changed to initiate. The action verb initiate means to commence or begin, and it is generally used to cause the start or beginning of an effort which could not be completed in a short period of time.

The intent of Step 8 is to ensure that operators adequately raise RCS temperature before attempting to draw a bubble, so that a maximum temperature differential, delta-T, between the RCS and the pressurizer is not exceeded. The note in Step 8 makes this clear.

And furtherance of the note, Step 8.3, which was not changed, directs operators how to proceed with drawing the bubble based on RCS temperature. If the RCS temperature has reached between 135 and 160 degrees Fahrenheit, then operators can proceed Step 9 and use decay heat to draw the bubble. If RCS temperature cannot be raised to 135 degrees Fahrenheit using decay heat, operators must proceed to Step 10, draw the bubble using heat from the reactor coolant pump.

Later in the evening on November 9th, after the procedure change was made, control operators drew the bubble on decay heat without waiting for the RCS temperature to reach 135 degrees Fahrenheit. Thus, it appears the operators interpreted the procedure to allow this. As apparently so interpreted and applied, the procedure change would not have been minor, as it altered the sequence of steps. Consequently, TVA accepts the violation.

Apparent Violation 2 further alleges that two TVA employees, Mr. (b)(7)(C), and Mr. Bill Sprinkle, Manager of the Nuclear Plant ad Chief of Operations, deliberately violated NPG-SPP-01.2.1 in processing this procedure change as minor. TVA denies that Mr. (b)(7)(C) or Mr. Sprinkle deliberately violated this procedure.

Let me, first, discuss the allegations pertaining to Mr. (b)(7)(C). You've heard Mr. (b)(7)(C) explanation why he considered the procedure change to be a minor change, one that did not alter the requirement to heat the RCS to 135 degrees Fahrenheit or drawing the bubble using decay heat.

While the action verb at the beginning of Step 8 was changed to initiate, that step still required initiation of the heatup between 135 and 160 degrees to occur, quote, by performing the following:, close quote, referring to Steps 8.1, 8.2, 8.3. Thus, completion of these steps remained mandatory.

Step 8.3 stated that if RCS temperature cannot be raised to greater than 135, the operators were required to n/a Step 5.2.1.9, the step allowing the bubble to be drawn using decay heat; proceed to Step 5.2.1.10, requiring the use of the reactor

coolant pump to up the RCS temperature.

As Mr. (b)(7)(C) explained, he did not understand the procedure change was intended to bypass the temperature limitation. The procedure change that he made did not allow it based on his reading. TVA finds Mr. (b)(7)(C) explanation to be credible. Indeed, Mr. (b)(7)(C) interpretation of the procedure as changed is, in TVA's estimation, the way it should have been interpreted and applied. In TVA's estimation, the gate in Step 8.3 of the procedure still requires the RCS temperature to be increased to (audio interference) before drawing the bubble in decay heat for Step 9.

Further, Mr. (b)(7)(C) explained that he understood the action verb was changed to allow the heatup to begin. This is consistent with a contemporaneous description of the procedure in the revision log, which states, quote, reworded step to allow for RCS heatup. And it's consistent with the explanation that Mr. (b)(7)(C) provided to the TVA OIG after he had the opportunity to review the change. Accordingly, we do not believe that Mr. (b)(7)(C) classified the procedure change as minor, knowing that to do so would constitute a violation of the procedure.

Now let me turn to Mr. --

MS. SIMON: Excuse me, Mr. Lewis. I'm sorry. This is Marcia Simon. I'm still having a lot of trouble hearing you. So, I'm going to ask if you guys could try to look one more time at the microphone issue. I'm sorry.

MR. GIFFORD: It appears that the microphone for that headset is very directionally-dependent. Is it possible to position the microphone so that it is right up against the speaker's cheek or closer?

PARTICIPANT: Okay. Can you hear better now?

MR. GIFFORD: That is very loud, yes.

PARTICIPANT: Okay. All right. And it's still working even after I close the window.

MR. LEWIS: Let me now turn to Mr. Sprinkle. And let me know if you can hear me.

MR. GIFFORD: That audio is much better.

MR. LEWIS: Thank you. Marcia, my setting was not causing the problem.

I'll turn to Mr. Sprinkle now. Mr. Sprinkle acknowledges that, with hindsight, he made a mistake in considering the procedure change to be a minor change. He agrees with the NRC's determination

that the change did not meet the criteria for a minor change because it altered the sequence of steps by permitting operators to draw a bubble at less than 135. And to the best of his recollection, he viewed the change as one that would not alter the intent of the procedure, which was to prevent the temperature differential between the RCS and pressurizer from exceeding a maximum delta-T on which the design had been based. To the best of his recollection, he simply failed to recognize that maintaining the intent of the procedural step was not a sufficient basis to categorize it as minor if it altered the technical sequence of the steps.

In sum, it appears to TVA that Mr. Sprinkle simply made a mistake, and as already discussed, making a mistake does not constitute deliberate misconduct. I should add that Mr. Sprinkle clearly finds it difficult to recall the circumstances of the procedure change that occurred almost five years ago, but his state of memory is not a basis to impute deliberate misconduct. Rather, the amount of time that's elapsed between the change on November 9th, 2015 and the NRC's notice of the apparent violation cuts against the finding of deliberate misconduct, as such a finding should be based on

evidence, not speculation.

In conclusion, TVA agrees that the procedure change as it was apparently interpreted and applied in the control room to allow bypassing the temperature requirement was not a minor editorial change, and therefore, accepts the violation on this basis. TVA disputes only that Mr. (b)(7)(C) and Mr. Sprinkle acted deliberately. The NRC has not offered any evidence that either Mr. (b)(7)(C) or Mr. Sprinkle knowingly and deliberately misclassified the procedure.

Because the operators did draw the bubble using Step 9, presumably, interpreting the procedure change to alter the sequence of procedural steps, TVA has taken steps to address the violation.

Mr. Barstow will now speak to those correction actions and the significance of the violation.

MR. BARSTOW: Thank you, Mr. Lewis.

TVA acknowledges that a performance deficiency violation occurred on November 9th, 2015 when the procedure changed to 1-GO-1, was processed as a minor or editorial change. The procedure change did not meet the NPG-SPP-01.2.2 criteria for a minor or editorial change because it unintentionally impacted

the procedure's intent and the sequence of the procedure steps prior to drawing a bubble in the pressurizer.

As you just heard from Mr. Lewis, TVA's assessment is that Mr (b)(7)(C) reasonably concluded the procedure change was minor because he thought the subsequent steps would prevent operators from doing anything that was not already allowed by the procedure.

It is also TVA's position that Mr. Sprinkle could reasonably have believed that the procedure change did not alter the intent of 1-GO-1 based on maintaining the 320-degree Fahrenheit differential temperature design limit for the reactor coolant system and pressurizer temperatures. As Mr. Sprinkle has acknowledged, he made a mistake by failing to consider whether the change would impact the sequence of procedural steps.

Absent any substantive information to the contrary, TVA concluded that neither Mr. (b)(7)(C) nor Mr. Sprinkle intentionally violated the procedure change process. This error was of very low safety significance. Proceeding to draw the pressurizer bubble at less than 135 degrees did not result in exceeding the 320-degree delta-T design limit between

the pressurizer and the reactor coolant system.

On November 9th, 2015, when the pressurizer heater was energized and temperature was raised to approximately 340 degrees, according to the control room log, the RCS temperature was approximately 105 degrees Fahrenheit, based on dataware. Therefore, the maximum delta-T design limit was met and a margin of about 85 degrees Fahrenheit remained.

Remaining within the design limit was not simply by chance. 1-GO-1 directs operators to perform surveillance 1-SI-68-44, which is the RCS temperature pressure limits and pressure temperature limits, which monitors the delta-T to ensure the design limit is met.

TVA has taken extensive corrective actions at Watts Bar to address issues concerning the procedure used and adherence that existed in 2015. We also recognize that this example highlights specific issues with the procedure change process. Therefore, any violation issued will be captured in TVA's Corrective Action Program, so that further corrective actions can be considered for the procedure change process.

In terms of the ROP, TVA agrees that there

was a performance deficiency and a violation of 10 CFR 50, Appendix B, Criterion 5. Notwithstanding the change to 1-GO-1 on November 9th, 2015, the Watts Bar procedure ensured that the design limit for a delta-T between the pressurizer and the RCS system was monitored and met. There was no impact on the initiating events or barrier integrity cornerstones because the design limit delta-T was not challenged. Therefore, TVA considers this procedure change process violation had very low safety significance.

I will now turn the presentation back over to Mr. Lewis for a discussion of Apparent Violation No. 3.

MR. LEWIS: Thank you, Jim.

In Apparent Violation 3, the NRC alleges that, on November 11th, 2015, the shift manager approved Watts Bar Unit 1 going from Mode 5 to Mode 4 without first ensuring that all restraints had been resolved, in violation of TVA's General Operating Instruction 1-GO-1. TVA acknowledges that a violation of 1-GO-1 occurred by proceeding with a heatup to Mode 4, despite a clearance being in place that should have restricted the plant to Mode 5 and 6. But TVA denies the violation was the result of deliberate misconduct.

TVA examined this noncompliance as part of

its root cause analysis and looked into the events on November 11th, 2015. The root cause analysis found that there was a mode restriction interference, but because the restriction was not communicated back to the work order that necessitated the clearance, the operators were not apprised of the restriction, and it was not included on the OCC's outage issue action tracking list. This error cannot be attributed to Mr. Johnson, who the NRC alleges engaged in deliberate misconduct in connection with this Apparent Violation.

Further, as part of the procedure moving from Mode 5 to Mode 4, managers in various disciplines, including the (b)(7)(C), were required to provide signed confirmation that work activities were either complete or would not prohibit entry or impact continued operation in Mode 4. The NRC does not allege that this confirmation did not occur. Rather, Apparent Violation 4 alleges that Mr. Johnson was told by the (b)(7)(C) that the previous night shift did not move to Mode 4 because normal letdown was out of service due to the valve repair.

The (b)(7)(C) statement does not imply that a mode restraint existed, but, rather, only that the night shift wanted normal letdown feed

service before proceeding with the heatup. This is a critical point, as Mr. Johnson is alleged to have deliberately ignored a mode restraint in proceeding, not, that he disregarded the night shift's preference to wait for normal letdown to be returned to service before proceeding with the heatup.

As I will explain, the evidence indicates that Mr. Johnson was not aware of mode restraint, and therefore, reasonably understood there were no restrictions precluding entry to Mode 4. Before I discuss the specifics of Mr. Johnson's actions on November 11th, 2015, I'd like to provide a bit more background on the events that led to the Apparent Violation, according to TVA's root cause analysis.

On November 9th, 2015, minor maintenance on a CVCS letdown isolation valve was being performed when an active leak was identified on the packing leak offline, requiring a weld repair. On the morning of November 10th, a child work order was created for the weld repair and contained no mode flow restraint. The child work order was added to the OCC's emergent issues list, but the repair was listed as impacting Mode 2.

On the evening of November 10th, the Operations Department developed the clearance needed

to perform the work order. During the development of the clearance, it was identified that the work would be performed with single valve isolation, and the note, therefore, was added to the clearance details indicating the clearance was intended for use in Mode 5 and 6. However, there was no process in place driving the transfer of this information back to the work order.

In addition, the OCC's outage issue and action tracking list was not updated to reflect the new Mode 5 and 6 restriction and the impact of this for the valve remained Mode 2. The absence of this information in the work order and out of the OCC's outage issue and action tracking list prevented the control room from identifying the Mode 5 and 6 restriction prior to entering Mode 4.

Similarly, the STORM report, which stands for Shift Turnover Outage Review Meeting, the STORM report from 0600 on November 11th gave no indication that the valve repair needed to occur before the plant entered Mode 2.

I will first address the alleged violation of 1-GO-1, Section 5.2, Step 17.1. Step 17.1 required the operators to initial that they had ensured that all clearances that would prohibit entry into Mode 4

had been restored as required. TVA acknowledges that the control room operators should have been precluded from completing Step 17.1 because the clearance was in place with a Mode 5 and 6 restriction. However, the evidence indicates the control room operators did not know that they were precluded from concluding Step 17.1.

As shown here, the STORM report on the evening of November 10th tracked the valve's repair on the outage issue and action tracking list as having a Mode 2 impact. Because of the weakness in the process for controlling emergent work, the note that was later added to the clearance details for this work was not carried over to the work order, and the OCC's outage issue and action tracking list was not updated to reflect the Mode 5 and 6 restriction that had been added in the clearance details.

Around the time that the day shift was coming on duty, the STORM report on the morning of November 11th at 0600 stated Mode 4 would be reached at 0600 and the weld repair would be completed at 0700. Further, TVA's root cause analysis found there was a breakdown in communications.

Based on all of this, it appeared the control room operators and Mr. Johnson were not aware

of the Mode 5 and 6 restriction in the clearance details. Consequently, the violation of 1-GO-1, Section 5.3, Step 17.1, appears unintentional.

The NRC also asserts that Mr. Johnson violated 1-GO-1 when he initiated, in Section 5.3, Step 22, indicating that all restraints to Mode 4 entry had been resolved, when, in fact, they had not been. This Step 22 requires the shift manager to initial that Appendix B has been completed. In order to complete Appendix B, numerous steps need to be performed and signed off by various personnel.

As shown on the screen, Step 3 of Appendix B stands to ensure that Checklist 1 is complete for entry into Mode 4. Apparent Violation 3 seems to be relying on the Checklist listing the CVCS-charging and letdown system as normally operable as the basis for Mr. Johnson violating the procedure. However, this Checklist does not create an operability requirement or a mode restraint. As you can see on the screen, the Checklist only says the system is normally operable. If the system had to be operable in order to proceed, the term normally would not have been used. Rather, the Checklist would have said the system is required to be operable. Note that the CVCS-charging and letdown system falls under Section

B of Checklist 1, and I'll come back for that momentarily.

Further, as you can see on your screen, the Checklist allowed the system alignment checklist for the CVCS-charging and letdown system to be n/a'd, and even further, as shown on your screen, Section C of the Checklist lists those systems that must be available prior to Mode 4. The CVCS-charging and letdown system is not listed in Section C. As I pointed out earlier, it's in Section B.

Therefore, TVA denies that it violated Step 3 of Appendix B. TVA concedes that a violation of Step 21.1 of Appendix B, and hence, 1-GO-1, Section 5.3.22, occurred by failing to ensure that the work order would not prohibit entry into Mode 4. And as previously discussed, this violation resulted from the clearance details not being communicated or tracked properly, and not from any deliberate misconduct by Mr. Johnson or the control room operators.

I'll now hand the presentation over back to Mr. Barstow.

MR. BARSTOW: Thank you, Mr. Lewis.

TVA acknowledges that a performance deficiency and procedure violation occurred when Watts Bar Unit 1 transitioned to Mode 4 with an open

clearance that should have limited the plant to Mode 5 or 6. While TVA agrees that certain steps in 1-GO-1 outlined by Mr. Lewis were not met, TVA disagrees with the NRC's analysis that 1-GO-1 was not properly followed when the shift manager initialed that Appendix C to the procedure had been completed.

As discussed, TVA denies that Mr. Johnson's decision to change modes was made knowing that a violation of 1-GO-1 would occur. The failure to track the mode restriction occurred due to a work control process inadequacy and was missed by the organization. It was not the result of a deliberate act by Mr. Johnson or anyone else.

This failure had no reactor or industrial safety significance. According to (b)(7)(C) (b)(7)(C), the mode restriction in the clearance note was written to address the best time to perform the work.

The CVCS filed maintenance boundary was acceptable given that the manual isolation valve, 1-ISB-68-580, and air-operated value, 1-FCZ-62-69, upstream were isolated for the physical boundaries. These two valves in series satisfy the special requirements for mechanical batteries for a fluid that is greater than 200 degrees Fahrenheit or 500 PSIG.

Additionally, drain valve 1-CRB-62-1235 was tagged open for then accumulation of energy if there was any leak by the two valves in series. While not from a required boundary, the clearance notes, for RCS temperature to be less than 200 degrees Fahrenheit was a third boundary in a series to ensure worker protection.

As corrective action for this issue, TVA revised the Watts Bar Nuclear Operations Directive Manual relative to clearance development and placement. New requirements were added for clearances that are not directly controlled by a clearance tag, such as clearances relying on pressure level and maintaining pressure. Now the required mode or condition will be documented in a narrative log, and operations will ensure that the work order is updated appropriately.

In terms of the ROP, TVA agrees that there was a performance deficiency and a violation of 1-GO-1. This issue is of very low safety significance because it did not impact the initiating events, mitigating systems, or barrier integrity cornerstone. Specifically, this issue did not increase the likelihood of or cause an initiating event and it did not negatively impact any of the key shutdown safety

functions of decay heat removal, inventory control, or containment needed in Modes 4 or 5.

I will now ask Mr. Lewis to discuss Apparent Violation No. 5.

MR. LEWIS: Thank you, Jim.

TVA acknowledges that a violation of 10 CFR Part 50, Appendix B, Criterion 17, occurred on November 11th, 2015, due to TVA's failure to maintain appropriate operations logs. TVA has previously acknowledged that the specifics of the RHR evolution on November 11th were not maintained in the operations log. TVA also identified log-keeping as one of the operator fundamental weaknesses associated with RHR evolution and stated that its control room operators needed to improve their log-keeping.

Following identification of the deficiencies in operating logs associated with the RHR evolution, TVA initiated Condition Report 1116732, Operator Logs, in December of 2015. A Condition Report identified that several trend CRs had been submitted concerning the accuracy and thoroughness of station logs. And the Condition Report was developed to ensure that logs meet OPDP-1 and that operations expectations are met going forward.

Additionally, TVA conducted an apparent

cause analysis to evaluate and identify issues associated with reactor heatup on November 11th, 2015. The apparent cause analysis acknowledged that the specifics of the RHR evolution and associated decisionmaking were inadequately documented in the operations logs.

One of the contributing causes in the apparent cause analysis is, quote, Governance and oversight of operations performance was not effective in addressing reoccurring deficiencies in, skipping over, log-keeping quality. TVA's root cause analysis, completed in February 2016, also identified the log-keeping deficiencies and identified a failure to document critical thinking as one of the weaknesses in operator fundamentals.

A few months after the root cause analysis was issued, the NRC, on April 7th, 2016, issued a Severity Level IV, non-cited violation, for TVA's failure to maintain sufficient operations log regarding the RHR evolution. TVA did not contest the NRC's non-cited violation. However, TVA denies that the violation occurred as a result of deliberate misconduct. TVA has been unable to identify any information that would lead the NRC to revisit the non-cited violation and find that operators

intentionally failed to log events from November 11th, 2015.

The main control room operators who were on duty that day and who have been interviewed regarding log-keeping have explained that they should have logged the events more thoroughly, but were occupied with other tasks. In an email message a month following the RHR evolution, Mr. (b)(7)(C), the event supervisor, explained that they certainly could have logged more and that the crew just had too many things going on.

The (b)(7)(C) (b)(7)(C), explained during his December 2015 NRC interview that, quote, I think it's related to the amount of time we had to note the log entry. Skipping down, With a startup like that where everything is fluid, and then, a lot of things just get truncated with that, things get missed. Mr. (b)(7)(C) also explained during his PEC that, looking back, the events of November 11th, 2015 should have been better documented by the crew.

Mr. Johnson acknowledged in his December 2015 NRC interview that the note logs were not up to standard. He said, The log-keeping for that day, I look back at it. It was less than adequate and it's

something that needs to be addressed, that the log-keeping that day was not up to standards.

However, Mr. Johnson also explained that the failure to properly log the events of the day was the result of being busy. He said during that interview, I was relieved that we hadn't let the plant get into a bad situation. At the end, we were hustling a lot to get the normal letdown system back in service where we could get back to a normal plant configuration, that I didn't, I didn't ensure the CRs were written and the logs were adequate.

When asked by the resident inspector, the senior resident inspector, whether the failure to log was intentional or an effort to hide what had happened, Mr. Johnson was emphatic that it was not. Mr. Nadel asked Mr. Johnson, Is anyone directing you to omit information in the log? Mr. Johnson responded, Absolutely not, no. Mr. Johnson followed up with a question, Did you guys ever think about the NRC? It was a federal holiday and no one is here from the NRC and kind of a skeleton crew as far as a regulator, and that maybe not putting the entire story in the log somehow just kind of pushed it underneath the table? Mr. Johnson responded, Absolutely not.

Similarly, Mr. Johnson's January 9th, 2016

TVA OIG interview states that Mr. Johnson believed the event was not logged, quote, because it was, oh, so hectic that day -- close quote -- and not, quote, to try and hide what happened. Close quote.

More recently, in his written submission to the NRC in response to Apparent Violation 5, Mr. Johnson specifically asserted that the failure to include the expected level of detail in the operations log was a mistake due to the level of activity in the main control room and not an intentional omission.

While a high level of outage activity is no excuse for failing to meet the log-keeping requirements, a failure to perform adequately in the moment is not equivalent to a person intending to not meet the requirements. TVA has not seen any statement by any operator or any other evidence that would lead it to conclude that the operators intended to violate log-keeping requirements. TVA has also seen no indication that any operator thought about logging the pressurized level exclusion and, then, decided not to do so.

In sum, TVA's investigation found no support for the NRC's assertion that Mr. Johnson deliberately chose to violate NRC regulations, TVA's procedures, or his senior reactor operator license.

Rather, TVA concludes that the failures to maintain sufficient logs on November 11th, 2015 was unintentional and consistent with TVA-identified performance deficiencies in 2015.

I will now hand over our presentation to Mr. Barstow.

MR. BARSTOW: Thank you, Mr. Lewis.

TVA acknowledges that a performance deficiency and procedure violation occurred when Watts Bar operators failed to maintain an accurate and appropriate log. This issue was previously documented by the NRC as a non-cited, Severity Level IV violation. TVA did not contest that violation in 2016 and still believes that the issue was appropriately characterized at that time.

As discussed, Mr. Johnson has acknowledged deficiencies in log-keeping relative to the RHR event. More broadly, insufficient log-keeping was a known performance issue in the 2015-to-2016 timeframe, as noted in the Condition Reports, quality assurance escalations, and causal evaluations. However, TVA is not aware of any evidence that the failure to properly log the events were the result of a conscious decision. Those on duty that day have said that they were very busy and forgot to update the logs.

For these reasons, TVA does not agree with the NRC's determination of deliberate misconduct relative to log-keeping. This issue should not impact reactor safety. This violation was previously assessed by the NRC using traditional enforcement because it impacted the NRC's ability to carry out its regulatory function.

NRC found the failure to maintain accurate logs was more than minor and was consistent with an enforcement policy example for a Significance Level IV violation. This issue has been entered into the Corrective Action Program and Condition Report 1127691 and the NRC treated this issue as a non-cited violation, consistent with Section 2.3.2(a) of the enforcement policy. TVA considered this characterization appropriate in 2016 and no new information has been identified that would cause TVA to change this view.

Further, a number of corrective actions have been taken to address log-keeping inadequacies at Watts Bar since December 2015. These include a focus on log reviews in January 2016 with Condition Reports initiated, where applicable, and effectiveness review for the negative trend Condition Report, monitoring and metrics with weekly trending on independent log

reviews, and operations training that was used as a case study of the RHR event that included a discussion of insufficient operating logs.

Log-keeping remains a focus for the Operations Department at Watts Bar, and at the crew level, each shift manager monitors their crew's performance. When they identify gaps, the shift manager provides coaching, initiates Condition Reports, or initiates discretionary crew recess, depending on the significance of the issue. When appropriate, actions resulting from this focus on log-keeping can be seen in a crew excellence plan or an individual operator excellence plan. Additionally, log-keeping is something that we monitor and part of the Operations Department performance assessments.

TVA continues to believe the characterization of this issue as a non-cited violation in 2015 was appropriate, based on our review of all available information and interviews with the individuals who were directly involved.

Dave Lewis will now discuss Apparent Violation No. 6.

MR. LEWIS: Thank you, Jim.

TVA acknowledges that the main control room operators violated Watts Bar procedures and,

hence, 10 CFR Part 50, Appendix B, Criterion 5, when they reestablished RHR letdown without first starting an RHR pump. In fact, as the NRC is aware, on April 7th, 2016, the NRC issued a green non-cited violation for the failure to follow an approved procedure when we were restoring RHR letdown on November 11th, 2015. And TVA did not contest the violation. But TVA denies the violation was the result of deliberate misconduct.

Based on Mr. Johnson's prior statements, it appears he believed he was not within the RHR procedure, but was, rather, taking prudent operator actions to restore control pressurizer level. Mr. Johnson has explained that the goal of reestablishing RHR letdown was to reduce pressurizer level, not to put the RHR system in service for cooling. Specifically, Mr. Johnson did not perceive a need to put RHR back in service, as the main control room operators were only establishing letdown rather than restarting cooling.

In this regard, a table provided to the NRC resident inspector, Mr. Nadel, on December 17th, 2015, which was identifying the status of responses to his questions, stated, In a 12/16/15 meeting with the resident inspector, the shift manager stated that he was not in a procedure when he initiated RHR letdown,

but leveraged his training and integrated plant understanding to place the plant in the safe condition via leveraging/placing RHR letdown in service.

Additionally, during his December 18th, 2015 interview with the NRC, Mr. Johnson stated, Prudent operator actions is what we were doing. When asked during his December 18th, 2015 interview whether Mr. Johnson, quote, feels that the steps that he took were within his authority, based on the training that he received over the years, Mr. Johnson said, Absolutely. He further explained that the steps that the main control room took to control the pressurizer level were prudent operator action to control the plant in a situation that wasn't entirely expected.

Mr. Johnson evidently believed that he was acting in response to an emergent situation and that he could use prudent operator actions to control that situation. As a result, Mr. Johnson appears to have had a good-faith belief that he was authorized to act outside of the RHR procedure.

However, TVA does not believe that Mr. Johnson was correct in his belief that he could disregard TVA Procedure 1-SOI-74.01, which is the RHR procedure. Instead, at a minimum, Mr. Johnson should have n/a'd steps if they were not applicable.

Pursuant to OPDP-1, Section 5.1(h), Mr. Johnson, as the shift manager, was empowered to find that starting the RHR pump was not applicable in the current operating condition, and therefore, 1-SOI-74.01, Section 5.8.2, Step 18, directing the start of the RHR pump did not need to be followed. Section 5.1(h)(3) of OPDP-1 states, Follow guidance in NPG-SPP-01.2 if a portion of a procedure is used or other reasons exist for n/a of non-conditional steps. Approval required by the section manager or designee shall be performed by the shift manager.

Section 18 -- I beg your pardon -- Step 18 was a non-conditional step because it did not use the language of if or when. Thus, Mr. Johnson had the authority to n/a Step 18 directing the start of the RHR pump. If Mr. Johnson had n/a'd Step 18, then this particular Apparent Violation would not have occurred.

Given that Mr. Johnson could have complied with the procedure by n/a'ing Step 18 without too much difficulty, it's hard to see that his actions were deliberate misconduct. Rather, the control room operators were faced with an unexpected situation, and TVA cannot conclude that either Mr. Johnson or the control room operators intentionally violated the procedure.

TVA respectfully submits that the failure and informality relative to the RHR procedure used and adherence appears symptomatic of the documented weaknesses in operator fundamentals that existed at Watts Bar in 2015 and 2015 rather than deliberate misconduct.

I'll now turn our presentation back to Mr. Barstow.

MR. BARSTOW: Thank you, Mr. Lewis.

TVA acknowledges that a performance deficiency and procedure violation occurred when operators reestablished RHR letdown without starting the RHR pump. As you just heard, TVA does not believe that the failure to follow the RHR procedure was a deliberate violation by any individual. The operator took action to restore RHR letdown consistent with the general RHR operating procedure and made a decision to not start the RHR pump based on the plant condition and having no constructive reason to start the pump. The intended reduction in pressurizer level was achieved without the need to start an RHR pump. The operators were not trying to reestablish RHR shutdown cooling. They were reestablishing RHR letdown.

The safety significance of this issue was assessed in 2016 when the NRC issued a green, non-

cited violation for the failure to follow procedures. At that time, the inspector determined that this finding was of very low safety significance because the way that the system was placed in service did not cause any safety-related components to become inoperable nor did it represent an actual loss of function of one or more (audio interference) of equipment designated as high safety significant, in accordance with the TVA's Maintenance Rule Program.

TVA has not identified any new information associated with this finding that it believes should change the original characterization of the safety significance. We (audio interference) because of the alleged deliberate misconduct. However, TVA's review of the historical documents and statements, as well as new interviews with Mr. Johnson, did not identify a basis to conclude that Mr. Johnson's actions relative to procedure use would rise to the level of deliberate misconduct.

It is also important to note that a number of corrective actions have been taken at Watts Bar since 2015 to improve procedure use and adherence. Actions have also been taken to increase accountability for management responsible to recognize deficiencies in operator fundamentals and to reinforce

high standards and expectations for performance. You heard Tony Williams talk about some of these during his remarks.

Today, the work environment and the level of performance and operations have improved at Watts Bar. TVA is continuing to sustain this improvement in both areas, and we believe this is reflected in the NRC inspection record and INPO evaluation. TVA continues to believe that NRC's 2016 characterization of this issue as a green, non-cited violation for inadequate procedure adherence was appropriate. While TVA identified a number of important organizational and operational weaknesses associated with the RHR event in 2015, no new information has been identified that would indicate a different characterization of this finding is warranted in 2020.

This concludes TVA's presentation of Apparent Violations 1, 2, 3, 5, and 6.

MR. O'BRIEN: Thank you, Mr. Barstow. I appreciate that.

As we had conversations last week with your counsel, there was a strong potential we would need to be fluid and flexible as things go forward. So, I want to do a little on-the-fly planning, if that's okay with you, Mr. Barstow.

MS. ROELOFS: What was your question, Mr. O'Brien? You cut off at the end of your question, Mr. O'Brien.

MR. O'BRIEN: I'm sorry. So, I indicated I wanted to do a little bit on-the-fly planning as we go forward the rest of the day, if that was okay with Mr. Barstow.

MR. BARSTOW: Yes, Mr. O'Brien, that's fine.

MR. O'BRIEN: So, we are at 10:20 your time, according to my clock here. The next thing scheduled is a break for lunch, and then, caucus with the NRC, with us coming back two hours later. So, if it's okay with you, I think we might just take those two hours and come back at 12:30 your time, if that's acceptable to you. So, we'll do the caucus and you guys can get a little bit of lunch probably a little early, if that's helpful for you. And we'll come back and reconvene at 12:30 at your time. Is that acceptable?

MR. BARSTOW: Yes, that's acceptable. Thank you.

MR. O'BRIEN: Okay.

MS. ROELOFS: Mr. O'Brien, can I ask if our audio was a little bit better? We were trying to

be a little bit more quiet in the room. Could you hear us better?

MR. O'BRIEN: I could, but I'm not as important as the court reporter. So, let's ask the court reporter how that went.

Mr. Court Reporter, was that much better for you in terms of the audio?

COURT REPORTER: Yes, Mr. Chair. Can you hear me?

MR. O'BRIEN: Yes, I could. Thank you very much.

COURT REPORTER: Yes, the audio was much better.

MR. O'BRIEN: Thank you very much. Yes, I found it to be very much better. Thank you.

So, with that, we'll go off the record and come back at 12:30 your time to begin with questions and answers.

Thank you, everybody.

(Whereupon, the above-entitled matter went off the record at 10:20 a.m. and resumed at 12:40 p.m.)

MR. O'BRIEN: We have a few questions that we'd like to ask, and -- where different panel members are going to ask them as we go along.

We have no questions relative to AV 1. So, we're going to move on from that list. So, if one comes up as a result of our other questions.

And we'll begin with AV 2, and Marcia?

MS. SIMON: Thank you, Ken. I just have a couple of questions on AV 2, and forgive me if I'm not looking into the camera. I have two screens, and it's easier for me to just read off of the bigger screen.

The first question has to do with, Mr. Sprinkle made a -- the statement in the TVA OIG interview summary states that Mr. Sprinkle recalled that he was looking ahead in the schedule and noticed a sticking point with temperature and the procedure for drawing the bubble.

And it states further that Mr. Sprinkle stated that he got system engineering involved, and talked to operations to reach a resolution to make sure it was not a hold up the schedule by redefining or reclassifying a portion of the procedure.

So, Mr. Sprinkle's statement to the TVA OIG, and the discussion in his written response on page 2, acknowledges that there is an issue with temperature and the procedure for drawing a bubble, and indicates that the reason for changing the

procedure was not to have to reach 135 degrees to draw a bubble.

In contrast, Mr. (b)(7)(C) in his PEC, stated that if he had understood the procedure change to involve an intent to draw the bubble at a lower temperature, he would not have classified the change as minor/editorial.

So, I'd just like to ask, how do you reconcile those two statements?

MS. ROELOFS: This is Tricia Roelofs from TVA. We're going to refer back to our counsel to answer, based on their results of their investigation that you've heard on the record today.

MS. SIMON: Okay.

MR. LEWIS: We're not sure what Mr. Sprinkle's understanding of the procedure was. It's unclear, because he simply doesn't recall at this point.

It is true that his OIG interview suggests that he identified it. But, it's also possible it came from the control room, and we've been unable, because of lack of recollection, to really pin down what was the sticking point -- you know, who raised it.

And as a result, we do believe, though --

basically, though, that there was a difference of understanding between Mr. Sprinkle and Mr. (b)(7)(C). That Mr. (b)(7)(C) simply understood that an operator wanted an initiate verb, an action verb, to start the heat up process, and that was the change he was making. And with regard to his intent, that's how he proceeded.

It's harder to gauge what Mr. Sprinkle understood just because of the lack of recollection. It is possible that he understood it to allow the bubble to be drawn at a temperature below 135. The delta-T discussion seems to suggest that.

And the best indication we have is that if that was his understanding of intent, he simply made a mistake in classifying it as a minor change. So, it may have been a difference of understanding in what that change was intended to accomplish.

I think it is pretty clear though that what Mr. (b)(7)(C) understanding was, because he wrote it the revision log, you know, to change the procedure to allow heat up. Those aren't the exact words, but that's the gist of it.

MS. SIMON: Okay. Yeah, because I was -- in Mr. (b)(7)(C) PEC, it seemed like the information he got from Mr. Sprinkle when he met with

him to get this assignment was basically the idea that it was simply -- it was going to be a change from raise to initiate.

And it's, you know, we're trying to understand why Mr. Sprinkle would not have communicated to him, you know, this analysis, and you know, the sticking point and so forth.

But, I understand that -- I understand what you're saying.

MR. LEWIS: Let me just add this. The one thing that's not in that OIG interview is a clear statement that Mr. Sprinkle understood the procedure change was to allow the bubble to be drawn at 135.

It says that there's a sticking point. And it doesn't identify what it was. I think that you could reach the inference that you're making, but it isn't clear.

MS. SIMON: So, I just want to clarify. So, you're saying it -- are you saying it's possible that the sticking point did not involve drawing the bubble at a temperature less than 135?

MR. LEWIS: I think considerably the sticking point could be some operator saying I need an initiate verb. Or, that's a possibility. The other possibility is that the operators couldn't get to 135

and wanted to avoid it.

But, we've looked at the logs that, you know, trying to ascertain, why couldn't the operators get to 135? We can't see any acceptable reason why they couldn't.

Even at a slow heat up rate, you know, they could have gotten to 135. So, we don't understand that part of the picture.

It's one of the reasons that we are particularly interested in getting Mr. Redinger's statements, because he was the unit supervisor. We have some belief that he may have understood what the issue was.

We've talked to other people in the control room, and have had no luck understanding what may have been the issue. So, we are very interested in Mr. Redinger's views, and unfortunately, you know, that has not been shared with us.

MS. SIMON: Okay.

MR. O'BRIEN: Is it possible, Mr. Lewis -- this is Mr. O'Brien -- is it possible, Mr. Lewis, that since Mr. Sprinkle was the manager over the procedure change process, and Mr. Sprinkle would have been familiar with the difference between the words raise and initiate as those are both defined terms for the

utility, that he clearly understood what he was trying to do?

That is, to change it so it was not a step that had to be achieved, but instead a process that had to be begun?

MR. LEWIS: It's certainly possible.

MR. O'BRIEN: Thank you.

MS. SIMON: Okay. My next question is, again, in his written response, Mr. Sprinkle discussed an analysis which appears to involve several technical considerations.

On page 2 of his response he talks about, you know, whether 135 degrees prevented a violation of tech specs. He talked about a surveillance procedure. He talked about delta-T, its system design parameters, et cetera.

And in his TVA OIG interview summary, it says that he consulted with system engineering. So, I guess how do you reconcile those actions with his determination that this was a minor/editorial change?

MS. ROELOFS: We'll -- this is Tricia from TVA, we will turn that question over to our counsel, Mr. Lewis, as well.

MR. LEWIS: Mr. Sprinkle has indicated that he -- if this was the purpose, to allow the

bubble to be drawn at 135, you know, he's reconstructing it.

But, he says he believes it was a non-intent change. And it was a non-intent change because it appears to have preserved delta-T, the 320-degree delta-T. And he says he made a mistake. He failed to consider the part of the procedure that said it shouldn't be minor if it changes the sequence of steps.

So, I think the -- I think that's the answer. That he was considering it minor. That's the best he can gather. And then kind of reconstructing after the fact, not being completely certain, but his view is that it was probably minor if that was the case, because it preserved delta-T and he simply made a mistake in failing to consider the other aspects of the minor one, that it not change the sequence of steps.

MS. SIMON: Okay. I'm just going to ask Gerry to -- Gerry could you put up the pages from Exhibit 88, please?

And I think Mr. Lewis, or whoever is going to answer this question, maybe it's more appropriate for someone from TVA since it involves the procedure itself. I think you'll -- you'll have to scroll up

and down on your screen in order to possibly get to the part I'm referring to.

But, I just wanted to ask a couple of questions related to the procedure and the requirements for minor/editorial changes. So, I'll ask the question and then you can decide who you want to address it.

So, at the bottom of the page that's on the screen now, it's paragraph A. And so, it says -- it talks about minor changes, such as inconsequential editorial corrections that do not affect the outcome, results, functions, processes, responsibilities, and requirements of the performance of procedural instructions.

So, I'd like to know, is -- are minor changes limited to inconsequential editorial corrections, based on that statement? I'd like to know the interpretation of that, please.

MS. ROELOFS: Hello, this is Tricia Roelofs from TVA. Mr. Williams, also from TVA, will answer that question.

MR. WILLIAMS: Yeah. Yeah, hello, Ms. Simon. Can you ask me the second part of your question?

I under -- I'm down at the section about

the minor changes. But, you're trying to ask a question about what would classify as a minor change? And also the editorial portion of it?

MS. SIMON: Yeah. But my specific question is -- I'm reading that first -- the first part of that first sentence. And it says, such as inconsequential editorial corrections, et cetera, et cetera.

And so my question is, are minor changes limited to those kinds of inconsequential editorial corrections?

MR. WILLIAMS: Well, when you put in the action verb, such as, these are examples of these that would classify as a minor/editorial change. So, it's not all inclusive when you use action verbs such as, such as.

Those are kind of clarifying what are the type of things that would fall under these type of changes. So, I don't know if that answers your question.

But, the action verb was such as, is explaining that the rest of that sentence is examples of things that would fall under the minor changes.

MS. SIMON: Okay. And so Gerry, could you turn to the next page, please? This is a follow-up to

that, Mr. Williams.

So, there's a list in, I guess, Paragraph B of, is it, 8.17 categories of minor editorial changes. And at Mr. (b)(7)(C) PEC, I asked him which of these corresponded to the change in question on November 9.

And he said number, paragraph 7 -- subparagraph for number 17, changes which are purely administrative and non-technical in nature, which do not change the intent or outcome of an activity.

And I guess so my first question would be, would you or whoever is appropriate to answer, agree with that assessment? Or is there another -- is there another item in this list that you think it would fall under?

MS. ROELOFS: Mr. Williams will answer that question as well, Ms. Simon.

MS. SIMON: Thank you.

MR. WILLIAMS: Yeah. Ms. Simon, I think we agree that when we looked back, we did the investigation into this violation, this classification of a procedure change based upon the effect that it had, with the implementation of this evolution, should not have been processed as a minor editorial change.

So, we understand the interpretations on

that step 17 and how (b)(7)(C) believes that he would fall under that. However, when you look at the way it was interpreted by the operations group, and which we agree with, would be an action verb that was used, it changed the sequence.

So, this editorial, this change would not, that occurred, would not be classified as a minor or editorial change in accordance with this procedure.

MS. SIMON: Okay. I guess what I'm trying to get at, is in trying to look into the, you know, the mindset of either Mr. (b)(7)(C) or Mr. Sprinkle, as they're looking at this -- as they're looking at this change, it seems, you know, hard to look at a lot of these items and say that, you know, clearly the change was not, for example, a correction to addresses, telephone numbers, or computer application names.

A lot of these changes really do seem like inconsequential editorial corrections. And so, I guess we're trying to understand why an experienced procedure writer or an experienced manager like Mr. Sprinkle with an SRO license, would look at a change like this, and classify it as any of these.

So, if you have any thoughts on that, we'd like to hear them.

MS. ROELOFS: Mr. Williams is -- and again this is Tricia Roelofs. Mr. Williams will answer. And then we'd also like our counsel to comment on the issue of intent after Mr. Williams speaks.

MR. WILLIAMS: Yes, Ms. Simon, I think that when you looked at the testimonies by Mr. (b)(7)(C) and Mr. Sprinkle, it wasn't intentional that they understood these steps in this procedure.

But they don't know how it's laid out. Particularly when it's embedded in an administrative procedure that has 17 steps.

But their testimony talks about understanding, their understanding of the change that was requested, and how it applied to this step in the administrative procedure of minor and editorial changes.

So, they had a thought process. They had a basis for proceeding in the change in this manner. They were wrong. They were incorrect on their application of this step of the procedure.

It was not intentional. At least -- and I'll hand this over to Mr. Lewis, who did some more investigation on it.

But, we understand their basis. We understand how a person could make this correlation

that if the heat-up is stopped, and they needed to initiate it, then you needed action verbs that would allow them to do it.

And even the way the -- Mr. (b)(7)(C) communicated that his thought process was, this was wordsmithing by the operators, meant that it was unintentional. That it was a major classification of the procedure, a re-sequencing of those steps. That it was a minor and editorial based upon the way he saw this change being made.

So I'll hand it over to Mr. Lewis. But, I understand how a person -- misapplied this step in the procedure. We agree that it was a misapplied step in the procedure.

But, I understand the basis and the way it was phrased. And we don't believe that it was an intentional misappropriation of the procedure, a misapplication.

MR. O'BRIEN: Mr. Williams, before you move on to Mr. Lewis, I'd like to follow up on something you said. You indicated that there was a belief by somebody. I'm not sure whom, but by somebody that they may have needed to change from raise to initiate in order to allow the heat-up to either begin or continue.

As both raise and initiate are action verbs that allow an activity to occur, I'm a little lost at that explanation since the activity could have begun under either verb using your process.

And given that the individual, Mr. Sprinkle, that was involved is a supervisor reviewing those types of procedures, Mr. (b)(7)(C) was an individual who had done, according to his own testimony, many, many, many thousands of procedures.

And the operators were familiar with the bolded, highlighted words in terms of your process. And both of those words would have allowed them to do the action being specified.

I'm a little at a loss, and I wonder if you could help me to understand why that's something that we should take as a logical argument?

MR. WILLIAMS: Mr. O'Brien, raise is raising the rate. If you have a heat-up rate, we talk about heat-up rate. We talk about cool-down rate. When you're in here, in your procedures, they talk about these rates.

And an operator would say raise at increasing the rate of, the heat-up rate. Initiate means start from scratch.

So, while I understand the issue, and I

understand that it was the noncompliance with the procedures, this change should not have been done as a minor editorial change. But, I also understand that operators in the control room, when they look at these words, they do request that the changes be modified too, because of the situation that they're in.

So, when you're talking about heat up, you talk about cool down, a lot of times we imply rate associated with those evolutions. And raising a rate and lowering the rate where it initiated and you're starting from scratch, initiate means start the heat up.

So, that's the only time, the only way I can see not being at the time. But, that's the only way I can see it, that discussion in this hearing.

MR. O'BRIEN: So, to make sure I understand, and I apologize, I just want one further clarification.

You're making your argument that it applies because it could be a rate that they were assuming, even though a rate has nothing to do with this question in hand?

MR. WILLIAMS: I'm not making an argument on whether this was a procedure change that was -- should have been done under the normal process and not

editorial.

And I'm also not making an argument on what motivated Mr. Sprinkle or Mr. (b)(7)(C). When I look at the way they communicated their basis, I understand what, how they were looking at this change.

And I understand how they thought that this would be something that might be considered a minor and editorial change.

MR. O'BRIEN: Thank you, sir.

MS. ROELOFS: And this is Tricia Roelofs from TVA. I'd like to ask if our counsel has anything to add to those statements that Mr. Williams just made.

MR. LEWIS: Yes. Going back, the paragraph at the bottom of the previous page. The last sentence has a statement of what minor changes aren't.

Just scroll down, excuse me. So, minor changes shall not change the intent of the procedure or the technical sequence of procedural steps.

That's the most precise definition. Minor changes are things that don't change the intent and don't change the sequence.

That seems what Mr. (b)(7)(C) understood he was doing. He wasn't changing the intent. It

still required, under his interpretation reading, to go through step 8.3 and reach 135 degrees Fahrenheit before drawing the bubble. And it didn't alter the sequence.

On the next page, item 17 again fits what Mr. (b)(7)(C) understood. It wouldn't have fit what the operators may have understood or how it may have been interpreted.

But Mr. Sprinkle understood he was making a change that was made to accommodate a request from an operator that they wanted an initiate verb. From his perspective, it was non-technical. It didn't change the intent as stated here.

It didn't change the outcome of the activity. It was, like he called, wordplay. And I do understand, and maybe TVA could confirm that I'm correct, that it's not all that uncommon that operators ask for word changes in procedures.

And sometimes then subsequently another operator that wants a different word change. And those are made.

MR. O'BRIEN: Mr. Lewis, I appreciate that. I want to make sure there's clarity in one of the statements that you made.

You indicated Mr. Sprinkle had heard from

the operators. I think you meant to say Mr. (b)(7)(C). I just want to make sure that we're correct on that.

MR. LEWIS: Yes. So, I was talking about Mr. (b)(7)(C) intent. I misspoke. I apologize.

MR. O'BRIEN: No, that's okay. I just wanted to make sure we were clear. Thank you very much for helping me.

MR. LEWIS: I appreciate that clarification very much. Thank you.

MS. SIMON: So, Mr. Lewis, I guess following up on that briefly. I know Mr. (b)(7)(C) identified number 17 as the one he felt was appropriate.

But, I guess again, from Mr. Sprinkle's standpoint, given that he went through and looked at technical aspects like delta-T and other things, and consulted with engineering, how does that -- how does that -- how does that make it fall under number 17 when it's supposed to be non-technical and purely administrative?

I mean, how does -- how does that change compare to adding a step requiring a log entry, which to me seems clearly administrative and has no technical bearing on anything.

Whereas, it certainly seems that, by Mr. Sprinkle's own analysis, this had some technical nature.

MR. LEWIS: Again, if Mr. Sprinkle understood that, he was in fact, you know, having this change made, or somebody was requesting this change be made in order to allow the bubble to be drawn on decay heat at less than 135 degrees, as apparently the control room interpreted that.

You know, we have conceded it was not a minor change. As -- so, if that was his understanding, it would not have been a minor change. And Mr. Sprinkle says, you know, yes, that's what I was doing. I was thinking of it as a non-intent change. And I made a mistake.

MR. O'BRIEN: Mr. Lewis, one more clarification to something you just said. You made a reference to the control room interpreting that.

Do you have evidence that that is how the control room interpreted it? Or is that just Mr. (b)(7)(C) dialogue?

MR. LEWIS: My belief that that may have been held how the control room interpreted it, is the fact that they drew the bubble at about 105 degrees. So they didn't go to 135.

And so you tried to figure out how, you know, could they have drawn the bubble at 105 if they were following the procedure. And you know, a possibility, and you know, perhaps a bit more then that is that's how they were interpreting the procedure.

But, it is, again, we don't know. We would very, very much like to see the materials that you have with Mr. Redinger, because he's probably the person who, you know, may have said something that explains what was going on here.

And that part we've not been able to reconstruct. We've not been able to determine in the control room, you know, how they got to drawing the bubble at 105. What was their thought process, and why did they think it was permissible?

That part is not known to us.

MR. O'BRIEN: Thank you.

MS. SIMON: Okay. Gerry, could you put up the other document about the IQR training? Thank you.

So, I just had a -- you didn't discuss this this morning. But, it was in the written response that you provided.

So, I just had a couple of questions about the independent quality review. And I extracted a

couple of pages from the training on that.

I actually want to go to, I don't remember which page it is here. I think it's like the third or fourth slide. Next, next, next. Yeah. That one.

So, my question is, based on what I can see, Mr. Sprinkle was the person who, he didn't initiate the change in the terms, in the term of art in the, that computer program that TVA uses.

But, he essentially proposed it. He communicated it to Mr. (b)(7)(C). He did research on it, apparently, from his response. He did the independent quality review. And he also ultimately approved it as sponsor.

And I guess my question is, is that consistent with the definition of independence as shown in this training?

MS. ROELOFS: Ms. Simon, this is Tricia Roelofs from TVA. We would like to ask our counsel to answer that question based on their investigation and review of the documents.

MR. LEWIS: If Mr. Sprinkle supplied the information to the preparer for the revision, and perhaps TVA can explain more than me on where to draw the line.

But, if he was the person who really

provided the information to Mr. (b)(7)(C) about what was being done and why, then our position in our written response is that that would not have been, he would not have been independent. And shouldn't have been the IQR reviewer.

Where we've had difficulty in assessing this aspect, is in not having a clear understanding of what Mr. Sprinkle communicated to Mr. (b)(7)(C). That's the missing link.

If the request came from the control room and the request was change raise to initiate, and that was simply transmitted to Mr. (b)(7)(C) through Mr. Sprinkle, perhaps he could have been the IQR reviewer.

Our written response indicates that we just don't have enough information to know whether this aspect in the training was met or not.

We do point out in our written response that, as far as the procedure goes, it simply prohibits the preparer from being the IQR reviewer. And, you know, does not have this explicit requirement in the procedure.

But, I'd also like to point out that this aspect is not part of the violation that was provided to TVA. This is not one of the alleged aspects of the violation of what was sent to TVA.

MS. SIMON: Okay. Thank you.

MR. O'BRIEN: Mr. Lewis, this is Mr. O'Brien again. Based upon Mr. Sprinkle's testimony, I believe he indicated that he was looking ahead. And he identified the need for this issue.

And Mr. (b)(7)(C) indicates that Mr. -- Mr. (b)(7)(C) indicated that he was asked to change it. It would -- I'm trying to make sure I understand, because you implied, I think you implied again that this may have come from the control room.

Do you have any information to indicate at all and contradict Mr. Sprinkle's testimony that it did come from the control room?

MR. LEWIS: Well, in talking to people in the control room, am I on mute?

MR. O'BRIEN: No. You're live.

MR. LEWIS: Thank you. Excuse me.

MR. O'BRIEN: You're welcome.

MR. LEWIS: We asked a number of people in the control room where this originated. They're trying to find out.

One of the individuals that we talked to, a gentleman named, (b)(7)(C), indicated that there was an issue, and he couldn't remember with, you know, whether they could heat up. And that he was aware of

this issue.

And that they later learned, I believe what happened is Mr. Redinger, who is the shift supervisor, had to leave the control room for a medical appointment. Mr. Heimel stepped in.

Then Mr. Redinger came back. And at some point Mr. Redinger understood that there was a procedure change that had been made. And I think the implication that we gathered from that discussion was that, you know, it resolved the issue.

So, evidently, there was something, according to Mr. Heimel, that was being raised in the control room. And I think that, the implication, that he had a very, you know, nobody has a very precise recollection unfortunately, of what was going on.

But, we did gather from him that there was an issue raised in the control room. And it seems to have been resolved later by a procedure change.

What Mr. Heimel could not tell us, was what was the impediment? What was the sticking point? Why couldn't they have heated up? And I said, I'm sorry, Mr. Heimel.

So, we still have some indication that there was an issue that was being raised in the control room. We don't know exactly what it was.

And we do have some indication that perhaps this procedure change resolved it. We also find Mr. Sprinkle's statement, have the sense that he's not really sure that, you know, what he understood in 2017 was right.

He was having trouble recalling back then. And even today, he is not really sure what was the purpose and who raised it. We are suffering from a lack of information.

MR. O'BRIEN: Okay. Thank you, very much. Marcia?

MS. SIMON: Okay. Thanks. And --

MS. ROELOFS: Excuse me, Mr. O'Brien, Ms. Simon. This is Tricia Roelofs from TVA. I'm sorry if interrupt.

MS. SIMON: That's okay.

MS. ROELOFS: Mr. Williams would like to supplement that answer if that's permissible, please.

MR. WILLIAMS: Yes, Mr. O'Brien, I just want to add, the, you know, associated with the role of Mr. Sprinkle being the OCC, being that interface in constant communication with the control room, and being the look-ahead guy that's looking at the different evolutions, it's not uncommon that that position sees some, the control room team, seeing

potential need for procedure changes.

And being the communication to get those resources going. So, I do know from watching the OCC evolutions that that curve with the ops representative in the OCC, does -- is in very frequent communications back and forth with the control room.

So, if the control room did have concerns associated with the verbiage in this procedure, it's not unusual that they would then tell Mr. Sprinkle to initiate that procedure change problem.

MR. O'BRIEN: Thank you. Marcia?

MS. SIMON: Thanks. One final question on apparent violation two. Again, with the IQR.

I just want to, I guess, clarify whether the IQR review, part of the IQR review involves making sure a minor editorial designation is appropriate.

MS. ROELOFS: Ms. Simon, this is Tricia Roelofs from TVA. Mr. Williams will answer that question.

MR. WILLIAMS: Yes. I believe we do recognize that the IQR review should be evaluating the classification of minor editorial in his review.

And looking at the -- and we agree that the -- that review done by Mr. Sprinkle in his role of the IQN review did not meet expectations to flag to

see that that was not a minor or a technical change.

MS. SIMON: Okay. Thank you. Ken, were there any other questions on --

MR. O'BRIEN: There were no other questions in AV 2. Unless you have another one, Marcia.

MS. SIMON: No. I don't.

MR. O'BRIEN: Then we'll move onto AV 3. And I had a question on AV 3 I wanted to ask relative to your material that you put up relative to the different checklists.

And you indicated that the checklists, I think it's Checklist B, but I don't have it directly in front of me, did not quote/unquote require the letdown system to be operable.

Could you help me appreciate any other procedures, any other locations, any other processes by which you would ensure that letdown would be operable as part of your normal startup activities?

And I'll change the word operable if that will help you to go away from the formal definition of operable as used in tech specs, to mean available and useful.

MS. ROELOFS: Mr. O'Brien, TVA, Mr. Williams will be able to answer your question. But

before that, could you please repeat your question?

Or could the court reporter please repeat the question?

MR. O'BRIEN: I'll give it a shot since I made it up as I was going.

MS. ROELOFS: Okay. Thank you.

MR. O'BRIEN: During your presentation you made the point, I believe, that Appendix B did not require the letdown system to be, I'll call it operable. But I, you can also use available and useful.

And so, my question was, with that supposition in front of me, could you help me to understand what other procedure, what other location, what other control that you have, that you rely upon in starting up the plant, to ensure that system is available when needed?

Yeah. You just passed it.

MR. WILLIAMS: So, if you see, and I believe Ken, this is real clear, this clarification, are you talking about the section that says CVCS, charging and letdown?

MR. O'BRIEN: That is correct.

MR. WILLIAMS: And so we understand the tech specs, the application with the boric acid

flowback, and that and charging is clear for the operator to see the tech spec applicability in accordance with the modes and clean.

And then the letdown isolation valve would obviously have a tech spec application as well in the letdown system. And we do have other procedures that are tracking the operability of those systems.

And we do have systems that have the heat column, the celsio tracking modules that are tracking the tech spec required implications associated with those components in the letdown line and those components in the charging system that had tech spec applications.

And then additionally, we do have the normal process of letdown. But, with the whipping of the PWR, the excess allows you to deviate around the letdown process.

But that's an operational need type of process. But, I'm going to turn this over to the operations director to any other controls that we have in place that are driving the operabilities, the operable requirements associated with those charging and letdown systems.

MR. RICE: Mr. O'Brien, this is Chris Rice. So, for the letdown system, it's important to

understand that the purpose of the letdown system is to allow for clean up of the RCS and letdown. And then volume control.

Now, with the -- as far as what else would drop that, we do take this system out of service on line from time to time to perform maintenance.

And the typical driver would be based on other inputs such as RCS and chemical control, if we were seeing that we were seeing elevated activity in the RCS.

And that's when we take the -- when we do take it out of service, those are the things that we monitor for to ensure that it is capable of clean up RCS.

MR. O'BRIEN: Mr. Rice, I apologize. I wasn't clear enough in my question. During startup of the plant, you have a procedure that is on the board right now as it relates to ensuring systems are aligned in the way and manner in which you expect them. So they're available when you expect them to be used.

My question was, during start up, what other procedure besides this procedure, do you have, that would ensure that the letdown system, more specifically, and the portions that were out of

service, would be put in service before they were needed?

Not during normal operations. Not in other times and other situations. But specifically during this type of evolution and this type of set of circumstances.

I appreciate your perspective relative to Westinghouse. I spent a good portion of my career as a Westinghouse resident. So, I understand that answer too.

Mr. Rice, you're on mute. I don't know if you're aware of that.

MS. ROELOFS: No, I'm sorry. This is Tricia. He's off mute. Go ahead, Mr. Rice.

MR. RICE: I know of no other operating procedure that would be in place at this time that would require letdown situations, sir.

MR. O'BRIEN: That's -- thank you, very much. That's the answer I thought existed, but I wanted to confirm it. Thank you.

So, let me, I apologize, Mr. Rice, I want to ask a follow up question just to be sure we're clear on understanding and what not.

It is possible, it would have been possible for you during this evolution, to have not

put letdown in service at this point in time, and used other measures to control its status until a point in time you truly needed it, i.e., when you took RHR out of service. Is that correct?

MS. ROELOFS: This is Tricia Roelofs. We would like to refer that question to our attorneys, please.

MR. O'BRIEN: Okay. But, I think this is more an operational question as opposed to a -- but, you can do as you please.

MS. ROELOFS: I'm sorry, Mr. O'Brien. Again, I misunderstood what you needed. Can you please rephrase the question?

MR. O'BRIEN: I can repeat it.

MS. ROELOFS: Could you repeat? Yes, please.

MR. O'BRIEN: Mr. Rice, what I'm asking is, your processes and procedures would allow you to use other measures besides this checklist when you were starting up, to allow you to track and control the availability of the letdown valves, other than this just through this procedure.

So you could have potentially used other mechanisms to make sure you knew of its status when you were going to need it.

MR. RICE: Yes, sir. There are other methods that could have tracked this letdown line and letdown subsystem of the chemical volume control system.

We could -- there are other methods that could have tracked, what would have been required.

MR. O'BRIEN: Thank you, sir. I appreciate that. I don't have any other questions regarding AV 3. I don't believe the rest of my team does, unless they tell me that I missed something.

So, we'll move onto AV 5. Marcia?

MS. SIMON: Thank you, Ken. I have one question, unless I have follow ups about AV 5.

So, this apparent violation is not about the crew's failure to make entries during the shift. It's really about Mr. Johnson's failure to review the logs at the end of the shift to ensure that they were accurate and complete.

And Mr. Johnson stated in his OI interview in December 2015 that as shift manager he was responsible to make sure the logs were done properly. And he failed to do that at the end of the shift.

Mr. Johnson indicated in his written response that, by the time turnover with oncoming, with the oncoming shift manager was complete, he was

close to exceeding fatigue rule hours, and did not legally have time to do a final end of shift thorough review of the logs before he had to leave.

So, my question is, if that was the case, what is a shift manager supposed to do in that situation to fulfill the responsibility of ensuring that logs are accurate?

MS. ROELOFS: Thank you, Ms. Simon. For that question, again this is Tricia Roelofs from TVA. Mr. Rice will answer your question.

MR. RICE: Ms. Simon, this is Chris Rice. So --

(Telephonic interruption)

MS. ROELOFS: One moment, please. I'm sorry, we were on mute. Can you start your answer again, Mr. Rice?

MR. RICE: Yes. Ms. Simon, this is Chris Rice. My expectation would be during that time frame, if Mr. Johnson was unable to complete all of his duties, that we would have pulled additional resources to support, making sure that the logs were complete and accurate.

There is opportunities to have provided another SRO to the main control room to assist with that function. And he could have delegated that to

him. He did not do that.

MR. WILLIAMS: And if you look today on how we do business, the loading in the control room is something that we monitor and we evaluate.

We have shift managers that are very, that acknowledge when they need help. They request for additional resources to bring pools into the control room to help out with logs, to help out with additional procedures.

Last outage, the operations department started having schedules that were loaded up more than the available manpower that they had on shift. We gave them resources to help re-sequencing their work to allow them to complete the activities without overloading the manpower that they had available to them.

So, maintaining the logs from the beginning of the shift to the end of the shift is a manpower task that needs to be evaluated by the shift manager, and today we do see those shift managers letting the OCC know whatever help they need to perform those functions.

MS. SIMON: Thank you, Mr. Williams. I'm trying to understand at the time what Mr. Johnson's options were and, for instance, whether he would have

had training on the fatigue rule that would have indicated to him what he should have done if he was truly approaching his legal limit on hours.

MR. RICE: Ms. Simon, this is Chris Rice. He did have the same options in place that we have to -- that we have, that Tony mentioned today.

So we have those options available. We -- this was a -- there were potential waivers for fatigue rule if it was so required.

I wouldn't expect that we would exercise those options to ensure that the logs are complete and accurate. And that is, we see that today.

But at the time, we did have an issue with log keeping. And that was clearly identified in the QA audit that was performed.

And this was so that many actions that came out of that were to provide the coaching and bringing up those standards associated specifically with log keeping.

MS. SIMON: Thank you, Mr. Rice. Ken, that's my last question on that apparent violation.

MR. O'BRIEN: I had one other question in that area as it relates to AV 5. And it was a dialog that occurred before.

And it goes a little bit to the logs in

the sense that Mr. (b)(7)(C) and Mr. (b)(7)(C) were both serving as day one shift, and the other shift if you will, of oversight broad, and I use that word broad, of ongoing activities.

And I know at least one of them in their testimonies, either their comments to us, or their presentations indicated that they routinely looked at the logs before and after.

Given what some of the testimony has been here today, and some of the other pieces of information where the TVA was aware that this was an issue, and was aware of the need to be attentive to this, do you have any perspective, any comments you want to provide relative to the very substantial absence of information on this particular date?

And two of the more senior people in the operations department, including the senior license holder, not observing or making any comment in that regard?

MS. ROELOFS: This is Tricia again, from TVA. I will take the initial part of that answer. And then we'll turn it over to our counsel to complete our answer.

MR. WILLIAMS: Yeah, Mr. O'Brien, we would -- I would have expected those individuals to see

those gaps in the performance with the log keeping.

I can't speculate on why it didn't occur on that day. But, I will turn it over to legal counsel to see if in their investigation they found something on why they did not pick upon the gap in log keeping.

MR. O'BRIEN: Thank you.

MR. LEWIS: I don't recall Mr. (b)(7)(C) saying that he always did it. I -- you'll have to excuse my recollection of this. You caught me by surprise with this question.

But, I think he said he -- I think the sense was that he often did it. But, I don't know that he in fact did review the log when he came back on the shift on the evening of November 11.

Nor do I believe that he would have necessarily recognized this omission from the log. I think his understanding when he came back was, the operators were very calm.

I don't think he got the sense that there was a significant evolution. But, then I don't think we've ever really probed this with Mr. (b)(7)(C).

And so I'm not confident I really know the answer. And similarly, I don't know whether Mr. (b)(7)(C) said that he routinely reviewed the logs.

He'd only been the (b)(7)(C) (b)(7)(C) (b)(7)(C) (b)(7)(C)

And again, like Mr. (b)(7)(C), I don't know whether he did review the logs at the end of the day, or would have perceived the omission.

MR. O'BRIEN: Thank you, Mr. Lewis. I guess I have a follow up to this. And it goes back to part of the dialog from, I think, Mr. (b)(7)(C) and Mr. (b)(7)(C) relative to, and I think some of the discussion here, relative to trying to change the accountability and the expectations and performance.

Obviously here's a situation where the control room doesn't do logging as they're required to. The shift manager doesn't do a review as he's required to. The (b)(7)(C), the operations directors don't identify that and do anything.

I'm struggling to try and equate those two different answers, accountability and trying to set that up. And then what appears to be some of those individuals who'd be responsible for actually doing that, having no recollection or not being involved in that at all, and no observation of it.

Any feedback, any thought for me there?

MS. ROELOFS: Mr. O'Brien, Mr. Williams has a comment on your question.

MR. O'BRIEN: Thank you.

MR. WILLIAMS: Mr. O'Brien, I fully agree that the leaders need to -- they need to, they need to be performing the same standards that they expect out of the workforce.

And if the workforce is not following the procedures because management is not also following the procedures, then you're never going to improve performance.

If there is something that's important to the leaders -- to the stations, and it's something that is an improvement initiative, then you need to provide the ability for those teams to improve their performance and be successful. But you need to monitor them to see if they're correcting those issues.

So, I will speak to the improvement plan that occurred at the site as far as the corrective action associated with what we learned from these events. And one of them is the -- or one of the biggest one is the leaders have to be out there.

They need to be engaged. They need to be supporting the improvement initiatives within their

teams. And when you look at some of these, this event and some of the leaders' behaviors as well, it doesn't appear that they were supporting and reinforcing those standards.

But yet, that was a focus area. And that could have been a reason why the performance didn't improve as fast as what it should have.

MR. O'BRIEN: Thank you, Mr. Williams. I appreciate that.

MR. LEWIS: This is David Lewis. Could I just clarify what I said a second ago?

MR. O'BRIEN: Sure.

MR. LEWIS: What I was really trying to say is, we don't know. I was, I guess challenging the assumption that Mr. (b)(7)(C) and Mr. (b)(7)(C) necessarily looked at the logs that evening. And would have recognized it.

I don't know whether they did or didn't. And I was indicating I don't recall them saying that they always did.

But again, the answer is, I think we don't know. At least from our inquiry whether they looked at the logs at the end of the day. Or that they recognized there was any omission.

There's just no record that we're aware of

right now. But we're also not aware from anybody's statement that anybody intentionally tried to, you know, not log information or tried to conceal any information.

That's -- everybody we've talked to has stated that clearly.

MR. O'BRIEN: Thank you, Mr. Lewis. I don't believe we have any other questions on AV 5, unless my team has something else they've developed.

So we'll move on if it's okay with you, Mr. Barstow. And we'll move onto AV 6. I know we're right at about an hour since we started. I think this will be relatively short if that's okay.

MS. ROELOFS: That's okay with us, thank you.

MR. WILLIAMS: Yes, Mr. O'Brien, we'll continue.

MR. O'BRIEN: Thank you. I have a question relative to AV 6. And really what I'm looking for is an understanding of where, if it is, defined anywhere in TVA procedures or Watts Bar procedures, what constitutes prudent operator actions?

And then how that relates from your perspective to any of the actions that occurred on November 11?

MS. ROELOFS: Hello, this is Tricia Roelofs from TVA. Mr. Rice will answer that question for you.

MR. O'BRIEN: Thank you.

MR. RICE: Mr. O'Brien, as far as prudent operator actions, they are defined in the technical instructions. Those are associated with abnormal or emergency operating procedures, however.

As far as this, the use of prudent operator actions in this scenario, I would say that they were misapplied. Today, we've trained on this following this event with operators over the last few years.

And made efforts to reduce prudent operator actions even in abnormal or emergency situations by building our procedures.

So, for this particular case though, prudent operator actions would not have been the best method for dealing with the issue.

The best method would have been to have preplanned for a contingency such as this, reviewed the procedures, had the procedures out, ensured that they support coming into and out of the line up. And then completing the procedures in their entirety.

And if that was not capable of being performed, then a procedure change should have been

performed or as a last effort to ensure -- to follow through with the appropriate use of n/a in accordance with procedures.

MR. O'BRIEN: Mr. Rice, you make my memory cells proud with your response. In that as a former resident, senior resident, that is exactly the answer I would have expected. Thank you.

MS. ROELOFS: You're welcome.

MR. O'BRIEN: I don't believe, and I'm going to check with my team to make sure, so they can correct me, I don't believe we have any more questions regarding AV 6. Is that fair?

Tricia and Mr. Barstow, we have no further questions at this point in time. We're at about an hour.

If you'd like to take a 15 minute break and then come back and finish for the day, that would be a good idea. But, I'm open to suggestions.

MS. ROELOFS: Yes, sir. We would like to please take a short break. And then we will resume at let's say 1:55.

MR. O'BRIEN: I'm really good with that Tricia. Correct. Five minutes before the hour.

MS. ROELOFS: Five minutes before the hour, 1:55 Eastern. Thank you.

MR. O'BRIEN: Thank you very much. So Court Reporter, we're off the record until five minutes to the hour.

MS. ROELOFS: Thank you.

MR. O'BRIEN: Thank you.

(Whereupon, the above-entitled matter went off the record at 1:39 p.m. and resumed at 1:57 p.m.)

MR. O'BRIEN: Mr. Barstow, at this point in time we're ready to begin if you are.

MS. ROELOFS: This is Ms. Roelofs. We are. And we would -- our counsel would like to make one clarifying comment. And then just a very brief closing comment for TVA.

And I'm sorry for interrupting Mr. Barstow. I'm just seated next to the mute button. So, that's why I'm speaking.

PARTICIPANT: Can we make sure the Court Reporter is on line, please.

MR. O'BRIEN: Court Reporter, are you online? Court Reporter, are you on line?

COURT REPORTER: Yes, Mr. Chair.

MR. O'BRIEN: Thank you. Go ahead Tricia. You had a clarifying comment you wanted to make before we begin?

MS. ROELOFS: Yes. Our attorney would

like to make that comment.

MR. LEWIS: Yes. This is David Lewis. Marcia, I believe you indicated in one of your questions that the shift manager was required to read the logs at the end of his shift.

I just wanted to clarify, I think the procedure is OPDP-1, Section 4.6(I), which says the shift manager reviews the logs to ensure the logs are accurate and appropriate.

I just want to point out it doesn't specifically say at the end of the shift. It's just his responsibility to review the logs.

MR. O'BRIEN: Thank you, Mr. Lewis. Mr. Barstow, we're about to finish right now. And before we finish I'd like to offer any -- for the day that is, only for the day, I'd like to offer you the opportunity to comment sir, if you'd like your legal counsel to make a short, brief statement.

MR. BARSTOW: Yes, thank you, Mr. O'Brien. I think Mr. Rausch would like to make some closing comments.

MR. O'BRIEN: Thank you.

MR. RAUSCH: Okay. This is Tim Rausch. And first of all, I'd just like to thank you for the opportunity today to present our facts as well as

answer your questions.

Just to be very clear and concise here at the end, TVA accepts the apparent violations associated with current violations, 1, 2, 3, 5 and 6. We accept those on the fact that there are various cases where performance did not meet our expectations.

But we also have been very clear that in each of those cases, we do not believe there was any deliberate misconduct. And with that, we'll close the day.

MR. O'BRIEN: Thank you, Mr. Rausch. I really appreciate that. I have just a couple of comments I want to provide. And then I'll provide them each day and those that may have listened in on some of the individual conferences, I raise somewhere. First, I just want to remind everybody of two things relative to this pre-decisional enforcement conference.

First is that the apparent violations that we've discussed today are subject to further review and subject to change prior to any resulting enforcement action. That's the whole reason we're holding this conference.

And second, the statement or views or expressions of opinion made by the NRC employees at

this pre-decisional enforcement conference, or lack thereof, are not intended to represent any final agency determinations or beliefs.

Those are two very important factors. And as I said, I'll repeat them each of the next two days to reinforce the fact that this is an information gathering for us.

And we greatly appreciate the time and effort that Mr. Rausch, you and your staff have put in and the information that you've exchanged with us today. I even further appreciate the materials that you sent in advance that allowed us to make sure that we were most fully ready to have this conference and to listen. So thank you very much.

Unless there are any final comments, and I'll pause for a moment in case somebody does have another one.

I'll close the meeting at this point. I'll ask the Court Reporter and Ms. Roelofs to talk to, there's a couple of factors that they need to address.

But we are off the record at this point in time. Thank you very much.

(Whereupon, the above-entitled matter went off the record at 2:00 p.m.)