

The following observations reflect common themes from the interviews and focus groups in response to questions about changes in the work environment at Watts Bar, willingness to raise nuclear safety concerns, perceptions about various avenues for raising concerns, and management support for and responsiveness to raising concerns.

In general, individuals in the focus groups reported improvements in the work environment at Watts Bar. Examples of improvements included less pressure during outages, managers that were more willing to listen and support stopping when unsure, and better communication and respect among employees.

Individuals also reported feeling free to raise nuclear safety concerns without fear of retaliation. The majority of employees had confidence that if a nuclear safety concern was raised, it would get the attention it deserves.

However, most employees made a distinction between nuclear and non-nuclear safety concerns. Many employees felt that managers were not consistently supportive or responsive to non-nuclear concerns, such as those related to personal safety.

- There was a theme that the priority of fixing safety issues doesn't consider the worker
- Low confidence in CAP for resolving lower priority issues
- Frustration with writing CRs for repeat issues, and seeing issues closed to trend with no explanation of whether or how it was addressed
- Accountability not being applied equally or consistently for individual contributors and managers
- Lack of consistency in what people say and what they do, such as following through on commitments and walking the talk
- Lack of transparency and openness in communications

Generally, employees were aware of the ECP program, but individuals were either neutral based on lack of experience or held negative perceptions about lack of independence from line management, lack of confidentiality, or ineffectiveness in resolving issues.

It was clear from the focus groups that most individuals have seen improvements, but there were reservations about the sustainability of changes, and recognition that more improvements were needed to continue to build trust and ensure that changes are truly embedded in the culture.

## CY 2018 Watts Bar Unit 1 & 2 EOC SCWE/Allegation Trends Input

### Sources:

- Allegations received from onsite sources in CY 2018
- Discrimination concerns history 2014 – 2018
- Inspection related SCWE observations
- 2018 EOC Assessment
- CEL and CO Corrective Actions (Training; SC Assessment; ERB Procedure)
- Discussion with TVA ECP managers
- Media articles re: activities at Watts Bar 1 & 2 in CY 2018

### Assessment:

Trending the number and nature of allegations for specific reactor sites, individually and in the aggregate, is one method NRC staff uses to monitor the Safety Conscious Work Environment (SCWE) at reactor sites. Because a large volume of allegations from onsite sources might indicate a SCWE at risk, the staff conducted a more in-depth SCWE review of certain sites with larger numbers of onsite allegations, including Watts Bar Units 1 & 2.

The number of allegations received by NRC from onsite sources regarding Watts Bar Units 1 and 2 in CY 2018 (30) increased significantly after a decrease last year. The rate of receipt throughout the year was steady, with a spike in the second quarter corresponding to a spike in chilling effect, discrimination, and wrongdoing allegations in the Radiation Protection department. Allegations were received in mostly from licensee employees with the majority of the concerns in the SCWE/chilling effect and discrimination areas. Sixty (60) concerns were received in the 30 allegations and trends were noted in the Radiation Protection and Operations departments. The trend in discrimination concerns mirrored those of other concerns in that the number of discrimination concerns increased in 2018 after decreasing the previous year. Thirteen (13) discrimination concerns were received by NRC in 2018. Four (4) were still open and in the NRC's Investigation process at the time this analysis was prepared and 4 did not make a prima facie showing. Two of the discrimination concerns were resolved using the NRC's Early ADR Process, one was withdrawn by the allegor, and the remaining 2 were investigated and not able to be substantiated. No discrimination concerns have been substantiated in the past 5 years although some claims have been successfully mediated and reached settlement using the NRC's Early ADR process.

Fourteen (14) allegation concerns were received in CY 2018 asserting a chilled work environment or chilling effect. This is a significant increase from the 3 received in 2017. Four of the 12 concerns were received in the second quarter and involved the Radiation Protection department. The first chilled environment concern in Radiation Protection was not substantiated based on previous inspections, however, the NRC conducted an additional inspection in June 2018 and did substantiate that a chilled work environment existed in the Radiation Protection department. As a result of a significant increase in the number of chilling effect and discrimination allegations submitted to the NRC regarding the Watts Bar Radiation Protection department, the SCWE follow-up inspection planned for June 2018 also included a focused SCWE assessment of that department. The inspectors determined that corrective actions as a result of the Chilling Effect Letter (CEL) were having a positive effect on the chilled work environment within the Operations department and provided site-wide monitoring of safety culture. However, there were continued challenges related to identification and evaluation of department-specific work environment trends. In particular, the inspection determined that a

chilled work environment existed in the Radiation Protection department (ADAMS Accession No. ML18229A153).

The March 2016 CEL (ADAMS Accession No. ML16083A479) stated, in reference to the Operations department, that “information from the corrective action program, the Employee Concerns Program (ECP), and other sources, have provided opportunities for management to identify changes in certain aspects of the safety culture and SCWE, but the information has not been fully acknowledged and acted upon.” Although there have been improvements in the Operations department and actions taken to enhance site-wide monitoring of safety culture, the chilled work environment in Radiation Protection is an indication that Watts Bar is not adequately monitoring, acknowledging, or acting upon department-specific changes in SCWE. As a result, the NRC has decided to leave the CEL at Watts Bar open. Closure of the CEL is contingent upon an NRC determination that Watts Bar has made reasonable progress toward addressing the underlying issues that led to the issuance of the CEL.

The NRC first identified the SCWE theme at Watts Bar in the 2016 mid-cycle letter dated August 31, 2016 (ADAMS Accession No. ML16244A703) based on the issuance of the March 2016 CEL during that assessment period. After the mid-year inspection, the NRC issued a follow-up to the annual assessment letter (ADAMS Accession No. (ML18242A458) explaining that the CEL would remain open and announced a cross-cutting issue (CCI) in the SCWE area for Watts Bar because the NRC has documented four consecutive occurrences of this cross-cutting theme. In accordance with IMC 0305, the SCWE CCI may be closed if the NRC has confidence in the licensee’s scope of efforts or progress in addressing the CCI. Given that the CCI is opened because of the CEL, the actions necessary to close the CEL and CCI are the same.

Of note, multiple allegations (4) were received after the June 2018 inspection in which the allegers felt that they were harassed by the licensee (b)(7)(C). (b)(7)(C) Although the concerns did not make a prima facie showing, it may have been an example of a possible chilling event for a department that was already found to be chilled. Because the perception from these individuals was that the licensee was harassing them about (b)(7)(C), this event may have made employees hesitant to raise (b)(7)(C). The rate of (b)(7)(C) and ECP concerns did decrease in 2018, possibly as a result of (b)(7)(C).

Regarding other chilled work environment allegation concerns received in 2018, two (2) associated with the Electrical Maintenance organization and one with Operations were evaluated and not substantiated. Five chilled work environment allegations were received, one anonymously, concerning the environment within an onsite contractor (Day & Zimmerman). Three of the concerns were found to not be substantiated and, at the time this analysis was written, the other two are still under evaluation by the staff.

TVA’s Employee Concerns Program (ECP) received only 5 concerns for evaluation in 2018. This continues to be a low number compared to other sites and the NRC’s traffic. Overall, the ECP had 121 contacts in 2018; remaining the same as last year. Most of the activity involved rapid resolutions or referrals to other programs. According to discussions with TVA ECP personnel, the program saw discipline trends in Maintenance, Radiation Protection, and Modifications. These are the same as the trends the NRC observed in allegations. The licensee has not seen any changes in trends in the ECP concerns received. The licensee is continuing to increasing communications and pulsing of employees.

Summary: A review of the number and nature of the allegations associated with the Watts Bar site in CY 2018 indicates that while Watts Bar has been able to make improvements in the Operations department, the addition of a chilled work environment in RP is an indication that Watts Bar is not adequately monitoring, acknowledging, or acting upon department-specific changes in SCWE. Therefore, the NRC has determined that a cross-cutting issue (CCI) exists in the SCWE area for Watts Bar because the NRC has documented four consecutive occurrences of this cross-cutting theme. The SCWE CCI may be closed if the NRC has confidence in the licensee's scope of efforts or progress in addressing the CCI. Given that the CCI is opened because of the CEL, the actions necessary to close the CEL and CCI are the same. NRC continues to monitor the SCWE at Watts Bar.

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▪ **Review of NRC Documents**

I. Allegation Trends

1. Volume

- 30 received from onsite sources in CY 2018, vs. 11 in CY 2017; 30 in CY 2016
- 60 concerns in CY 2018
- CY trend: overall steady with a spike in Q2 [Q1-(7), Q2-(11), Q3-(7), Q4-(5)]
- 5-year trend: cyclical – [12 – 21 – 30 – 11 - 30]

2. Allegation Receipt Characteristics

- Onsite source breakdown – 23 license employees (22 current, 1 former); 5 contractors (4 current, 1 former); 2 anonymous allegers
- Trends in the Radiation Protection including CWE, discrimination and wrongdoing concerns associated with the department

3. Discrimination allegation trend

- 13 discrimination concerns were received by NRC in 2018 – 2 were investigated and unsubstantiated; 4 are still open and in the investigation process; 4 did not make a prima facie showing; 2 were resolved in the ADR process; and one was withdrawn by the allegor
  - Rate: 3 received in each of the first 3 quarters; 1 in Q4
- 4 discrimination concerns were received by NRC in 2017 – 3 are still open and in the ADR process; 1 did not make a prima facie showing
  - Rate: all received in Jun/July timeframe as Unit 2 was coming out of forced outage, only 1 appears to be related to the outage
- 9 discrimination concerns were received by the NRC in CY 2016 – 1 was inspected, but not substantiated; 2 were settled in Early ADR; 4 did not make a prima facie showing; 2 were 3<sup>rd</sup> party
- 7 discrimination concerns were received by NRC in 2015 – 1 was inspected, but not substantiated; 1 was settled in Early ADR; 2 did not make a prima facie showing; 3 were withdrawn by the allegor
- 5 were received in CY 2014 – 3 did not make a prima facie showing; 1 was inspected, but not substantiated; 1 was settled in Early ADR

4. Chilled work environment/chilling effect allegations

- 14 allegation concerns were received in CY 2018 asserting a chilled work environment or chilling effect

- Rate: decreasing trend Q1 (5), Q2 (4), Q3 (3), Q4 (2)
  - RP (5) – evaluated and substantiated
  - Day & Zimmerman - some evaluated and not substantiated (2 still under evaluation)
  - Ops and Maintenance – evaluated and not substantiated
- 2 received anonymously

II. February 28, 2018 Annual Assessment Letter (ML 18059A150)

- Unit 1: Licensee Response Column
- Unit 2: Regulatory Response Column - cross-cutting issue (CCI) considered in the SCWE area for Watts Bar because the mid-cycle letter documented the fourth consecutive occurrence of this cross-cutting theme, but because NRC inspection (Jan 2018 – see below) and independent SC assessment showed improvement we held off. 95001 Inspection related to Unplanned Scrams PI

III. Chilling Effect Letter Follow-up Actions

- Jan 2018 inspection: Reviewed the following:
  - i. Monthly Pulse Surveys
  - ii. Snap shot self-assessment of CAP (Aug 2017)
  - iii. SC Monitoring Panel participation expanded
  - iv. Conduct RCA of weakness in Adverse Action Process
  - v. Organizational Stress Indicator
  - vi. Quarterly audits of ERB
- 2017 SC Assessment (Jul 31 – Sept 11)
  - i. Done by Oak Ridge Associated Universities (ORAU)

(b)(5)



(b)(5)

- Semi-annual Seminar for Sr. Leadership
- Revise SC Oversight guidance
- SCWE Refresher Training (Aug 2017)
  - i. Pillsbury gave training to Mgrs Nov 2017

(b)(5)

- IV. June 2018 follow-up SCWE and CEL/Confirmatory Order (CO) team inspection
  - August 17, 2018 IR, "Follow-up for NRC Confirmatory Order EA-17-022 and Chilled Work Environment Letter EA-16-061" (ML18229A153) determined CWE existed in RP. "...suggest continued challenges to Watts Bar's ability to proactively detect and prevent chilled work environments."
  - 92 percent of RP department interviewed (individual)
- V. Assessment Follow-up Letter; August 31, 2018 (ML18242A458).
  - "...closure of the CEL is contingent upon an NRC determination that Watts Bar has made reasonable progress toward addressing the underlying issues that led to the issuance of the CEL.
  - "...the NRC has determined that a CCI exists in the SCWE area for Watts Bar because this is the fourth consecutive occurrence of this cross-cutting theme."
  - "...Given the CCI is opened because of the CEL, the actions necessary to close the CEL and CCI are the same."
    - i. Demonstration of improvement in SCWE
    - ii. Demonstration of identifying the causes of the weaknesses in the stations ability to detect declining trends in safety culture and SCWE..."
    - iii. Development of CAs to address weaknesses identified above
- VI. Confirmatory Order Issued – July 27, 2017 (ML17208A596)
  - Related to apparent violation of previously issued 2009 CO
  - CO Follow-up Actions: – to be reviewed during Jan 2018 inspection?
    - i. Processes/Policies:
      1. Audit (quarterly) Adverse Action/ERB (9/30/17 and ongoing)
      2. (b)(5)

(b)(5) Meaning, I assume, the ECP is expected to inform the disciplining manager whether or not the employee brought concerns to them. That is not how most ERBs I've studied work and is likely to be seen as an ID release – a breach of trust between the ECP and the CI – and has a real potential to chill the workforce.

- b. Voting Members – it also appears the ECP representative is a voting member of the ERB (see pg. 10). Again, if the ECP votes to allow the discipline and signs the ERB Adverse Action Review Form (see Attachment 6), they've compromised their role as an independent reporting avenue. What if the employee brings the ECP a discrimination concern after the ERB blesses the adverse action? They are compromised. What I'm used to seeing is an ERB that engages ECP (without the disciplining manager's knowledge) to ascertain if the employee engaged in protected activity by bringing concerns to them. Recognizing that, although they ask the Line Manager if they are aware of protected activity, the manager may not know about the ECP visit. The ECP never signs or votes, so as not to compromise their independence.

- c. (b)(5)

(b)(5) So, someone should review this form and inform the ERB members (but not the Line Manager) of the additional protected activity.

- d. It is not clear to me who is the approving authority. I would think the ERB Chair. But they talk about the members of the ERB voting and differing views. Why vote? Is it majority rule? I'd make it clearer in the procedure that the Chair is the approving authority regardless of the vote.
  - e. Lastly, their definition of SC is out of date. The NRC and industry agreed to use the following vs. the INSAG definition: The NRC defines nuclear safety culture as the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment.
- 3. Modify pulsing survey process (10/27/17)
  - 4. Revise SC/SCWE policies/procedures (10/31/17)
- ii. Training:
    - 1. Inform 1<sup>st</sup> line supervisors and above about employee protection regulations (10/27/17);
    - 2. NSCMP training (10/27/17)
  - iii. Communications:
    - 1. CNO video watched by all (10/27/17);
    - 2. Site VPs conduct all-hands meetings (10/27/17);
    - 3. Re: ECP exit interview rights (10/27/17)
  - iv. Other:
    - 1. Assess past compliance with COs (10/31/17)
    - 2. Performance appraisals for VP/Plant Mgr (10/31/18)

## VII. NRC Integrated Inspection Report

- July 1 – Sept 30
- Reviewed CRs associated with operator performance (“lack of formality, rigor, discipline”)
- HIT (High Intensity Training program) – NRC found effective and expected to address deficiencies
- SCWE: interviewed 22 (engineering, licensing, ops) no reluctance to report safety concerns; mgmt. emphasizes need for employees to report concerns; CAP/ECP readily accessible

VIII. PI&R Sept 2016 – Feb 2017 Part 1 & 2

- **BACKGROUND:**  
**Part 1** (Sept 2016) and SCWE Issue of Concern Follow-up (NRC IR 05000390/2016007 and 05000391/2016007; ML16300A409
  - i. 17 Focus Groups; 22 interviews; 136 employees total
  - ii. Improvement in the primary work environment conditions in Operations
  - iii. Team found broader, previously unrecognized challenges to the maintenance of a positive safety culture which continue to challenge the site’s SCWE. “The team identified substantial weaknesses in various attributes of a SCWE, which were found to be pervasive across various work units.”
  - iv. “...although most employees in the assessment indicated that they were personally willing to raise nuclear safety concerns, nearly half believed retaliation was a potential outcome for raising concerns. In addition, most employees did not believe that concerns were promptly reviewed or appropriately resolved, either by their management or via the Corrective Action Program.”
  - v. NRC concluded the licensee is “not meeting the Commission’s expectation that licensees establish and maintain a positive safety culture and safety conscious work environment as described in the Safety Culture and SCWE Policy Statements (76 FR 34773, June 14, 2011; 61 FR 24336, May 14, 1996)”

**Part 2** (Nov 2016 – Feb 2017) and SCWE Issue of Concern Follow-up (NRC IR 05000390/2016013 and 05000391/2016013; ML17069A133

- vi. The team conducted interviews and focus groups with 28 staff, primarily at the first line supervisor level or above. During Part 1 of the PI&R inspection, non-supervisory employees felt that their supervisors were most at risk for being retaliated against for raising concerns. However, all supervisory staff interviewed during Part 2 of the inspection indicated that they were willing to raise nuclear safety concerns and felt free to raise concerns to their direct supervisors without fear of retaliation.
- vii. Many supervisory staff acknowledged that there had been challenges to the safety conscious work environment in their departments in the 2016, but that actions taken following the CEL have resulted in improvements. Supervisory and non-supervisory staff expressed a “wait and see” attitude with regard to the sustainability of positive changes.
- viii. With the exception of the Operations department, many of the other department-specific actions being taken to improve the safety culture and SCWE were not being tracked within the scope of WBN’s chilled work environment improvement plan.
- ix. The conditions that prompted the issuance of CEL were confirmed to extend beyond the Operations department, and the NRC staff reported that the corrective

actions to address the CEL should appropriately be extended site-wide and in a tracked and auditable fashion.

- x. **Nuclear Safety Culture Assessment and Monitoring –**
  - 1. Inspectors noted a lack of clear, objective or independent criteria for evaluating when nuclear safety culture standards are met.
  - 2. The October 2016 meeting of the NSCMP resulted in six traits being rated as improvement opportunities, and four traits were rated as acceptable.
  - 3. The overall effectiveness measure for CAPR closure in the Chilled Work Environment RCA (CR 1155393) has multiple potential weaknesses that could challenge the integrity of the effectiveness review.
  - 4. Lack of training for people who are responsible for providing inputs to the nuclear safety culture monitoring process, or people who are analyzing and making assessments based on these inputs,
- xi. **Employee Concerns Program –** The inspection team also reviewed elements of the Employee Concerns Program as part of the PI&R inspection. The inspectors found that, within the ECP files, it was difficult to track what corrective actions the site has taken as a result of ECP recommendations. In some cases when CRs were developed to address ECP recommendations, some of the corrective actions were later changed or cancelled. The lack of documentation and follow-through to ensure that actions are taken as a result of ECP substantiated concerns is likely continuing to challenge the perceived effectiveness of ECP, particularly in cases where employees who raise concerns are not getting feedback regarding how their concerns were addressed.

#### IX. Plant Activities/Events

- Fall 2018 –Refueling outage (800+contractors)

#### X. Licensee SCWE Maintenance Activities

- Discussion with:
  - i. (b)(7)(C)
  - ii.
  - iii. From NRC: Melanie Checkle (RII), Sandra Mendez (RII), Lisa Jarriel (HQ)
- Mentioned Steptoe and Johnson lawyers investigation (July – Nov 2018) into harassing behaviors by RP employees and supervisors
  - i. Concluded 2 CIs and 1 supervisor creating hostile work environment
- ECP Trends:
  - i. 5 Concerns to ECP requiring full investigation; steady trend (6 in 2017)
    - 1. (b)(7)(C)
    - 2.
    - 3.
    - 4.
  - ii. 65 Total ECP Intakes (concerns, referrals, rapid resolutions); plus 56 contacts decreasing trend (2017 = 84 intakes and 40 contacts). Changed definition of RR and Contacts to have more in the Contacts area. No feedback from employees on this change because it is not seen by employees, only ECP.

1. Concerns = (formal investigation) Intake related to nuclear safety or quality, HIRD associated with a protected activity
  2. Referrals = Issue raised to ECP to be handled by another organization other than ECP, such as HR
  3. Rapid resolutions = communication related issues such as cursing; Issue that can be resolved by ECP with minimal effort. These may or may not require investigation
  4. Contacts = little or no ECP involvement (e.g., venting); Any communication with ECP not meeting the definition of those above requiring no further ECP action, but documented to reflect the activity/communication.
- iii. Intake rate bumps in 1<sup>st</sup> and 3<sup>rd</sup> quarter due to outages, (22, 11, 18, 14)
  - iv. Anonymous rate declined – 9% in 2018 from 14% in 2017. Also less anonymous CRs written in 2018
  - v. Discipline trends –RP; Modifications (D&Z)
    1. Modification traffic associated with discrimination due to RIF. Not Substantiated.
    2. No trends in issues, except RP – 12 concerns from RP.
    3. Addressed traffic with continued communications
- Stressors include the quantity of work and survey fatigue. Receiving less comments on surveys. Hoping that new electronic surveys will help survey fatigue.
  - Management Changes
    - i. (b)(7)(C)
    - ii.

## Watts Bar Safety Culture Focus Group Notes

Group Name: (b)(7)(C)

Date & Time:

Facilitator: S. Morrow

Note Taker: S. Smith

Number of Participants: 4

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### Overall Impressions of Safety Culture

- Safety Culture is fine with more of an emphasis on safety culture over the last year
- Start meetings discussing safety topics
- One individual stated that if he brings up a safety concern it will get addressed while he acknowledged that others don't necessarily feel the same way
- In regards to a Chilled Work Environment, there doesn't appear to be a problem saying anything.
- When asked how managers respond when an individual raises a safety concern, the group said that now they are more willing to help than in the past.
- When asked in the past year how does management respond, the employees responded that the topic comes up more.
- When asked if they were confident concerns will be addressed the interviewees stated that they were confident that all safety related issues would be addressed; but issues related to hiring or more qualifications – not necessarily so.
- The group feels comfortable raising nuclear safety concerns but acknowledges that they will not always get what they necessarily want
- When asked if management has done better communicating issues, the interviewees stated that they felt they are doing better. The example provided was related to the over-speeding of the diesel and why actions were taken against the employees.
- The interviewees stated that they are concerned with management being able to sustain the changes since based on past performance they do not do so well.

### Environment for Raising Concerns

- Trust is a problem at the site. Managers will tell you one thing then do another
- Trust between first line supervisors is good.
- Generally, there is trust with some managers and not with others
- Trust with upper levels of management – they do not address concerns
- In regards to First Line Supervisors, if they take an issue to these individuals, they will do whatever they can to fix the concern – but it is not always like that. For example if procedures needed to be fixed they would do what they can.
- (b)(7)(C) tries to get things done.
- Example 1 - Confidential

(b)(7)(C)

(b)(7)(C)

- **Example 2 - Confidential**

(b)(7)(C)

- **Example 3 - Confidential**

(b)(7)(C)

### **Avenues for Raising Concerns**

- When asked if others feel hesitant, the group stated that they felt 90% plus are very outspoken. So they don't think anyone is hesitant.
- In regards to ECP, the interviewees stated that they have talked to her and know her face. They didn't know that she was independent of management.
- They stated that they were aware of individuals talking to ECP.
- They also stated that they guess that they could go to ECP but that they didn't really have a problem bringing issues up

### **Current Work Environment**

- The group did acknowledge that there were some practices that management still does that causes concern for the group. The practice of job shopping.

- **Confidential**

(b)(7)(C)

- Employees still see work being shopped around
- According to the staff, the (b)(7)(C) used this as an example of how "we found the right way and we got it done." But the (b)(7)(C) didn't know the whole story.
- In the plant, they will try to work around safety issues – Past plant motto was "if you can't do it right, do it at night"

- In their shop, they were short on supervisors – this wasn't necessarily an issue. People feel comfortable telling people about issues. They had an issue and the job steward and the manager were on top of it.
- One of the interviewees asked a question related to the fatigue rule. Wanted to know way it was initiated. He asked because TVA is reducing the work force but work still needs to get done.
- The interviewees all agreed that staffing is an issue. They have been trying to hire people for four years now.
- They are not currently at minimum staffing but they are low and not where they should be.
- One example of how things have improved, management lets the craft deal with minor issues on their own.
- The interviewees did state that they felt that confidential issues that were brought up in the past got around the site before an individual had even left the office. They also stated that a few years ago things were not confidential but things seem better.
- There were concerns that the environment would roll back to the past once NRC oversight is gone.
- The interviewees definitely have seen better communication and respect among employees and provided the last outage as an example.

## Watts Bar Safety Culture Focus Group Notes

Group Name: (b)(7)(C)

Date & Time: (b)(7)(C)

Facilitator: T. Nazario

Note Taker: S. Smith

Number of Participants: 2

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### Overall Impressions of Safety Culture

- In regards to CWE, the environment is better, trending up
- The individuals that were the cause have suffered the least consequence
- At the same time if you are being watched you want to be on better behavior
- In general people are comfortable bringing up safety concerns although the site sometimes messes up safety culture with industrial safety
- In regards to whether the actions to date are sustainable, the individuals responded that felt they were with the people they have now, but also acknowledged that the people that caused the problem are still with TVA – in fact they were promoted
- There was a an obvious change in the how staff view safety over production for the last few outages
- While they felt things were slow with how issues were addressed during the outage, they noticed that they even slowed down in an effort to ensure that all the “whys” were addressed.
- Now, they don't feel that if they brought something up it would impact their jobs - this was different in the past
- Trust has improved between the (b)(7)(C) and (b)(7)(C) (b)(7)(C), however there is still a disconnect between what management thinks is going on and what is actually taking place due to things related to the CEL and OIG Findings

### Environment for Raising Concerns

- When asked if management change here at the site has helped, participants responded that it's hard to tell (b)(7)(C) (b)(7)(C)
- Different managers were there when the CEL letter from the NRC was sent out, things are currently different
- Only had (b)(7)(C) – feel like he is listening but one of the interviewees didn't necessarily have a problem with the (b)(7)(C) either
- During the OIG Interviews (b)(7)(C) sought union representation and have not caught any flack
- There are rumors that (b)(7)(C) at Sequoyah did receive some negative feedback that the (b)(7)(C) at the time, told (b)(7)(C) that if they went to the arbitration meeting it could be career limiting. This occurred in September of 2017.

- Coming up in March, (b)(7)(C) are concerned that something will come out of the fact that they went to arbitration and that the (b)(7)(C). This definitely has an impact on how they view things.

### Avenues for Raising Concerns

- In regards to CAP there is a very different view between work management and deficiencies. CAP gets a bad rap due to work management issues not related to the CAP function since CAP is used for everything
- CAP should only be used for CAQs
- While they are not directly involved in CAP, they hear about legacy issues. For example the butterfly valve leakage issue. Turns out the problem was with how the test was performed. The CR didn't fix the real problem.
- There is a lot of cross-over between CAP/Work Management/Non-CAP
- One individual has no confidence in ECP, would not use because issues get out. Have examples but would not provide. The other individual is undecided on whether to use it or not
- Both individuals do feel that management supports ECP and that the individual running the program is friendly.
- The pulse surveys are telling and it is hard to be honest on pulse surveys due to long term memory and how management moves around. (b)(7)(C) feel similar.
- Don't necessarily feel the surveys are useful, it depends on the crew and the time when they are conducted and feel that they are ineffective based on the results and the way the questions are worded
- (b)(7)(C) don't hear about the survey results and how issues are being handled. Would like to get more communication back from those
- One complaint is that they never hear when someone was sent home but that hasn't happened in a while since they are now getting a lot of help

### Current Work Environment

- Handling mistakes better than they were
- They are a long way from where they were - in a positive direction
- Truly believe that (b)(7)(C) is sincere
- Bringing up issues is much better than they were
- Don't anticipate any negative effects for bringing up issues
- Communication is better
- However, trust is suffering because of the promotion(s) of the individuals who caused the problems
- Individuals are also concerned those individuals, the ones that caused the problem, could have an impact in the future
- Past treatment is still in everyone's mind and the way things have been demonstrated makes them feel that things will continue to get better unless you are one of the individuals under the looking glass

- In the past, the (b)(7)(C) didn't last long. The last (b)(7)(C) (b)(7)(C) were completely stressed out due to what was going on above them
- At the time of the chilled work environment, (b)(7)(C) were so beat down that (b)(7)(C) felt like they had to step up in order to get things fixed. Now, the (b)(7)(C) feel they can speak up but still have an unresolved trust issue
- In general SCWE is good. The underlying problem is with trust and moral and management has a long
- Trust is still an issue even in communications. Specifically, communications go out to the site but they feel communications is different for (b)(7)(C) This is not necessarily positive.
- Felt like communications were a band aid – comes back to trust – still don't necessarily believe that there is a sense of sincerity as a department.
- Although, trust compared to 2 years ago has improved tremendously
- They are starting to feel as though they are being treated as a human as opposed to a number. Felt like the new management wanted to get to know them as a human – this was especially experienced with (b)(7)(C)
- At (b)(7)(C) level they feel similar sense of trust with (b)(7)(C) but not above that level of management
- Individuals feel that if they stay on the same track it will continue to get better and don't see the pressure that they were once under
- Good Managers – (b)(7)(C) were doing a good job but left due to actions from past management
- Even (b)(7)(C) have a different demeanor compared to the pressure they were once under
- (b)(7)(C) really look at how management reacts to issues that they bring up and use this in determining how effective their communication is
- Biggest challenge today is short staff. Can't use leave and now they have to go to supervisor classes which further complicates staffing. It's hard not to make a mistake when you are overworked.
- (b)(7)(C) are definitely afraid things will go back to the old way
- They were upset when the root causes came out and they said that the fault was with (b)(7)(C) trying to lift the standards on the (b)(7)(C) They still have a hard time with that and don't put a whole lot into what they say
- One example that was provided as poor communication was the issue with (b)(7)(C) (b)(7)(C) (b)(7)(C) There was no communication on what happened and no one has heard anything. Not to have any communication about what happened is lacking – this is an issue above their director level

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**From:** Munday, Joel  
**Sent:** Saturday, February 03, 2018 12:58 PM  
**To:** Haney, Catherine; Dudes, Laura  
**Cc:** Franke, Mark  
**Subject:** FW: Exit Notes Rev.2  
**Attachments:** WBN-CO-CEL\_DRAFT\_Rev2.docx

Very good exit notes Tomy. No issues identified except that staff does not trust ECP and still don't put a lot of stock in the CAP, except for nuclear safety issues. This is a quick read if you have time.

**From:** Masters, Anthony  
**Sent:** Friday, February 02, 2018 8:49 AM  
**To:** Nazario, Tomy <Tomy.Nazario@nrc.gov>  
**Cc:** Munday, Joel <Joel.Munday@nrc.gov>  
**Subject:** RE: Exit Notes Rev.2

Got it. Sounds good. My only feedback is on this, to allow decisions later if we feel we need to inspect all 6 of the remaining open items:

Additionally, we have inspected 23 out of 31 commitments from the CO and determined that no further inspection is required at this time. We have shared the status of the remaining 8; 2 of which do not require inspection but instead rely on actions by TVA or Region II. The remaining 6 open items **will may** be inspected at a later date (not ready to be inspected).

Thanks again!! I have been impressed with how you and the team prepared for and conducted this very unique inspection!!

**Anthony D. Masters, PE**  
Chief, Reactor Projects Branch 5  
Division Reactor Projects (DRP)  
U.S. Nuclear Regulatory Commission  
Region II - Atlanta  
(404) 997 - 4465 (office phone)  
(b)(7)(C) (cell phone)  
(404) 997 - 4905 (fax)  
[Anthony.Masters@nrc.gov](mailto:Anthony.Masters@nrc.gov)

**From:** Nazario, Tomy  
**Sent:** Friday, February 02, 2018 8:35 AM  
**To:** Masters, Anthony <[Anthony.Masters@nrc.gov](mailto:Anthony.Masters@nrc.gov)>  
**Cc:** Nadel, Jared <[Jared.Nadel@nrc.gov](mailto:Jared.Nadel@nrc.gov)>; Morrow, Stephanie <[Stephanie.Morrow@nrc.gov](mailto:Stephanie.Morrow@nrc.gov)>; Smith, Steven <[Steven.Smith@nrc.gov](mailto:Steven.Smith@nrc.gov)>; Heher, Patrick <[Patrick.Heher@nrc.gov](mailto:Patrick.Heher@nrc.gov)>; Staples, Necota <[Necota.Staples@nrc.gov](mailto:Necota.Staples@nrc.gov)>  
**Subject:** Exit Notes Rev.2

Tomy Nazario  
U.S. NRC  
(b)(7)(C)

# ~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

## WBN CO/CEL Inspection

### Exit Notes

February 2, 2018

Good morning. My name is Tomy Nazario, and I am the team lead for the Confirmatory Order and Chilling effect Letter follow-up inspection. Present Team...

First off we want to thank everyone who provided support over the last several weeks. Specifically, Kim Hulvey, Steve Bethay, Erin Henderson, and Jim Polickoski. As most of you in this room can appreciate, this inspection was very comprehensive given the review of hundreds of documents and interviews of over 90 individuals from different work groups. The fact that our inspection team was able to accomplish a significant amount of reviews and interviews, is a reflection of the support received by your organization both leading up to and during the inspection. The team reached the consensus that the manner in which the information was presented, organized, and prepared allowed the team to make significant progress over the last two weeks.

The purpose of the inspection was to follow-up on the CO (EA-17-022) and CEL. The results of which will be documented in IR2017009. We used inspection procedures:

- IP 92702, ADR Order follow-up
- IP 93100, SCWE Follow-up

During the course of the last two weeks supporting documents to verify that corrective actions had been fully implemented. These included:

- Corrective Action documents
- Your review of Historical Orders
- Root Causes
- Effectiveness Reviews
- Procedures
- Training Material,
- And many other documents that apply to both the CO and CEL

At this time we have reviewed all the actions stemming from the CEL (27 total) and have determined that no further inspection is required at this time; however, we have yet to review your final Chilled Work Environment Root Cause (CR 1155393).

Given the fact that 2017 NRC observations (as they pertain to the root cause) may not have been fully addressed, we are unable to complete our inspection of the root cause at this time. We also learned that the root cause may undergo another revision and a final effectiveness review will be performed in April 2018; therefore, it is prudent to inspect/review the root cause AFTER you have concluded your review and addressed any NRC prior observations (2017 PI&R IR). Our recommendation to Region II will be to consider reviewing the root cause after completion.

~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

## ~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

Additionally, we have inspected 23 out of 31 commitments from the CO and determined that no further inspection is required at this time. We have shared the status of the remaining 8; 2 of which do not require inspection but instead rely on actions by TVA or Region II. The remaining 6 open items will be inspected at a later date (not ready to be inspected).

We also interviewed 98 individuals through focus groups and one-on-one interviews. Stephanie Morrow will share with you several high level observations obtained from the interviews:

“The following observations reflect common themes from the interviews and focus groups in response to questions about changes in the work environment at Watts Bar, willingness to raise nuclear safety concerns, perceptions about various avenues for raising concerns, and management support for and responsiveness to raising concerns.

In general, individuals in the focus groups reported improvements in the work environment at Watts Bar. Examples of improvements included less pressure during outages, managers that were more willing to listen and support stopping when unsure, and better communication and respect among employees.

Individuals also reported feeling free to raise nuclear safety concerns without fear of retaliation. The majority of employees had confidence that if a nuclear safety concern was raised, it would get the attention it deserves.

However, most employees made a distinction between nuclear and non-nuclear safety concerns. Many employees felt that managers were not consistently supportive or responsive to non-nuclear concerns, such as those related to personal safety.

- There was a theme that the priority of fixing safety issues doesn't consider the worker
- Low confidence in CAP for resolving lower priority issues
- Frustration with writing CRs for repeat issues, and seeing issues closed to trend with no explanation of whether or how it was addressed
- Accountability not being applied equally or consistently for individual contributors and managers
- Lack of consistency in what people say and what they do, following through on commitments – walking the talk
- Lack of transparency and openness in communications

Generally, employees were aware of the ECP program, but individuals were either neutral based on lack of experience or held negative perceptions about lack of independence from line management, lack of confidentiality, and ineffectiveness in resolving issues.

It was clear from the focus groups that most individuals have seen improvements, but there were reservations about the sustainability of changes and recognition that more

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## ~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

improvements were needed to continue to build trust and ensure that changes are truly embedded in the culture."

We have shared detailed observations throughout the week with you and your team. All of which have been documented either in notes or CR's. As of this morning, we confirmed that our team's observations have been captured appropriately and CR's initiated, as applicable.

In summary, the team did not identify any findings. At this time, we have determined that TVA has satisfied most of the commitments in the CO (23/31) and all of the corrective actions in the CEL have been completed. As noted earlier, final inspection of CWEL RCA will be performed at a later time.

The NRC sent TVA a chilling effect letter in March of 2016 primarily because of evidence that operators did not feel free to raise nuclear safety concerns without fear of retaliation. Based on the current inspection we have determined that at this time the work environment supports operators to raise nuclear safety concerns without fear of retaliation and operators are willing to raise concerns.

In summary, while there may be evidence of progress as shared during the interviews it is important to note that there were also themes from the interviews throughout the site that suggest ongoing challenges to a healthy safety culture that could still regress back to a chilled work environment.

So while notable amount of progress has been made at the site, as noted by completion of corrective actions and input received from the interviews, we would caution TVA to claim early victory in the elimination of a chilled work environment (even as defined by the NRC).

Simply put, "do not take your foot off the pedal because you could potentially end in the same spot where you started." Because as stated during yesterday's debrief the environment remains fragile.

The reason for this statement is because of the observations Stephanie shared with you today and observations shared by the team throughout the week. These observations are specific to:

- ECP
- Problem Resolution for Issues Assigned Lower Priority and Repeated Identification
- Accountability
- Communication
- Transparency
- Follow Through
- Responsiveness to Non-Nuclear Safety Concerns
- Sustainability
- Trust

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~~**NRC SENSITIVE PRE-DECISIONAL INFORMATION**~~

We acknowledge that you are working on rebuilding trust and maintaining sustainability for the progress made to date; however, additional time may be needed to achieve high standards of a healthy nuclear safety culture.

As you continue to monitor and reassess these areas, we encourage that you continue to share any insights, progress, or changes to the NRC.

At this point, we have no further observations.

Everything we have shared with you is preliminary and is subject to NRC management review. Any future decisions and/or conclusions pertaining to the chilling effect letter and the CO will be made by Region II. We will provide this input to our management along with the observations shared today.

This concludes the exit.

Any comments/questions?

Thank you for your time.

~~**NRC SENSITIVE PRE DECISIONAL INFORMATION**~~

**From:** [Nadel, Jared](#) on behalf of [Henderson, Erin Kathleen](#)  
**To:** [Hardage, David](#); [Stephen, Tom](#); [Nadel, Jared](#); [Childs, Natasha](#); [Kirk, Matthew](#); [Ninh, Son \(Son.Ninh@nrc.gov\)](#); [Crespo, Manuel](#)  
**Subject:** FW: FW: NRC SRI briefing on ECP Changes  
**Sensitivity:** Private

---

FYI

-----Original Appointment-----

From: Henderson, Erin Kathleen [mailto:ekwest@tva.gov]  
Sent: Monday, May 13, 2019 8:18 AM  
To: Henderson, Erin Kathleen; Nadel, Jared  
Subject: [External\_Sender] FW: NRC SRI briefing on ECP Changes  
When: Monday, May 13, 2019 9:30 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).  
Where: Dial in 423-751-7777; PW (b)(7)(C)  
Sensitivity: Private

-----Original Appointment-----

From: Henderson, Erin Kathleen <ekwest@tva.gov <mailto:ekwest@tva.gov>>  
Sent: Monday, May 13, 2019 8:08 AM  
To: Henderson, Erin Kathleen; Paul, Jamie Lee; Johnson, Jonathan Thornton; Hulvey, Kimberly Dawn; Boerschig, Gregory A  
Subject: NRC SRI briefing on ECP Changes  
When: Monday, May 13, 2019 9:30 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).  
Where: Dial in 423-751-7777; PW (b)(7)(C)  
Sensitivity: Private

## **WB CO/SCWE Team Summary**

### Summary of Activities Conducted Onsite

As part of the team's review of the Confirmatory Order and the assessment of the Safety Conscious Work Environment (SCWE), inspectors utilized Inspection Procedure (IP) 92702, "Followup on Traditional Enforcement Actions including Violations, Deviations, Confirmatory Action Letters, Confirmatory Orders, and Alternative Dispute Resolution Confirmatory Orders," and IP 93100 – "Safety-Conscious Work Environment Issue of Concern." Specifically, the inspection team reviewed: historical Confirmatory Orders and associated corrective actions; recent PI&R SCWE observations; recent allegations; licensee SCWE-related policies, communications, and training materials; recent licensee safety culture and SCWE assessments; and the root-cause analysis for both the SCWE and Adverse Employee Action/Employee Review Board process. Inspectors also observed interactions between licensee supervisors and employees through various meetings and walk-downs, and conducted site-wide focus groups which consisted of roughly 10% of the workforce.

### Summary of Inspection Results

Results of the document review did not identify any issues of concern, however it was noted that the root cause analysis for the Chilling Effect (CE) was still under review and that the final effectiveness review had not been completed to date. That, in addition to the fact that observations made by the team that the 2017 NRC inspection of the CE root cause did not appear to be fully addressed, led the team to conclude that they were unable to complete inspection of the root cause at this time.

With respect to the SCWE Focus Groups, the team sought to assess: 1) the employees' willingness to raise concerns and whether management's behaviors encourage them to do so; 2) employee perception of the effectiveness of the corrective action program as the primary avenue to raise concerns; 3) the employee perception of the effectiveness of an alternative program if one exists, such as an ECP; and 4) the employee perception of the effectiveness of management actions to detect and prevent retaliation and chilling effects.

Several themes were identified as a result of the Focus Groups. Those themes can be categorized into two groups: 1) SCWE – Strengths, and 2) SCWE – Weaknesses/Areas for Improvement. Those results are listed below.

#### *SCWE – Strengths:*

- Employees are willing to raise nuclear safety concerns and management behaviors encourage the raising of nuclear safety concerns.
- Employees are willing to use CAP to raise issues and have confidence in CAP for high-priority issues.
- Employees recognize positive change in management behaviors, particularly from Outage Control Center (one source of the original chilling effect).

#### *SCWE – Weaknesses/Areas for Improvement:*

- Perception that non-nuclear safety concerns are not consistently addressed by management – this is a risk factor for decreased willingness to raise nuclear safety concerns, but the overall perception of improvements in the work environment are a positive indicator for SCWE.

- Less confidence in CAP for resolving lower priority issues, frustration with repeat issues and issues closed to trend – this is a risk factor for complacency, but no evidence of a decline in use of CAP.
- Employee perceptions of ECP are either neutral or negative based on legacy issues, stated preference to use line management or go directly to NRC or OIG – this is a weakness, but offset by availability of other avenues for raising concern.
- Still some reservations about sustainability of changes and that accountability for managers will be enforced.

With respect to the licensee's action to address the negative SCWE Trends or to an Event, the following was noted:

- The licensee has completed actions from TVA's April 2017 response to NRC's 2016 CEL and initial actions from CO EA-17-022 and actions show evidence of improvements in SCWE over past year.
- New procedures for Executive Review Board and Chilling Effect Mitigation Plans are expected to enhance management's ability to detect and prevent retaliation and chilling effects (required by CO EA-17-022).
- The licensee is continuing to take actions based on 2017 safety culture assessment results.
- The licensee has multiple parallel processes for detecting changes in SCWE. These include: nuclear safety culture monitoring panel; management compliments and concerns (2C's) meetings; ECP site wide pulsing surveys; and ECP pulsing implemented after a chilling effect mitigation plan.

#### Inspection Team Conclusions and Recommendations

The team noted that there was evidence of progress as shared with the inspectors during the focus group interviews; however there were also concerns throughout the site that suggest ongoing challenges to a healthy safety culture. Those concerns included sustainability for the progress made to date and the possibility for the environment to regress back to a chilled work environment, as defined by the NRC. As noted by the licensee, the "environment remains fragile."

The team also noted that while progress has been made to rebuild and maintain trust, additional time may be needed to achieve high standards of a healthy nuclear safety culture.

In conclusion, the team recommends that the SCWE continue to be monitored through the annual PI&R and supplemental inspections, as needed, and that the TVA CEL remain open until the final root cause analysis and effectiveness review have been completed and reviewed by the NRC.

## NRC observations during CWEL/CO inspection 1/22/18 - 2/2/18

- feedback from PM 2C's meeting was positive - people were willing to discuss positive items and issues of concern with the PM. There was good engagement.
- feedback from the inspection team is that they are overall pleased with the support they are receiving
- problem resolution in CAP needs improvement
- NSCMP - consider trigger values to ensure follow-up of outliers; actions to address trends
- NPG-SPP-22.300 could be enhanced. Specifically, Section 3.7 of the CAP guidance should be enhanced to specify that Section 3.2.8 of NPG-SPP-03.12 contains additional requirements for management and closure of Confirmatory Order actions. [CR 1382756]
- Virgilio report - not clear on what recommendations require action; one could infer possible deficiencies; report is not clear
- Could not determine if the observations of the March 2017 PI&R inspection report have been resolved. Will recommend to the Region that this be reviewed in a later inspection
- AEA audits could be improved by developing a standard "template" that provides a clear connection between the auditor's activities and the specific requirements of the Order. Findings and Recommendations should be more clearly delineated. [CR 1380707]
- positive improvement in recent ERB packages
- OSI does not appear to be an effective metric or effectively implemented
- SLT/AUO walkdown was positive. AUO was willing to discuss issues openly. Need to make sure we follow-up when workforce provides feedback to ensure trust.
- concerns expressed around sustainability of safety culture focus during outages; actions taken for U1R14 are not continuing so how will we not fall back into old routines? SRI made additional comments on this topic.
- Employee Concerns Program (ECP) Safety Conscious Work Environment (SCWE) pulsings use 'Sometimes' as a positive result with 'Always' and 'Often'. 'Sometimes' should not be used. This was also stated by the NRC in the March 2017 PI&R inspection report. [CR 1382810]
- Good participation in Focus Groups - about 10% of workforce interviewed; good representation of site
- feedback on SCWE training was positive and NRC stated that all CO requirements were captured.
- ORAU results - personal accountability and questioning attitude were highest scoring traits. The statements that fed these traits in the survey were "I" statements, which typically score higher.
- ORAU was short on department specific results; could have provided more department specific detail
- No comments on actions taken in response to the ORAU assessment
- NSCMP presentation dated November 2017 has some typographical errors
- CO binders were organized well; not only separated with an overview at beginning but also tabs and highlighted focus areas assisted in the inspection; the organization of the binders allowed the inspector to complete the inspection of past CO reviews for not only WBN, which was the plan, but also BFN and SQN.
- on CO related to WBN2 construction and the 50.9 posters - still required to comply and we are currently meeting the CO; CR action 533342-003 is more restrictive than the CO (place in highly trafficked areas)
- Consider an action in the SCWE mitigation plan and mitigation screening plan to evaluate if the individual being evaluated is an outlier either in a positive manner or negative manner in the number of CRs/PCRs/Safety issues identified, etc. and if so

could the fact that there is an AEA being taken against them create a perceived chilled work environment. [CR 1381117] Additionally, consider how verbal issues have been communicated by the individual; consider a more broad spirit of the process/ERB, rather than being too prescriptive - appeared to just be going through the checklist. Might consider a benchmark in this area. Look at potential global SCWE impact. Related comment and CR - Enhancement opportunity on how the action(s) of the individual that resulted in an executive review board could impact the safety conscious work environment of others in the group. [CR 1380749]

- RCA 1155393 (CWEL RCA) did not adequately evaluate ECP for determining the reasons behind a decline in SCWE. It determined that ECP was not culpable for the CWE. The data used for the evaluation was wrong - the timeframe used and the scope (used all sites, not just WBN).
- Focus Group feedback theme was that there is a lack of confidence and trust in ECP
- ECP self assessment and associated CAs did not adequately determine if it was a healthy program. Over-reliance on surveys to reach conclusion. Did not determine effectiveness of the program.
- RCA interim effectiveness reviews of RCA 1155393 have led to CRs and additional actions. These actions will need to be reviewed to close the review of the RCA, as they are tied to the CAPR since they are a result of the interim effectiveness reviews.



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

February 15, 2018

Joseph W. Shea, Vice President  
Nuclear Regulatory Affairs and Support Services  
Tennessee Valley Authority  
1101 Market Street, LP 4A  
Chattanooga, TN 37402-2801

**SUBJECT: PUBLIC MEETING SUMMARY – WATTS BAR NUCLEAR PLANT –  
DOCKET NOS. 50-390 AND 50-391**

Dear Mr. Shea:

This refers to the meeting conducted, at your request, at the NRC Region II office, Atlanta GA, on February 9, 2018, at 1:00 p.m. EDT. The meeting's purpose was to hold a discussion regarding the need for a clarification or modification request to be submitted by Tennessee Valley Authority (TVA) for the 2017 Confirmatory Order (ML17208A647). Specifically, TVA has identified areas where it seeks clarification of previously issued Confirmatory Orders in order to ensure compliance with the Orders and TVA intends to formally request modification to the Confirmatory Orders EA-17-022 and EA 09-009, 203. Enclosed are a list of attendees and the presentation handout.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, and Requests for Withholding."

Please contact me at (404) 997-4465 with any questions you may have regarding this letter.

Sincerely,

*/RA/*

Anthony D. Masters, Chief  
Reactor Projects Branch 5

Enclosures:

1. List of Attendees
2. Handout – NRC Public Meeting  
Regarding Confirmatory Order Modification

cc Distribution via ListServ

SUBJECT: PUBLIC MEETING SUMMARY – WATTS BAR NUCLEAR PLANT –  
DOCKET NOS. 50-390 AND 50-391 February 15, 2018

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NAME	SNinh	BBishop	AMasters		
DATE	2/15/2018	2/15/2018	2/15/2018		

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ATTENDANCE LIST

DATE: February 9, 2018

MEETING TITLE/PURPOSE: Tennessee Valley Authority (TVA) Requesting Public Meeting for Clarification or Possible Modification of the 2017 Confirmatory Order Requirements

LOCATION: Region II Office

Name	Organization
JOE SHEA	TVA
Erin Henderson	TVA
Steve Bethay	TVA
Kimberly Hulvey	TVA
JOE CALLE	TVA
<del>CHRISTOPHER CUNNINGHAM</del>	TVA
JAMES POLICCO SFI	TVA
Anthony Masters	NRC
Sarah Price	NRC
Joel Munday	NRC
Cathy Hawley	NRC
Jamin Seat	NRC

ATTENDANCE LIST

DATE: February 9, 2018

MEETING TITLE/PURPOSE: Tennessee Valley Authority (TVA) Requesting Public Meeting for Clarification or Possible Modification of the 2017 Confirmatory Order Requirements

LOCATION: Region II Office

Name	Organization
Mark Kowal	NRC Region II
Melanie Checkle	NRC Region II
SON NINH	NRC REGION II
Laura Duets	NRC - Region II
MARK FRANKÉ	NRC - Region II
Paul DiGiouanna	TVA

ATTENDANCE LIST

DATE: February 9, 2018

MEETING TITLE/PURPOSE: Tennessee Valley Authority (TVA) Requesting Public Meeting for Clarification or Possible Modification of the 2017 Confirmatory Order Requirements

LOCATION: Region II Office

Name	Organization
SCOTT SPARKS	NRC
Lisamarie L. Jarriel	NRC, HQ
Jared Nadel	NRC
Stephanie Morrow	NRC
Brad Bishop	NRC
Sandra-Mendez	NRC



# TVA Presentation

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NRC Public Meeting regarding  
Confirmatory Order Modification  
February 9, 2018

# Purpose

- TVA has identified areas where it seeks clarification of previously issued Confirmatory Orders in order to ensure compliance with the Orders
- TVA intends to formally request modifications to Confirmatory Orders EA-17-022 and EA 09-009, 203.

# EA-17-022 Current Status

- In June 2017, TVA utilized ADR to address apparent violations documented in the Watts Bar PI&R Report (March 2017).
- TVA committed to actions in the following areas:
  - Communications
  - Training
  - Work Processes
  - Independent Oversight
  - Assessing and Monitoring Nuclear Safety Culture and Safety Conscious Work Environment
- Of the 31 individual actions, the NRC recently inspected 23 actions.

# Order EA-17-022; V.1.c.5

- **Current Confirmatory Order Requirement:**

Within six months following issuance of the CO, TVA shall revise Nuclear Safety Culture Monitoring guidance to incorporate a requirement for the Senior Leadership Team to conduct a review of Adverse Employment Actions to identify potential trends that could impact an organization's nuclear safety culture.

- **Proposed Confirmatory Order Requirement:**

Within six months following issuance of the CO, TVA shall revise Nuclear Safety Culture Monitoring guidance to incorporate a requirement for the Senior Leadership Team to conduct a review of Adverse Employment Actions described in V.1.c.1) to identify potential trends that could impact an organization's nuclear safety culture.

# Basis for Modification

- TVA proposes the modification because:
  - The modified requirements ensure consistency with Section V.1.c.1 of EA-17-022 where adverse actions that require an executive review board are defined.
  - This change is consistent with TVA's perspective of the required intent during ADR.

# Order EA-17-022; V.1.d.1

- **Current Confirmatory Order Requirement:**  
The audit shall include reviewing all adverse employment actions periodically attending ERBs, reviewing chilling effect mitigation plans, and providing recommendations as appropriate.
- **Proposed Confirmatory Order Requirement:**  
The audit shall include reviewing all adverse employment actions described in V.1.c.1, periodically attending ERBs, reviewing chilling effect mitigation plans, and providing recommendations as appropriate.

# Basis for Modification

- TVA proposes the modification because:
  - The modified requirements ensure consistency with Section V.1.c.1 of EA-17-022 where adverse actions that require an executive review board are defined.
  - This change is consistent with TVA's perspective of the required intent during ADR.

# Order EA-09-009, 203; V.1

- **Current Confirmatory Order Requirement:**  
By no later than ninety (90) calendar days after the issuance of this Confirmatory Order, TVA shall implement a process to review proposed licensee adverse employment actions at TVA's nuclear plant sites before actions are taken to determine whether the proposed action comports with employee protection regulations, and whether the proposed actions could negatively impact the SCWE. Such a process should consider actions to mitigate a potential chilling effect if the employment action, despite its legitimacy, could be perceived as retaliatory by the workforce.

# Order EA-09-009, 203; V.1

- Proposed Confirmatory Order Requirement:  
By no later than ninety (90) calendar days after the issuance of this Confirmatory Order, TVA shall implement a process to review proposed licensee adverse employment actions to include suspensions (one or more days off without pay), terminations for cause, involuntary reduction in force, and no-fault terminations of employment at TVA's nuclear plant sites before actions are taken to determine whether the proposed action comports with employee protection regulations, and whether the proposed actions could negatively impact the SCWE. Such a process should consider actions to mitigate a potential chilling effect if the employment action, despite its legitimacy, could be perceived as retaliatory by the workforce.

# Order EA-09-009, 203; V.1

- **Current Confirmatory Order Requirement:**  
By no later than one hundred twenty (120) calendar days after the issuance of the confirmatory order, TVA shall implement a process to review proposed significant adverse employment actions by contractors performing services at TVA's nuclear plant sites before the actions are taken to determine whether the proposed action comports with employee protection regulations, and whether the proposed action could negatively impact the SCWE. Such a process will likewise consider actions to mitigate a potential chilling effect if the employment action, despite its legitimacy, could be perceived as retaliatory by the workforce.

# Order EA-09-009, 203; V.1

- Proposed Confirmatory Order Requirement:

By no later than one hundred twenty (120) calendar days after the issuance of the confirmatory order, TVA shall implement a process to review proposed significant adverse employment actions by contractors performing services at TVA's nuclear plant sites to include suspensions (one or more days off without pay) and terminations for cause before the actions are taken to determine whether the proposed action comports with employee protection regulations, and whether the proposed action could negatively impact the SCWE. Such a process will likewise consider actions to mitigate a potential chilling effect if the employment action, despite its legitimacy, could be perceived as retaliatory by the workforce. In the case of a suspension or termination of access authorization that may be associated with an adverse employment action, or where a contractor did not provide notification to TVA of a significant adverse employment action until after it had occurred, process review may occur after the adverse employment action has been taken.

# Order EA-17-022; V.1.c.1

- **Current Confirmatory Order Requirement:**  
By no later than six months after the issuance of the CO, TVA shall maintain a uniform process to ensure independent management review of all proposed adverse actions in accordance with the procedure. This process shall be executed by an ERB chaired by a TVA Vice President or above. The ERB shall, at a minimum, review proposed adverse employment actions to include suspensions (one or more days off without pay), terminations for cause, involuntary reduction in force, and no-fault terminations of employment.

# Order EA-17-022; V.1.c.1

- Proposed Confirmatory Order Requirement:

By no later than six months after the issuance of the CO, TVA shall maintain a uniform process to ensure independent management review of all proposed adverse actions in accordance with the procedure. This process shall be executed by an ERB chaired by a TVA Vice President or above. The ERB shall, at a minimum, review proposed adverse employment actions to include suspensions (one or more days off without pay), terminations for cause, involuntary reduction in force, and no-fault terminations of employment. In the case of a suspension or termination of access authorization that may be associated with an adverse employment action, or where a contractor did not provide notification to TVA of a significant adverse employment action until after it had occurred, process review may occur after the adverse employment action has been taken.

# Basis for Modifications

- TVA proposes the modifications to EA-09-009, 203 and EA-17-022 because:
  - The modified requirement provides consistency between EA-09-009 and EA-17-022.
  - The modified requirement provides clarification to ensure that TVA meets both the requirements of the Confirmatory Orders and Access Authorization requirements.

# Order EA-09-009, 203; V.9

- Current Confirmatory Order Requirement in EA-09-009, 203 Section V.9:

By no later than ninety (90) calendar days after the issuance of this Confirmatory Order, TVA shall revise its training program for new supervisors to incorporate a classroom discussion of the NRC's employee protection rule and the Company's policy on SCWE.

# Order EA-09-009,203; V.9

- Current Confirmatory Order Requirement in EA-17-022:
  - 2) The training [as described in V.1.b.1] will be provided within one year and on an annual basis thereafter, to, at a minimum, all working status nuclear business group *supervisory employees, contractor supervisory employees* involved in nuclear related work activities, human resource staff involved in the adverse employment action process, employee concerns program staff, contract technical stewards for nuclear related work activities, and the personnel in the TVA Office of General Counsel who are engaged in nuclear related work activities.
  - 3) *New supervisory employees* shall complete initial training through in-person or computer based training within three months of their hire or promotion effective date. The training shall require, at a minimum, a discussion of the training material with personnel in the TVA Office of General Counsel who are engaged in nuclear related work activities.

# Basis for Withdrawal

- TVA proposes the requirement in EA-09-009, 203 be withdrawn because:
  - The training requirements for supervisors in EA-17-022 are duplicative with EA-09-009, 203 and more comprehensive.

# Summary

- TVA has implemented the commitments in EA-17-022 per the required due dates. TVA has taken numerous corrective actions to ensure that actions are taken as necessary to mitigate the potential impacts an adverse employment action may have on organizational SCWE
- During implementation of the new requirements, TVA identified potential compliance issues requiring clarification to the requirements to ensure compliance. TVA intends to formally request modification to the Confirmatory Orders.

**From:** [Lopez-Santiago, Omar](#)  
**To:** [Nadel, Jared](#); [Ninh, Son](#)  
**Cc:** [Deschaine, Wesley](#)  
**Subject:** RE: TVA Fleet Update on ECP Program changes  
**Date:** Monday, May 13, 2019 11:22:05 AM

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Thanks!

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**From:** Nadel, Jared  
**Sent:** Monday, May 13, 2019 11:12 AM  
**To:** Lopez-Santiago, Omar <[Omar.Lopez-Santiago@nrc.gov](mailto:Omar.Lopez-Santiago@nrc.gov)>; Ninh, Son <[Son.Ninh@nrc.gov](mailto:Son.Ninh@nrc.gov)>  
**Cc:** Deschaine, Wesley <[Wesley.Deschaine@nrc.gov](mailto:Wesley.Deschaine@nrc.gov)>  
**Subject:** RE: TVA Fleet Update on ECP Program changes

They mentioned that some internal fleet level communications will be released starting tomorrow. I'll fwd those to the branch and Joey/Roger when we see them.

---

**From:** Lopez-Santiago, Omar  
**Sent:** Monday, May 13, 2019 10:41 AM  
**To:** Ninh, Son <[Son.Ninh@nrc.gov](mailto:Son.Ninh@nrc.gov)>  
**Cc:** Nadel, Jared <[Jared.Nadel@nrc.gov](mailto:Jared.Nadel@nrc.gov)>; Deschaine, Wesley <[Wesley.Deschaine@nrc.gov](mailto:Wesley.Deschaine@nrc.gov)>  
**Subject:** RE: TVA Fleet Update on ECP Program changes

I will inform Joey and Roger.

---

**From:** Ninh, Son  
**Sent:** Monday, May 13, 2019 10:17 AM  
**To:** Lopez-Santiago, Omar <[Omar.Lopez-Santiago@nrc.gov](mailto:Omar.Lopez-Santiago@nrc.gov)>  
**Cc:** Nadel, Jared <[Jared.Nadel@nrc.gov](mailto:Jared.Nadel@nrc.gov)>; Deschaine, Wesley <[Wesley.Deschaine@nrc.gov](mailto:Wesley.Deschaine@nrc.gov)>  
**Subject:** FW: TVA Fleet Update on ECP Program changes

Omar,

Based on the phone call this morning, It appears that TVA will keep it privately. TVA management will conduct the meeting with TVA employees to discuss it today or near future. Should we let RII Public Affairs know about it or aware of it? Just in case, if some TVA employees go to public or media that we have no control.... We don't want RII Public Affairs caught cold on this issue.

Son

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**From:** Lopez-Santiago, Omar  
**Sent:** Monday, May 13, 2019 8:22 AM  
**To:** Ninh, Son <[Son.Ninh@nrc.gov](mailto:Son.Ninh@nrc.gov)>; Nadel, Jared <[Jared.Nadel@nrc.gov](mailto:Jared.Nadel@nrc.gov)>  
**Subject:** RE: TVA Fleet Update on ECP Program changes

Good question – Jared please ask Boerschig.

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**From:** Ninh, Son  
**Sent:** Monday, May 13, 2019 8:17 AM  
**To:** Nadel, Jared <[Jared.Nadel@nrc.gov](mailto:Jared.Nadel@nrc.gov)>  
**Cc:** Lopez-Santiago, Omar <[Omar.Lopez-Santiago@nrc.gov](mailto:Omar.Lopez-Santiago@nrc.gov)>  
**Subject:** RE: TVA Fleet Update on ECP Program changes

Jared,

Does TVA plan to issue a press release on the fleet ECP change? Or do we expect to receive the heavy media on this announcement? Just in case public inquiry, we need to share the information with Joey and Roger, RII Public Affairs when it becomes available.

It is very unusual for the public that TVA changed the fleet ECP. We may consider an EDO daily note if heavy media interested

Son

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**From:** Nadel, Jared  
**Sent:** Monday, May 13, 2019 7:56 AM  
**To:** Stephen, Tom <[Thomas.Stephen@nrc.gov](mailto:Thomas.Stephen@nrc.gov)>; Hardage, David <[David.Hardage@nrc.gov](mailto:David.Hardage@nrc.gov)>  
**Cc:** Lopez-Santiago, Omar <[Omar.Lopez-Santiago@nrc.gov](mailto:Omar.Lopez-Santiago@nrc.gov)>; Ninh, Son <[Son.Ninh@nrc.gov](mailto:Son.Ninh@nrc.gov)>; Seat, Jamin <[Jamin.Seat@nrc.gov](mailto:Jamin.Seat@nrc.gov)>; Hamman, Jeffrey <[Jeffrey.Hamman@nrc.gov](mailto:Jeffrey.Hamman@nrc.gov)>; Crespo, Manuel <[Manuel.Crespo@nrc.gov](mailto:Manuel.Crespo@nrc.gov)>  
**Subject:** TVA Fleet Update on ECP Program changes

Gentlemen,

I got word from licensing this morning that Greg Boerschig wants to do a joint call with all three SRIs to discuss changes to the fleet ECP. I threw out 0930 this morning. We can discuss on the 0830 call, but if there is a better time for all, just let me know and I will adjust.

Respectfully,

Jared Nadel  
Senior Resident Inspector, Watts Bar  
(O) 404-997-5301

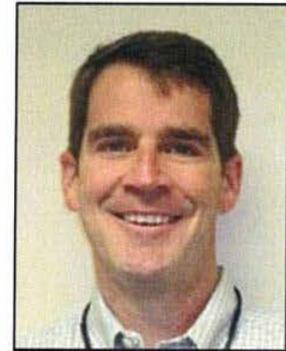
February 2, 2018

## MESSAGE FROM TOM MARSHALL: NRC Provides Initial NSC Inspection Feedback

As you are aware, the Nuclear Regulatory Commission has been onsite for two weeks talking to employees and inspecting our actions to improve our Nuclear Safety Culture and our Safety Conscious Work Environment.

Overall the NRC looked at 50 actions, including those addressing the 2017 Confirmatory Order, and did not find performance deficiencies. In the coming weeks, the NRC will provide us a formal inspection report.

However, I want to share some of the initial feedback we received from the NRC inspection team as they exited the site. These insights are based on an aggregate of what the NRC heard from those who participated in focus groups and interviews — individual responses were kept confidential. Thank you for your open, honest comments.



Most importantly, the NRC passed along your beliefs in two critical areas — that you feel free to raise nuclear safety concerns without fear of retaliation and that you have experienced improvements to our site culture/work environment. You also emphasized to the NRC that if you raise a nuclear safety concern, you are confident it will be addressed. This is similar to the ongoing feedback we have been hearing from you.

The NRC noted other improvements, namely the impact of the BEAR team, our outage work environment improving due to people staying in role and growing confidence in site leadership. I'm pleased to hear about those, as they represent specific actions we've taken. But, we all understand that the ability and willingness of employees to raise safety concerns is the absolute essential to a healthy Nuclear Safety Culture and Safety Conscious Work Environment. You raising concerns, being respectfully listened to, and then having those concerns resolved is the cornerstone of our Watts Bar work environment. Nothing is more important.

That said, the NRC shared your feedback on where we need to improve further — and we will. The NRC said that some people expressed that while nuclear safety concerns would get addressed, those individuals didn't share the same confidence that non-nuclear safety concerns would be resolved. The fact that we are not appropriately addressing some concerns bothers me personally.

Let me be clear — because I'm extremely passionate about this — if you raise any type of concern, we owe you the respect to listen to it and seek a resolution as quickly as possible. If you ever feel the task you are working on is unsafe — **STOP!** Talk to your supervisor, your department manager, me or Paul Simmons. I can guarantee that you will be supported and listened to, and that we will take immediate action to make conditions safe until we can identify/implement a permanent solution. We also know that we need to improve around communicating what we are doing with your concern. These are our site standards, because we care about every individual at Watts Bar.

There are three other gaps the NRC shared with us based on your comments, and I believe they are all related. First is sustainable trust in leadership. The second is improving our Employee Concerns Program, which comes down to you trusting the process is fully confidential and helps resolve issues. The third is ensuring we are addressing issues raised through anonymous CRs. Again, this is a trust issue. In work environments where there is strong trust, few anonymous CRs are written because people raise issues face-to-face through respectful conversations. However, it is your right to submit anonymous CRs and it is our responsibility to address them according to our processes. We are taking additional actions to ensure that's what we are doing in every case.

There is one common fix to all these gaps. Every leader at Watts Bar has to earn your trust each day, in every interaction. We don't always have to agree on every issue. We do have to listen to any concern you have, demonstrate our commitment to safety as our overriding priority and communicate the actions we are taking.

You'll hear more in the coming weeks and we'll continue to work hard to make improvements in our respectful work environment. For now, thank you and always work safely.

Tom

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**U.S.NRC**

UNITED STATES NUCLEAR REGULATORY COMMISSION

*Protecting People and the Environment*

# **Confirmatory Order and Chilling Effect Letter Follow-up Inspection**

Inspection Team: Tomy Nazario  
Stephanie Morrow, Steve Smith,  
Necota Staples, Patrick Heher

February 9, 2018

# Inspection Scope

- IP 92702, ADR Order follow-up (CAs, RCA)
- IP 93100, SCWE Follow-up (Interviews)
- Confirmatory Order (EA-17-022)
- Chilling Effect Letter (EA-16-022)



# Inspection Effort

- Completed inspection of 50 commitments and actions as they pertain to the CO/CEL
- Reviewed over 500 documents
- Interviewed close to 100 individuals (10% of workforce)
- Not only did the team accomplish the inspection scope established back in November of 2017 but team also inspected and completed additional items directly related to the CO/CEL
- Over 400 hours of inspection during the two weeks

# Inspection Status

- Confirmatory Order (EA-17-022):
  - Completed inspection of 23/31 commitments
  - Reviewed Adverse Action RCA
  - Historical CO's (WBN, BFN, SQN)
  - 8 open items (2 no inspection; 6 future inspection)
- Chilling Effect Letter (EA-16-022)
  - Completed inspection of 27/27 corrective actions
  - PI&R Part 2 (March 2017) identified several observations pertaining to CEL RCA; some were unresolved
  - Inspectors reviewed CWE RCA Rev. 0, 1, 2
  - “Final” RCA planned to be completed in the next months
  - “Final” effectiveness review scheduled for April 2018



# Inspection Status ...continued

- SCWE
  - Focus group and one-on-one interviews with 98 individuals (10% of workforce)
  - Interviews included multiple departments, including departments flagged as a result of allegations and by residents
  
- Other
  - Held discussions with site VP, site PM, and CNO
  - Observed ERB, management alignment meetings, POD, Compliments and Concerns meeting, MRC, and training
  - Allegation follow-up

# Inspection Summary

- No findings (observations and CR's)
- Progress made as evidenced by CA's and interviews
- Individuals willing to raise nuclear safety concerns
- Other perceptions from interviews:
  - Managers were not consistently supportive or responsive to non-nuclear concerns, such as those related to personal safety
  - Perceived accountability inconsistency
  - Lack of consistency in following through
  - Lack of transparency and openness in communications
  - Lack of independence by ECP
  - Reservations as to trust and sustainability

# Messaging to TVA

- Inspection completed for most of the commitments in the confirmatory order and corrective actions in the chilling effect letter
- Current work environment supports operators to raise nuclear safety concerns without fear of retaliation and operators are willing to raise concerns (CEL March 2016)
- Themes that suggest ongoing challenges to a healthy safety culture that could still regress back to a CWE
- Caution to claim early victory (“CWE eliminated”)
- Additional time may be needed to achieve a sustainable NSC/SCWE and fully rebuild trust



# Recommendations

- Recommend future inspection of 6 open CO commitments
- Recommend future inspection of CEL RCA (CR 1155393), once finalized
- Continue to monitor NSC and SCWE (“fragile”)



# Questions ?

# Timeline

(not all-inclusive)

- 2009, Dec CO EA-09-009; EA-09-203 (OI; 50.7 discrimination)
- Mid-2015 TVA introduced Accountability model (zero tolerance)
- 2015, Nov WBN Unit 1 RHR event
- 2016, March CEL EA-16-061
- 2016, Sept NRC PI&R Part 1
- 2017, March NRC PI&R Part 2 (AV of EA-09)
- 2017, April TVA 2nd response to NRC (Conger & Elsea report)
- 2017, July CO EA-17-022
- 2017, Sept ORAU NSC Survey
- 2017, Nov WBN Meeting on CWE
- 2017, Nov ORAU, NSC Survey Phase 2 (trends, themes)
- 2018, Feb CO/CEL NRC Follow-up Inspection

# ~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

## WBN CO/CEL Inspection

### Exit Notes

February 2, 2018

Good morning. My name is Tomy Nazario, and I am the team lead for the Confirmatory Order and Chilling effect Letter follow-up inspection. Present Team...

First off we want to thank everyone who provided support over the last several weeks. Specifically, Kim Hulvey, Steve Bethay, Erin Henderson, and Jim Polickoski. As most of you in this room can appreciate, this inspection was very comprehensive given the review of hundreds of documents and interviews of over 90 individuals from different work groups. The fact that our inspection team was able to accomplish a significant amount of reviews and interviews, is a reflection of the support received by your organization both leading up to and during the inspection. The team reached the consensus that the manner in which the information was presented, organized, and prepared allowed the team to make significant progress over the last two weeks.

The purpose of the inspection was to follow-up on the CO (EA-17-022) and CEL. The results of which will be documented in IR2017009. We used inspection procedures:

- IP 92702, ADR Order follow-up
- IP 93100, SCWE Follow-up

During the course of the last two weeks supporting documents to verify that corrective actions had been fully implemented. These included:

- Corrective Action documents
- Your review of Historical Orders
- Root Causes
- Effectiveness Reviews
- Procedures
- Training Material,
- And many other documents that apply to both the CO and CEL

At this time we have reviewed all the actions stemming from the CEL (27 total) and have determined that no further inspection is required at this time; however, during the course of the inspection the inspectors noted that at least one NRC observation from the March 2017 PI&R inspection was not fully addressed. The observation discusses the use of responses to pulsing surveys and how the "sometimes" response was included as a favorable response, which could potentially skew results. It is important to note that the NRC at the time reviewed Rev. 0 of RCA CR 1155393 which was the Chilled Work Environment Root Cause. Since March of 2017, there have been 2 additional revisions and 3 interim effectiveness reviews.

~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

## ~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

Given the fact that 2017 NRC observations (as they pertain to the root cause) may not have been fully addressed, we are unable to complete our inspection of the root cause at this time. We also learned that the root cause may undergo another revision and a final effectiveness review will be performed in April 2018; therefore, it is prudent to inspect/review the root cause AFTER you have concluded your review and addressed any NRC prior observations (2017 PI&R IR). Our recommendation to Region II will be to consider reviewing the root cause after completion.

Additionally, we have inspected 23 out of 31 commitments from the CO and determined that no further inspection is required at this time. We have shared the status of the remaining 8; 2 of which do not require inspection but instead rely on actions by TVA or Region II. The remaining 6 open items will be inspected at a later date (not ready to be inspected).

We also interviewed 98 individuals through focus groups and one-on-one interviews. Stephanie Morrow will share with you several high level observations obtained from the interviews:

“The following observations reflect common themes from the interviews and focus groups in response to questions about changes in the work environment at Watts Bar, willingness to raise nuclear safety concerns, perceptions about various avenues for raising concerns, and management support for and responsiveness to raising concerns.

In general, individuals in the focus groups reported improvements in the work environment at Watts Bar. Examples of improvements included less pressure during outages, managers that were more willing to listen and support stopping when unsure, and better communication and respect among employees.

Individuals also reported feeling free to raise nuclear safety concerns without fear of retaliation. The majority of employees had confidence that if a nuclear safety concern was raised, it would get the attention it deserves.

However, most employees made a distinction between nuclear and non-nuclear safety concerns. Many employees felt that managers were not consistently supportive or responsive to non-nuclear concerns, such as those related to personal safety.

- There was a theme that the priority of fixing safety issues doesn't consider the worker
- Low confidence in CAP for resolving lower priority issues
- Frustration with writing CRs for repeat issues, and seeing issues closed to trend with no explanation of whether or how it was addressed
- Accountability not being applied equally or consistently for individual contributors and managers
- Lack of consistency in what people say and what they do, following through on commitments – walking the talk
- Lack of transparency and openness in communications

## ~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

## ~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

Generally, employees were aware of the ECP program, but individuals were either neutral based on lack of experience or held negative perceptions about lack of independence from line management, lack of confidentiality, and ineffectiveness in resolving issues.

It was clear from the focus groups that most individuals have seen improvements, but there were reservations about the sustainability of changes and recognition that more improvements were needed to continue to build trust and ensure that changes are truly embedded in the culture.”

We have shared detailed observations throughout the week with you and your team. All of which have been documented either in notes or CR's. As of this morning, we confirmed that our team's observations have been captured appropriately and CR's initiated, as applicable.

In summary, the team did not identify any findings. At this time, we have determined that TVA has satisfied most of the commitments in the CO (23/31) and all of the corrective actions in the CEL. Review of the CWEL RCA may be performed at a later time.

While considerable amount of progress has been made at the site as noted by completion of corrective actions and input received from the interviews, we would caution TVA to claim early victory in the elimination of a chilled work environment (even as defined by the NRC).

Simply put, “do not take your foot off the pedal because you could potentially end in the same spot where you started.”

The reason for this statement is because of the observations Stephanie shared with you today and observations shared by the team throughout the week. These observations are specific to:

- ECP
- Problem Resolution for Issues Assigned Lower Priority and Repeated Identification
- Accountability
- Communication
- Transparency
- Follow Through
- Responsiveness to Non-Nuclear Safety Concerns
- Sustainability
- Trust

We acknowledge that you are working on rebuilding trust and maintaining sustainability for the progress made to date; however, additional time may be needed to achieve high standards of a healthy nuclear safety culture.

## ~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

~~**NRC SENSITIVE PRE-DECISIONAL INFORMATION**~~

As you continue to monitor and reassess these areas, we encourage that you continue to share any insights, progress, or changes to the NRC.

At this point, we have no further observations.

Everything we have shared with you is preliminary and is subject to NRC management review. Any future decisions and/or conclusions pertaining to the chilling effect letter and the CO will be made by Region II. We will provide this input to our management along with the observations shared today.

This concludes the exit.

Any comments/questions?

Thank you for your time.

~~**NRC SENSITIVE PRE-DECISIONAL INFORMATION**~~

## ~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

During the interviews, individuals communicated a clear understanding of avenues to report concerns. Some individuals expressed concerns of fear of retaliation by supervision for raising concerns; however, they indicated that they would use other avenues available to them including senior leadership. It is important to note (and as distinction) that we did not identify specific examples of retaliation for raising safety concerns related to protected activities.

Not fully eliminated the CWE

We understand that some of these changes/actions are ongoing; nonetheless and based on our assessment this week, we noted that specific work groups continue to experience work environment challenges that could contribute to an unhealthy SCWE including their ability to raise concerns to their direct supervisor which is considered the preferred path. As documented in your X reports and surveys, you have conducted a number of questionnaires and have documented some of the specific challenges and areas where SCWE is to be improved. Based on our interviews there continues to be a perception amongst several individuals (PERCENT %) that an environment exists that suppresses or discourages individuals from raising concerns to their leadership.

Additionally, some individuals perceived the CAP program as ineffective in that it could be challenging to keep up with CRs given the large volume of CR's in CAP. PERCENT of employees perceived ECP as not being independent from TVA senior management and in some cases would did not feel comfortable with communicating with ECP. While the majority of interviewees acknowledged overall NSC and SCWE improvements; several individuals noted a lack of transparency in accountability expectations for site leadership. Examples were also provided where

At this time, it is too early to determine whether actions have been effective given the large number of actions, investigations, and assessments taken recently. We did note that you have an adequate understanding of some of the trust issues in specific organizations and that "further action is required to increase the health of SCWE within [certain] groups."

Additionally, based on documents reviewed, we understand that actions taken such as organizational/ management changes, training, and periodic assessments are in place to "correct feelings of retaliation, confidentiality, and respect at all levels." The action plans developed to address new and ongoing hotspots appears to be a proactive way to address the hot spots before the overall culture declines.

As you continue to monitor and reassess these areas, we encourage that you continue to share any insights, progress, or changes to the NRC.

At this point, we have no further observations; however, as part of our upcoming PI&R/CAP inspection, we may take the opportunity to revisit the status of ongoing corrective actions and assessments that are scheduled to take place.

~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

We have already shared the details of our interview assessments with appropriate ECP personnel and what we can share is that there are areas that continue to face challenges and areas for improvement that you are cognizant of and are addressing.

~~Some individuals perceived CAPAL as not being user friendly and CAPALs assigned outside of the site (i.e. XYZ) receiving a different (less) level of rigor for closure.~~

At this time, it is too early to determine whether actions have been effective given the large number of actions, investigations, and assessments taken over the last several weeks. We did note that you have an adequate understanding of SCWE issues and challenges. We also noted proactive measures in place to address what you call “hot spots” before the overall culture declines.

As you continue to monitor and reassess these areas, we encourage that you continue to share any insights, progress, or changes to the NRC.

At this point, we have no further observations; however, as part of our upcoming PI&R inspection, we may take the opportunity to revisit the status of ongoing corrective actions and assessments that are scheduled to take place.

We would like to confirm that no proprietary/confidential information is in our possession and if it, please let us know and we will return it to you or shred it.

### **ECP Talking Points**

We reviewed several documents including XYZ ECP Investigation Reports, Corrective Action documents, and tools used to track “hot spots.” The reports reviewed demonstrated a thorough and objective investigation with results that clearly addressed the concerns. The summary documentation clearly described the investigation, scope, method and results.

During the interviews, individuals communicated a clear understanding of avenues to report concerns. Some individuals expressed concerns of fear of retaliation by supervision for raising concerns; however, they indicated that they would use other avenues available to them including senior leadership. It is important to note (and as distinction) that we did not identify specific examples of FEAR of retaliation for raising safety concerns related to protected activities.

## ~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

We understand that some of these changes/actions are ongoing; nonetheless and based on our assessment this week, we noted that specific work groups continue to experience work environment challenges that could contribute to an unhealthy SCWE including their ability to raise concerns to their supervisor which is considered the preferred path. As documented in your investigation reports, you have conducted a number of questionnaires and have documented some of the specific challenges and areas where SCWE is to be improved. Based on our interviews there continues to be a perception amongst several individuals that environment exists that suppresses or discourages individuals from raising concerns to their leadership.

Some individuals perceived CAPAL as not being user-friendly and CAPALs assigned outside of the site (i.e. XYZ) receiving a different (less) level of rigor for closure.

At this time, it is too early to determine whether actions have been effective given the large number of actions, investigations, and assessments taken recently. We did note that you have an adequate understanding of some of the trust issues in specific organizations and that “further action is required to increase the health of SCWE within [certain] groups.”

Additionally, based on documents reviewed, we understand that actions taken such as organizational/ management changes, training, and periodic assessments are in place to “correct feelings of retaliation, confidentiality, and respect at all levels.” The action plans developed to address new and ongoing hotspots appears to be a proactive way to address the hot spots before the overall culture declines.

As you continue to monitor and reassess these areas, we encourage that you continue to share any insights, progress, or changes to the NRC.

At this point, we have no further observations; however, as part of our upcoming PI&R/CAP inspection, we may take the opportunity to revisit the status of ongoing corrective actions and assessments that are scheduled to take place.

~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

# ~~NRC SENSITIVE PRE DECISIONAL INFORMATION~~

## WBN CO/CEL Inspection

### Exit Notes

February 2, 2018

Good morning. My name is Tomy Nazario, and I am the team lead for the Confirmatory Order and Chilling effect Letter follow-up inspection. Present Team...

First off we want to thank everyone who provided support over the last several weeks. Specifically, Kim Hulvey, Steve Bethay, Erin Henderson, and Jim Polickoski. As most of you in this room can appreciate, this inspection was very comprehensive given the review of hundreds of documents and interviews of over 90 individuals from different work groups. The fact that our inspection team was able to accomplish a significant amount of reviews and interviews, is a reflection of the support received by your organization both leading up to and during the inspection. The team reached the consensus that the manner in which the information was presented, organized, and prepared allowed the team to make significant progress over the last two weeks.

The purpose of the inspection was to follow-up on the CO (EA-17-022) and CEL. The results of which will be documented in IR2017009. We used inspection procedures:

- IP 92702, ADR Order follow-up
- IP 93100, SCWE Follow-up

During the course of the last two weeks supporting documents to verify that corrective actions had been fully implemented. These included:

- Corrective Action documents
- Your review of Historical Orders
- Root Causes
- Effectiveness Reviews
- Procedures
- Training Material,
- And many other documents that apply to both the CO and CEL

At this time we have reviewed all the actions stemming from the CEL (27 total) and have determined that no further inspection is required at this time; however, we have yet to review your final Chilled Work Environment Root Cause (CR 1155393).

Given the fact that 2017 NRC observations (as they pertain to the root cause) may not have been fully addressed, we are unable to complete our inspection of the root cause at this time. We also learned that the root cause may undergo another revision and a final effectiveness review will be performed in April 2018; therefore, it is prudent to inspect/review the root cause AFTER you have concluded your review and addressed any NRC prior observations (2017 PI&R IR). Our recommendation to Region II will be to consider reviewing the root cause after completion.

~~NRC SENSITIVE PRE DECISIONAL INFORMATION~~

## ~~NRC SENSITIVE PRE-DECISIONAL INFORMATION~~

Additionally, we have inspected 23 out of 31 commitments from the CO and determined that no further inspection is required at this time. We have shared the status of the remaining 8; 2 of which do not require inspection but instead rely on actions by TVA or Region II. The remaining 6 open items will be inspected at a later date (not ready to be inspected).

We also interviewed 98 individuals through focus groups and one-on-one interviews. Stephanie Morrow will share with you several high level observations obtained from the interviews:

“The following observations reflect common themes from the interviews and focus groups in response to questions about changes in the work environment at Watts Bar, willingness to raise nuclear safety concerns, perceptions about various avenues for raising concerns, and management support for and responsiveness to raising concerns.

In general, individuals in the focus groups reported improvements in the work environment at Watts Bar. Examples of improvements included less pressure during outages, managers that were more willing to listen and support stopping when unsure, and better communication and respect among employees.

Individuals also reported feeling free to raise nuclear safety concerns without fear of retaliation. The majority of employees had confidence that if a nuclear safety concern was raised, it would get the attention it deserves.

However, most employees made a distinction between nuclear and non-nuclear safety concerns. Many employees felt that managers were not consistently supportive or responsive to non-nuclear concerns, such as those related to personal safety.

- There was a theme that the priority of fixing safety issues doesn't consider the worker
- Low confidence in CAP for resolving lower priority issues
- Frustration with writing CRs for repeat issues, and seeing issues closed to trend with no explanation of whether or how it was addressed
- Accountability not being applied equally or consistently for individual contributors and managers
- Lack of consistency in what people say and what they do, following through on commitments – walking the talk
- Lack of transparency and openness in communications

Generally, employees were aware of the ECP program, but individuals were either neutral based on lack of experience or held negative perceptions about lack of independence from line management, lack of confidentiality, and ineffectiveness in resolving issues.

It was clear from the focus groups that most individuals have seen improvements, but there were reservations about the sustainability of changes and recognition that more

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improvements were needed to continue to build trust and ensure that changes are truly embedded in the culture.”

We have shared detailed observations throughout the week with you and your team. All of which have been documented either in notes or CR's. As of this morning, we confirmed that our team's observations have been captured appropriately and CR's initiated, as applicable.

In summary, the team did not identify any findings. At this time, we have determined that TVA has satisfied most of the commitments in the CO (23/31) and all of the corrective actions in the CEL have been completed. As noted earlier, final inspection of CWEL RCA will be performed at a later time.

The NRC sent TVA a chilling effect letter in March of 2016 primarily because of evidence that operators did not feel free to raise nuclear safety concerns without fear of retaliation. Based on the current inspection we have determined that at this time the work environment supports operators to raise nuclear safety concerns without fear of retaliation and operators are willing to raise concerns.

While there may be evidence of progress as shared during the interviews it is important to note that there were also themes from the interviews throughout the site that suggest ongoing challenges to a healthy safety culture that could still regress back to a chilled work environment.

So while notable amount of progress has been made at the site, as noted by completion of corrective actions and input received from the interviews, we would caution TVA to claim early victory in the elimination of a chilled work environment (even as defined by the NRC).

Simply put, “do not take your foot off the pedal because you could potentially end in the same spot where you started.” During yesterday's debrief the plant manager shared the word fragile as it pertains to the environment at the site, we agree with that assessment.

Again, the reason for this statement is because of the observations Stephanie shared with you today and observations shared by the team throughout the week. These observations are specific to:

- ECP
- Problem Resolution for Issues Assigned Lower Priority and Repeated Identification
- Accountability
- Communication
- Transparency
- Follow Through
- Responsiveness to Non-Nuclear Safety Concerns
- Sustainability
- Trust

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We acknowledge that you are working on rebuilding trust and maintaining sustainability for the progress made to date; however, additional time may be needed to achieve high standards of a healthy nuclear safety culture.

As you continue to monitor and reassess these areas, we encourage that you continue to share any insights, progress, or changes to the NRC.

At this point, we have no further observations.

Everything we have shared with you is preliminary and is subject to NRC management review. Any future decisions and/or conclusions pertaining to the chilling effect letter and the CO will be made by Region II. We will provide this input to our management along with the observations shared today.

This concludes the exit.

Any comments/questions?

Thank you for your time.

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**From:** [Hulvey, Kimberly Dawn](#)  
**To:** [Nadel, Jared](#)  
**Subject:** [External\_Sender] FW: Keeping Current - Changes to Employee Concerns Program Structure  
**Date:** Tuesday, May 14, 2019 9:28:19 AM  
**Attachments:** [image001.png](#)  
[Changes to Employee Concerns program May 14.pdf](#)

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**From:** Nuclear Communications <NuclearCommunications@tva.gov>  
**Sent:** Tuesday, May 14, 2019 9:26 AM  
**Subject:** Keeping Current - Changes to Employee Concerns Program Structure

Please print the attached PDF for those without computer access.

May 14, 2019

## Changes to Employee Concerns Program Structure

The Employee Concerns Program plays a vital role in maintaining a healthy Nuclear Safety Culture at TVA's nuclear facilities. The program provides employees with an alternate path for issue resolution involving nuclear safety, quality or technical impacts to safe operation.

In response to employee feedback that the ECP program is not an effective alternative avenue for raising concerns, ECP will be changed to a different, more focused model for addressing employee concerns.

The changes are based on benchmarking with other utilities that have a high performing ECP program. In the new model, ECP staff members will remain independent from management in its reporting structure, and will continue to respect and preserve employee anonymity as requested.

You will see a series of communications between now and when the new structure is in place in early July that provides more details about the new organization. The communications will include information such as how the new organization will function compared to the current organization, what will be different about how the ECP Representatives will conduct ECP business, what employees can expect to see during the conduct of daily business and the various ways to bring concerns to the ECP Representative.

Between now and early July, the ECP organization will operate exactly as it does today. Stay tuned for more information as the changes are implemented.



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**From:** [Henderson, Erin Kathleen](#)  
**To:** [Nadel, Jared](#); [Hulvey, Kimberly Dawn](#)  
**Subject:** [External\_Sender] RE: FW: NRC SRI briefing on ECP Changes  
**Date:** Monday, May 13, 2019 8:30:57 AM  
**Sensitivity:** Private

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No, no press releases or media coverage expected. There is an communication/change management plan that we're currently working through.

Greg Boerschig is going to talk through upcoming changes to the program. It will be pretty consistent with what Greg talked to Joel and Omar about a couple of weeks ago. I can let Omar know that.

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**From:** Nadel, Jared [<mailto:Jared.Nadel@nrc.gov>]  
**Sent:** Monday, May 13, 2019 8:24 AM  
**To:** Hulvey, Kimberly Dawn  
**Cc:** Henderson, Erin Kathleen  
**Subject:** RE: FW: NRC SRI briefing on ECP Changes  
**Sensitivity:** Private

**TVA External Message. Please use caution when opening.**

I will confirm time by 0900. As I mentioned previously it seems the BFN SRI is out today. I got a question from the region RE: press releases or media coverage. Is TVA planning public announcements that will discuss the ECP changes?  
Thanks,

Jared Nadel  
Senior Resident Inspector, Watts Bar  
(O) 404-997-5301

-----Original Appointment-----

**From:** [kdhulvey@tva.gov](mailto:kdhulvey@tva.gov) [<mailto:kdhulvey@tva.gov>] **On Behalf Of** Henderson, Erin Kathleen  
**Sent:** Monday, May 13, 2019 8:18 AM  
**To:** Nadel, Jared  
**Subject:** [External\_Sender] FW: NRC SRI briefing on ECP Changes  
**When:** Monday, May 13, 2019 9:30 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).  
**Where:** Dial in 423-751-7777; PW (b)(7)(C)  
**Sensitivity:** Private

-----Original Appointment-----

**From:** Henderson, Erin Kathleen <[ekwest@tva.gov](mailto:ekwest@tva.gov)>  
**Sent:** Monday, May 13, 2019 8:08 AM  
**To:** Henderson, Erin Kathleen; Paul, Jamie Lee; Johnson, Jonathan Thornton; Hulvey, Kimberly Dawn; Boerschig,

Gregory A

**Subject:** NRC SRI briefing on ECP Changes

**When:** Monday, May 13, 2019 9:30 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).

**Where:** Dial in 423-751-7777; PW (b)(7)(C)

**Sensitivity:** Private

# Attendance

Kim Hulvey	Licensing
TAZA HAGINS-DYER	EMPLOYEE CONCERNS
Meshelle Ferguson	HR
Ruth Fordham	ECP
<del>CHRISTOPHER CHANDLER</del>	OQC
Gordon P Arent	Site VP Staff
JOE SHEA	VP REG AFFAIRS/SUPPORT SERVICES
JAMES DOUKOSKI	CPAM - REG AFFAIRS/LIC
Tom KOZAK	Contractor
Dan Tesar	Performance Improvement
Paul DiGiovanna	GM Org E&E
TONY WHIOR	WBN SPDM
Jesse JAMES	WBN maintenance
JOE CALLE	DIR, STRATEGIC ALLIANCE
Erin Henderson	Dir, Reg. Affairs
Randy Staggs	WBN Human Performance
Ten Cadern	Site Projects
Eynus Ellis	Sr Mgr. Security
Virgil Perry	Site Training
Thomas B Marshall	Plant Manager
L Bryan Bewin	RPM
Beth Jenkins	Eng. Dir.
Mike Owen	OPS - Dir.
NICK WELCH	WM Dir.
Lynn Flood	Chem/Env Mgr