

WEBINAR TRANSCRIPT

This document provides the transcript from a predecisional enforcement conference (PEC) webinar that was held on January 24, 2019, between the Nuclear Regulatory Commission (NRC) and representatives of the licensee, Southern California Edison (SCE). This meeting was held to discuss preliminary findings of a Special Inspection that the NRC conducted at San Onofre Nuclear Generating Station in September 2018. The inspection was conducted in response to an incident that resulted in the misalignment of a multi-purpose canister loaded with spent fuel at the San Onofre Nuclear Generating Station.

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- [Scott] All right, good afternoon.

I'm Scott Morris, Regional Administrator
NRC Region IV Office here in Arlington Texas.

This afternoon, we will conduct a public
predecisional enforcement conference

between the NRC and

Southern California Edison
concerning activities at the San Onofre
Nuclear Generating Station.

During this conference, we will discuss
two apparent violations

of NRC requirements

that we are evaluating under
the NRC's enforcement policy.

Before I go any further, I'd
like to ask the NRC staff
to introduce themselves,
then give Southern California
Edison an opportunity to
introduce your representatives.

So, with that, Michael.

- [Michael] Good afternoon,

I'm Michael Vasquez.

I'm the Team Leader for the Allegation
Coordination and Enforcement Staff.

- I'm Dr. Janine Katanic
and I'm the Chief of the,
can't even remember anymore, Fuel Cycle
and Decommissioning Branch.

- [Linda] And I'm Linda

Howell, I'm the Deputy
Division Director for the Division of
Nuclear Materials Safety.

- [Eric] Eric Simpson, I was
the lead inspector for the
special inspection at the San Onofre
Nuclear Generating Station.

- [David] I'm David Cylkowski,
Regional Council for NRC.

- [Chris] I'm Chris Smith,
I'm a Reactor Inspector
in the Division of Reactor Safety.

- [Lee] I'm Lee Brookhart,
I'm the dry cask storage
inspector here at Region 4.

Okay and on the phone, we
also have some NRC staff
as well. We have Patty Silva,
she's the branch chief in NMSS,
Division of Spent Fuel Management,
we also have Thomas Marenchin,
he's a Enforcement Coordinator
in the NRC's Office
of Enforcement back at Headquarters,
we also have Michelle Burgess, who is an
Enforcement Coordinator in the Office of
Nuclear Materials Safety and Safeguards,
again at Headquarters so I'll now turn
the table over to you,
Mr. Bauder, and introduce your reps.

Thank you, we appreciate
the opportunity to be
here this afternoon,
so thank you for that.

- [Doug] I'm Doug Bauder the
Vice President of Decommissioning,
and Chief Nuclear
Officer for San Onofre.

We have Tom Palmisano,
our Vice President of
External Engagement, Al
Bates, Manager of Regulatory
Affairs & Oversight, Jerry
Stevenson, our Manager
of Engineering, Jim Peattie,
General Manager of Oversight
and Lou Bosch our Shutdown Plant Manager.

Once again, we appreciate
the opportunity so thank you.

- [Scott] Ah before we move forward,
just a couple of logistical
things just to inform you all,
and maybe you know this already,
but for the visitors here today, we have
facilities down the hall,
restroom facilities,
drinking fountains et cetera,
just out this door and down.
To the left, also in the
event of emergency,

we will stay together, we'll
all exit through the main
entrance unless that's
blocked and there's a side
exit as well but we would gather
out in the parking lot and
do a count up before we're
allowed to reenter the building.
Also logistics, let me
ask everybody to silence
their cellphones, and
let's see, for those of you
who are having sidebar
conversations or those in the
audience, please keep your
voices down to a minimum
because this session is
being recorded, and so just
to increase the fidelity of the recording
we want to keep the voices and background
noise down to a minimum.
Lastly, please be mindful
that this predecisional
enforcement conference
is being broadcast again
to a wider audience, via
webinar, I think we have
on the order of about 400
folks who have registered.
I don't know how many

exactly are online right now
but we may get more
joining us as we proceed.
So if members of the
public or licensee staff
present here, oh also if
anybody needs to take a break,
please, because it's being
recorded, please do so
via the rear of the room,
you can see that the Skype
camera's right there so
we want to minimize the
amount of traffic walking
back and forth in front of
the camera.

Okay, so this is a category
NRC, Category 1 meeting
between the NRC staff and
Southern California Edison.
It is open to public
observation but not to public
participation. The NRC
staff will be available
after the business portion
of this conference
has concluded to answer
questions from members of
the public and to receive
comments concerning the

matters discussed during the conference.

Including those participants
who are observing
this conference via the webinar.

They can submit their
questions through the webinar
application, all right,
so I think we can go to
the next slide.

So to those of you who
are participating via
webinar, welcome. In the
event that we encounter
any technical difficulties
with the webinar we do
have a backup conference
telephone line, it will be
available, it's not active
now but if the webinar has
a problem we'll activate it
at the number you can see
and the passcode that is on that slide.

Also note that the link
to the NRC Spotlight page,
that's our homepage, the
NRC homepage, where you can
locate a copy of the NRC inspection report
that's really at issue
today, that describes the
apparent violations that

we will be discussing.

And a reminder to all
conference participants,
please state your name before speaking.

Just for the benefit of
the audience, it will also
help with the transcribed
version of this that
we'll also be posting
on our website in the
coming weeks.

So I want to just emphasize that we,
that the fact that we're
conducting this conference
today does not mean that
we've made a final decision,
or determination that
the violations occurred or
that any enforcement action
will be taken.

The conference however
is, an important step
in our well established
deliberative process.

The main purpose of this
conference is to provide
Southern California Edison
an opportunity to share
with us any additional information you all
think we need before we make, to make an informed

enforcement decision,
however again, no decisions
will be reached or discussed
during this conference.

So I strongly encourage
all of you to be candid,
provide your perspectives
on the apparent violations
or any other related issues,
their safety significance,
the circumstances surrounding
the apparent violations,
corrective actions you've
taken or have planned or
any other information you
believe has a bearing on
our final enforcement decision.

We get the next slide.

So the agenda you'll see
here, copies of the agenda
have been made available
to the participants as part
of our slide presentations,
I think we have some
in the back of the room as well so,
I'm shortly going to turn
over to Linda and Linda
will further discuss some
details about the purpose
of this conference.

Afterwards I'll give you,
Southern California Edison,
an opportunity to make
any opening remarks if you
have any, and after those opening remarks
I'll ask Michael Vasquez,
the lead for our Allegations
and Enforcement staff here
in Region IV to provide
a high level overview of
the NRC's enforcement policy
and our process, and then
Dr Katanic will discuss the
two apparent violations
that are at issue today
in a little more detail,
and then we'll turn the
conference over to Southern
California Edison to provide
your input and perspectives.
I note that, just note
that near the end of the
conference, business portion
of the conference, there
is an item listed as NRC Caucus.
That's really just an
opportunity to take a short
break probably 10, 15
minutes. It will give all of
us here, NRC staff and

those who are participating
by phone an opportunity
to caucus in a separate
conference room to discuss what
we heard and make sure
that we don't have any
further questions or
clarifying information
that we're looking for.

I don't anticipate that
caucus will, like I said,
last 10 or 15 minutes at
the most, we'll come back.

If we have an additional
question or two we'll
ask it, otherwise we'll
end the conference, okay?

Okay I think that is
about it, so let me just
turn it over to Linda.

- [Ryan] Sorry to interrupt,
we were getting some feedback
about not getting enough
sound from the microphones
so folks please make
sure that you use your
microphones.

- [Scott] All right,
thanks for that, Ryan.

- [Linda] Thank you.

Good afternoon, I'm Linda Howell,
the Deputy Director of the Division of
Nuclear Material Safety
in Region IV, and since we
have the conference open for
public observation I'm
going to repeat just a little
bit of background
concerning the two apparent
violations that are the
subject of the conference.
Those two apparent
violations were described
in the NRC's inspection report
issued on November 28th, 2018.
That report documented the
findings and observations
resulting from the special
inspection that was
initiated in early September 2018.
The inspection was conducted
to review circumstances
associated with an incident
that occurred on August
3rd, 2018, at the San Onofre
Nuclear Generating Station.
On that day, during placement
of a loaded spent fuel
canister into its intended storage vault,
licensee staff and

contractors failed to notice
the canister was misaligned
and not being loaded
directly into the storage vault.

In addition to the two
apparent violations which
Dr Katanic will discuss
shortly, other violations
of lesser safety significance
were identified and
documented in a Notice
of Violation that was
issued with the inspection report.

The purpose of the conference
today is to discuss
the two apparent violations.

As Scott noted, there are
apparent safety significance
and corrective actions
that have taken at the plant.

We do not plan to discuss the violations,
identified in the Notice of Violations
in today's conference.

The inspection report and
other relevant information
is available on the NRC
public webpage in the
Spotlight portion as Scott just mentioned.

I also want to note that the
purpose of the conference

today is to share information
that will be sufficient
for the NRC to make an
informed enforcement decision.

The purpose of the
conference is not for us to
make any conclusions or
draw any conclusions on
whether Southern California
Edison's ready to resume
fuel loading operations.

That decision will be
made following further
inspection efforts by the NRC.

The predecisional
enforcement conference is
being broadcast by webinar
to members of the public
to directly observe and
listen to information
presented by both the NRC and
Southern California Edison.

While the conference,
again, is not open for
public participation, we
will provide an opportunity
for members of the public
to ask questions of the
NRC staff who are present
here today concerning

the enforcement process
and the next steps forward.
Members of the public
who are observing the
conference via the webinar
can submit questions
via the question box
throughout the course of the
conference. NRC staff
will be monitoring the
webinar application to collect
your questions and will
attempt to respond to
as many of the questions
as possible within the
timeframe allotted this afternoon
with our priority on questions that directly
relate to the NRC's enforcement
and decision making process.
We'll try to address this as we go.
I just want to note, only the NRC staff will
participate in the public
portion of the meeting
after we conclude the
predecisional enforcement conference.
We'll excuse Southern
California Edison staff so
that it's really the NRC
addressing the public comments.
Presentations that are

being used in the conference have already been posted to the NRC public web page as we noted. Those presentations and other documents associated with the conference that might be received following the conference will also be made available in the NRC's Agency-wide Document and Access Management System, or ADAMS. The video and transcript from the conference will be also posted to the Spotlight section of the webpage, and in addition we'll post the comments and questions that we receive from members of the public to the Spotlight portion of the web page. I want to note that the transcript and the other comments and questions will take a few weeks to be posted since we have to receive the transcript from the contractor who is providing the webinar service and review both the

transcript and the questions
to ensure accuracy of the information.
For the Licensee representatives,
let me just remind you,
I know you might probably
be aware of this,
should you provide us any
additional information
shortly after the
conference that you believe
is sensitive and you would
like withheld from the
public you must provide
us with justification
for doing that in writing
in accordance with NRC
regulations.

So were there any questions on how we plan
to proceed with the conference?

Thank you.

So let me turn the discussion over to
Southern California Edison now to provide
any opening remarks that they might have.

- [Doug] Well thank you, once
again, this is Doug Bauder,
the Vice President of Decommissioning
and-

Thank you.

Once again, this is Doug Bauder, the
Vice President of Decommissioning

and Chief Nuclear Officer for San Onofre.

I want to again appreciate the opportunity to be here today and provide our analysis about the August 3rd downloading event and what followed, to give our safety perspective and to discuss our corrective actions as well and so we really appreciate the dialogue and are thankful to be here, appreciate it.

- [Linda] Thank you Doug. We'll now turn the conference over to Michael Vasquez to discuss our enforcement process.

- [Michael] Good afternoon, my name is Michael Vasquez, again I'm the Team Leader for the Allegation and Coordination and Enforcement staff.

There are a couple of things I want to know to start off with, like Linda said before about, no final decision will be made today. The NRC has not made any final decisions yet on whether the apparent violations actually occurred. This conference is the last

step in our information gathering in order to make an informed enforcement decision.

We provided Southern California Edison with an inspection report and that is what really provides our understanding of the apparent violations and the circumstances, and this conference is your opportunity to provide your perspective on the apparent violations. So during this conference, we'd like to hear your perspective on whether violations occurred, the circumstances surrounding the identification of the apparent violations, and any corrective actions you have taken or plan to take. This is your opportunity to give us any information that you believe that we should take into account when making our enforcement decisions. Next slide please.

If the NRC concludes a violation has occurred

then the NRC will assess the significance of that violation and we use severity levels, and in order to classify the significance of violations. There are four severity levels with Severity Level I being the most significant, and Severity Level IV being the least. Severity Levels I, II, and III are considered escalated enforcement and are candidates for monetary civil penalties. We take four factors into consideration when determining the severity level of the violation. First we look at whether there were any actual consequences. Second we look at whether there were any potential consequences, third we look at the potential for impacting the NRC's ability to perform its regulatory function, and four, we consider

any aspects of willfulness associated with the violation. Now, if we determine that a violation was categorized as a Severity Level I, II, or III, it is a candidate for, they are candidates for civil monetary penalties. So the NRC's civil penalty assessment process appears in the NRC Enforcement Policy in this diagram but let me simplify it for you. First, the NRC considers the enforcement history and the severity level of the violation. Second, we may consider the circumstances surrounding identification of the violation, and that is whether the licensee is deserving of identification for that. And third, we are always going to look at a licensee's corrective actions, whether they were sufficiently prompt and comprehensive to prevent that violation from recurring in the future.

And forth, we may consider discretion,
what we term as an exercise of discretion
to either increase or
decrease the size of a
civil penalty based on
factors described in
the NRC Enforcement Policy.
So, during this conference,
we really want to
hear your position on how the issues were
identified, and corrective
actions you've taken
and plan to take.
Although each case is
different, there are three
possible outcomes on the
civil penalty assessment
process. First, there
may be, if the licensee
identifies and corrects
a violation, there may be
no civil penalty. Second,
if a licensee
corrects, or, but doesn't identify a
violation, that could end
up with a base civil penalty. And third,
if the licensee does not
identify and does not
correct a violation it
could end up with twice

the base civil penalty
and for this case,
an independent spent fuel
storage installation,
the base civil penalties range
from \$36,250 for a Severity Level III
violation, to \$72,500 for a
Severity Level I violation.
After the conference we're going to have our
enforcement decisions
to make, and there are
four possible outcomes for
our enforcement decisions.
First, the NRC may decide
to take no enforcement
action if you've demonstrated
that no violations
occurred. Second, the
NRC can issue a Notice of
Violation, this is a written
notice documenting that a
violation has occurred and
requires a written response
documenting corrective action.
Third, the NRC can issue a
Notice of Violation with a
civil penalty. The
intention of the fine is to
emphasize compliance
in a way that prevents

future violations and that focuses the licensee's attention on significant violations. Fourth, the NRC can issue an order which is a written directive that can modify, suspend, or revoke a license and an order can require specific corrective actions be taken. The NRC's enforcement actions we take are publicly available on the NRC website. After this conference it may take us four to eight weeks to publish the enforcement decision. If a civil penalty or an order is issued, normally our Office of Public Affairs will also issue a press release on that day or the day after. And last, licensees, NRC licensees have appeal rights and may challenge NRC enforcement action. The instructions for challenging an enforcement action will be discussed in the action itself when coming in. Next slide. Any questions on this overview

of the enforcement policy?

Thank you.

Back to Linda.

- [Linda] Okay, well I'll turn the discussion next over to Dr Katanic who will provide some details concerning the apparent violations.

- [Janine] Okay, I'm Doctor Janine Katanic, and I'm the Chief of the Fuel Cycle and Decommissioning Branch, Mr Eric Simpson who was the Lead Inspector for the Special Inspection who works with me in this branch. I'd like to go over the two apparent violations and I will note for our audience that the apparent violations described in the slides are in abbreviated or summarized version just for ease of presentation. I will, however, verbally provide the full text of the apparent violations, which can be found in the handout. As previously noted, the apparent violations are subject to further

review and may be revised.

On slide 10, just to give a very high level overview before I read the text of the apparent violation, this apparent violation is related to the August 3rd, 2018 incident when a loaded spent fuel canister was being lowered into the vault and the canister was misaligned and was not being supported by the redundant, important-to-safety, drop protection features which in this case were the slings.

Apparent Violation One, to read the text of it, 10 CFR 72.212(b)(3) requires, in part, that each cask used by the general licensee conforms to the terms, conditions, and specifications of a Certificate of Compliance listed in 10 CFR 72.214. 10 CFR 72.214 includes a list of all the approved spent fuel storage casks that can be utilized under the conditions specified

in a specific Certificate of Compliance.

This includes Amendment 2 of Certificate of Compliance 072-01040. That Certificate of Compliance, Amendment 2, Condition 4, heavy loads requirements requires that lifting operations outside of the structures governed by 10 CFR Part 50, must be in accordance with Technical Specifications, Appendix A, Section 5.2. Technical Specifications Appendix A Section 5.2.c.3 requires that the transfer cask when loaded with spent fuel may be lifted and carried at any height during multi-purpose canister transfer operations provided the lifting equipment is designed with the redundant drop protection features which prevent uncontrolled lowering of the load. Contrary to the above, on August 3rd, 2018, the licensee failed to ensure

that the redundant drop protection features were available to prevent uncontrolled lowering of the load.

Specifically, the licensee inadvertently disabled the redundant important-to-safety downloading slings while lowering canister 29 into the storage vault.

During the approximately 45 minute timeframe, the canister rested on a shield ring, unsupported by the redundant downloading slings at approximately 17 to 18 feet above the fully seated position.

This failure to maintain redundant drop protection placed canister 29 in an unanalyzed condition because the postulated drop of a loaded spent fuel canister is not analyzed in the Final Safety Analysis Report.

- [Ryan] Janine, I apologize. We're getting major feedback that folks are not able to hear so we're going to

take just a one minute
pause if we can, we're
going to move the mic just
one second, hold on.

Please try to move your
microphones to the best
of your ability, close to your mouth.

- [Man] Sorry folks.

- [Janine] Thank you.

If there are no questions
regarding Apparent Violation
1, I'll move on to
Apparent Violation 2.

Are there any?

- [Doug] No questions, thank you.

- [Janine] All right on
slide 11, regarding Apparent
Violation 2, again, just to
give a high level overview
before I read the apparent violation,
the apparent violation involved timely
notification to the NRC of
the disabling of important to
safety equipment. The incident
occurred on Friday, August
3rd, 2018, and on the afternoon
of Monday, August 6th, 2018,
you provided a courtesy
notification of the
incident to our office, in

fact, to myself and others.
Following this courtesy
notification the NRC
discussed the reporting requirement with
Southern California
Edison during subsequent
conversations. On September
14th, 2018, at the
prompting of the Special Inspection Team,
the condition was formally reported by
Southern California Edison
to the NRC Headquarters
Operations Center.

Apparent Violation 2,
10 CFR 72.75(d)(1)
requires in part that
each licensee shall notify
the NRC within 24 hours
after the discovery of any
of the following events
involving spent fuel in
which important to safety
equipment is disabled
or fails to function
as designed when: one,
the equipment is required by regulation,
licensed condition or
Certificate of Compliance to be
available and operable to
mitigate the consequences

of an accident and two,
no redundant equipment was
available and operable
to perform the required
safety function. Contrary to
the above, from August 6th
to September 14th, 2018, the
licensee failed to notify
the NRC after discovery
of important to safety
equipment being disabled and
failing to function as
designed when required by
the Certificate of Compliance
to provide redundant
drop protection features
to prevent and mitigate the
consequences of the drop
accident and no redundant
equipment was available and
operable to perform the
required safety function.

And if there are no questions
about Apparent Violation 2,
I'll turn it back over to Linda.

- [Linda] Thank you Janine.

We'll turn the discussion over to
Southern California Edison
so that you can provide
your presentation, but

first in advance of that,
to the extent possible I
want to recommend that the
NRC staff holds their
questions until the conclusion
of Southern California
Edison's presentation to give
them an opportunity to
complete the full presentation.
There will be ample time
for the NRC staff to ask
questions at the conclusion of
Southern California Edison's
presentation, so let me
go ahead and turn it over
to you, Doug.

- [Doug] Thank you.

So for our presentation
if you could just go
right to slide three
where the agenda is listed.
Today, we intend to talk
about both potential
violations, the August 3rd download event,
a description of the event,
its safety significance,
what our causal analysis
has shown us and then
our corrective actions.
And then we move into

Reportability where we talk about the timeline, the causal analysis and once again, corrective actions associated with reportability.

We also have a segment on regulatory considerations, then we'll conclude, so that's the basic structure for that, if you could move to the next slide please.

The next slide.

So the incident on August 3rd, when the redundant safety functions of our lifting system were not maintained, is a serious matter which should not have been allowed to happen.

We accept the proposed violations of regulatory requirements. Next slide.

So immediately following the event, we placed the affected canister as you know in a safe condition and suspended our Fuel Transfer Operations. We've analyzed the incident and developed corrective actions with the utmost rigor, depth,

and thoroughness. We've also used top industry experts to verify our conclusions and actions.

Further, we know now with full confidence, that in the unlikely event of a load drop on August 3rd, the canister would not have been breached, and there would not have been any radiological hazard for our employees or to members of the public.

Next slide.

There were, however, significant organizational and programmatic lessons learned. We've established comprehensive and rigorous criteria prior to restarting our Fuel Transfer Operations. Those include: demonstration of effective corrective actions and equipment operations to the NRC, multiple independent reviews, full satisfaction by Edison that our actions are complete and they are sustainable and then

planned post-restart
actions to ensure further sustainability.

Next slide please.

You'll see this slide later
on in our presentation when
Jim Peattie talks to it,
we've provided our
corrective actions, I just
want to cover a couple
of highlights here.

In procedures, we took a
hard look at error traps,
worker usability, and we
put a lot of effort into
making our procedures more
usable for our workers.

In training, we strengthened
the entire training process
for San Onofre, this includes
new training materials.

And we took a look at training
with the perspective that
ensuring that when a new
worker shows up at the station,
that worker is fully
trained before being able to
take a spot in fuel transfer operations.

With regard to equipment,
we installed load monitoring
devices and those

devices have proved to be very effective. This week on Tuesday, I spent time in the field watching the load monitoring in action during an actual simulated canister download.

I am pleased with that process.

In corrective actions, we took a broad look at the program and expanded it such that we now have one corrective action database for all workers, whether they are contract workers or Edison workers, and we've encouraged lowering the threshold for workers to enter issues into the corrective actions system. Moving on to Oversight.

Simply put here, we've overhauled our oversight process, we've put new leaders in place, we looked at the organizational structure of Oversight.

That structure includes instead of filling out checklists, active coaching, and monitoring the work in the field. Also

in the area of Oversight,
my managers are now in the
field, more often under a
structured program observing
and coaching for performance.

Once again, we'll talk in
more detail later on today
about these specific areas.

I would like now to turn
the presentation over
to Lou Bosch, our Shutdown Plant Manager,
for the description of the event. Lou.

- [Lou] Okay. Thank you Doug.

Next to that.

Okay, so what happened?

On August 3rd, 2018, as a
loaded multi-purpose canister
was being downloaded into
the storage vault, it became
lodged on the shield ring.
For less than an hour, the
MPC remained lodged and
was not suspended by the rigging.

So what is the significance of this?

Although unlikely, the
canister could have fallen
18 feet to the bottom
of the cavity enclosure
container.

Two, the canisters have

been analyzed to be able to
withstand drops of up to
25 feet with substantial
margin of safety.

And three, during the event, there was no
radiological risk to
employees or the public.

However, this is still
an unacceptable incident
and Edison takes it very seriously.

Can you hear me?

So now, next slide, we're going to go to a canister
download evolution, before we start,

I want to take the time to
walk through an animation
of a canister download.

This will help in our
discussion to ensure there
is a clear understanding
of a normal canister
download, what exactly happened
on the August 3rd event
and what should have happened
on the August 3rd event.

So start the video please.

Stop there.

So I'm going to point out
the different components.

So, we're looking right
here on the orange,

this is the vertical cask transporter.
The transporter is
basically a mobile crane,
and it's different than a normal crane
in that it doesn't have a spool with a cable,
instead it has rising hydraulic towers
with fixed length slings.

One end of the slings
is mounted to a fixed
position on the tower,
and the other end is on the load.

Exactly.

The next we're pointing to
is the transfer cask itself.

The transfer cask is a lead
shielded cask that houses
the canister, its function is to provide
shielding during the transport operation.

In the cutaway view, we're
looking at the actual canister.

Holtec calls this MPC.

This is a five-faced
stainless steel container
housing 37 fuel
assemblies, welded shut and
back-filled with helium.

On top, is a shield cone.

The shield cone lowers the dose to our
employees working on the
downloading of the canister.

At the bottom, is the mating device.

The mating device, you can look at that as the doorway into the cavity enclosure container.

The cavity enclosure container which is below that, houses the canister during long-term storage of spent nuclear fuel.

Okay, continue the video.

Now the transporter is moving up to the mating device, the transfer cask will be lowered.

And we'll stop there.

The transfer cask is now bolted to the mating device, when we continue the video, you'll see the transfer cask lift links removed, the transfer towers move up and the canister rigging slings that attach to the top of the canister.

So continue.

So these are the lift links that got removed, the towers are now moving up to the top and you'll see the slings connected. Stop there.

So now, the canister's being

suspended by the rigging
slings. The crew will then
remove the transfer cask lower
lid, and opening the mating device door.
The canister is now
ready to be lowered into
the cavity enclosure container.
I will now describe the
make up of the crew.
There is two people out on the MPC pad
during the event. One
is the actual operator,
in the location and two is
a spotter that is up there.
And the spotter, the roles of the spotter
is to visually verify
the canister continues
to lower throughout the
download operation and
stop the transfer operation
during any abnormalities.
The transport operator
is in communication with
the spotter and also is
watching his tower heights
and stops during any
abnormal indications so
To reiterate the operator's
looking at tower heights and
load then the actual person

up in the man basket watches,
makes sure the sling continues
in a downward direction.

So now I'm going to go
through the three evolutions.
What does a normal download look like,
what happened on the event,
and what should have happened
on the event.

So the way the transfer
operates on normal,
they lower the canister
and the slings follow right
down with it so this is very simple,
the beam comes down,
the canister goes down
and it goes to the
bottom and they're done.

So, what happened? In August.
About four feet down
there is a shield ring
down in the cavity
enclosure container that I
will show you.

The canister got hung
up, the people did not
recognize the canister got
hung up, as a matter of
fact the slings at this
point started piling up

at this location both
here, and at that location.
Once the crew recognized that the canister
was in an abnormal
condition they contacted a
cask loading supervisor and
they actually raised it back up,
put it back onto the load
and it safely loaded down
to the bottom.

So, what should have happened?

What should have happened
is, at that four foot
point when it got hung
up, the spotter should
have operated in radio
communication with the
operator should have stopped.

Very simply they would
have stopped the evolution,
they would have put the
MPC back under load,
and they would have raised it
up and then lowered it down.

Continue the presentation.

So they pull the mating device door out,
and, stop right there.

So, right here is the area of concern
where we had the shield
rings, where it got hung up.

So basically, the
canister was sitting here
and it was on the shield
ring, resting at the
inner side of the transfer cask.
And then, like we talked about,
they actually raised
it back up and lowered it back down.

So, to finish this slide
we're just going to
finish the presentation,
so we're just demonstrating
the normal canister downloads
to the very bottom
and that's the final
spot in the storage vault
where the cask will be loaded.

I do want to mention here at the end that
Jim Peattie will be
presenting in his video
all the improvements that we have made to
the download process.

Next slide.

This kind of goes back through and explains
the actual hang up. So
then here is the canister
which we described, here is
the transfer cask on the back,
this is the shield ring
where it got hung up,

and this is where it was
bonded to the shield ring
and resting on the inside
of the transfer cask.

Next slide.

As Jerry stated, I'm turning over to him
for the safety significance.

- [Jerry] Good afternoon.

Good afternoon, I'm Jerry Stephenson,
I'm SONGS Engineering Manager and
I'll be talking about
the safety significance.

I'll start with a photo of the-
next slide.

Photo of the cavity enclosure container.
This assembly, the entire assembly is the
cavity enclosure container.

The shield ring is marked on the slide,
it goes 360 degrees around,
and gets welded to the
divider shell. The wall
that you see there is the
divider shell. The divider
shell is part of the
cavity enclosure container.

The shield ring is there
to reduce dose to workers
during the fuel transfer operation.

It's designed to be a tight fit,
to be an effective shield.

It's two inches thick,
and securely welded to the
cavity enclosure container
and reinforced with eight
gussets. You can see the
eight gussets there, you can
see some gussets on the top.
Thank you.

The canister's carefully
inserted through the shield ring,
but in this case it became
lodged on top of the ring.
The shield ring and the welds
to the divider shell have
been analyzed to be fully
capable of supporting
the loaded canister. We'll talk more about
the shield ring and the divider shell in
upcoming slides. Next slide.
Okay the actual consequences.
In this event the canister did not drop,
there was no significant
damage to the canister,
and no damage to the fuel.
The discussions on the
following slides will address what
might have happened if
the canister had fallen.
So what did actually
happen, what the actual

consequences that occurred
on August 3rd, are,
with the canister resting
on the shield ring, the
canister was exposed to a
potential drop of 18 feet.
That's because the shield
ring is 18 feet above
the bottom of the cavity
enclosure container.
Later we'll talk about
our analysis which is
done at 25 feet, but the
actual level of the shield ring
is 18 feet.

The contact with the shield
ring when it was lowered
may have caused minor
scratches that were evaluated
to be acceptable. We'll
monitor the external condition
of the canister for our
Inspection and Maintenance
Program which will be implemented in 2020.
Next slides.

So, what was the probability
of a canister drop on that day?
When the canister was
lowered onto the shield ring,
because of the small

contact area, the ductile stainless steel of the baseplate formed around the shield ring and the gusset and they molded against each other. Because of the weight and the small contact area, there's local conformance and the two items took each other's shape.

Once they're pushed together, formed together, a significant force would be required to dislodge them, such as a seismic event.

The canister was supported by the shield ring for less than an hour and we know from probabilistic work that we've done over the years, that the probability of a seismic event during a one hour period at SONGS is very low.

Next slide.

Okay, as I've been saying, in this event, the canister did not drop, there was no significant damage to the canister, and no damage to the fuel.

However, we did a SONGS
specific analysis of
what would have happened
if the canister had
fallen from the shield ring.
We used very conservative assumptions,
and the damage to the
canister would have been less
than what we calculated.
We postulated a drop that
was much more severe
than what the canister
was actually exposed to,
we did a deterministic analysis
with the following inputs.
We analyzed a fall height of 25 feet.
The actual fall that it was
exposed to was only 18 feet
from the shield ring.
We analyzed a wall
thickness of a half inch,
it's actually five eighths
inch, 25 percent thicker.
We assumed no friction
all the way to the bottom
of the CEC impacted with maximum energy.
We assumed an infinitely rigid bottom,
actually the bottom of the
cavity enclosure container
would have absorbed some energy,

we assumed all the energy was available to affect the canister. We used a conservative strain limit, .55 inches per inch, and we used the method of evaluation approved by the NRC and a computer code LS-DYNA. Next slide.

So the calculated maximum strain was well below the conservative calculational limit of .55 inches per inch. The external shape of the canister would be unchanged, the calculations show us that the canister will not breach. The calculational results have a lot of margin in them and they have reviewed by Holtec, SCE, and third party experts. So with no breach, there can be no release of radioactive material. This was a very conservative, deterministic analysis using NRC approved methodology. We now know, with full confidence based on this thorough and conservative

analysis that even in the unlikely event that a load drop had occurred, there would not have been any breach of the canister and therefore no release of any radioactive material or change in the radiation dose rates associated with the dry cask storage system. This system does not, therefore, present any significant additional radiological risk to our workforce or to the general public. Next slide.

We have evaluated that there would be some fuel damage if the canister had fallen. Our conservative analysis has shown that while there would have been some damage to the fuel, there would be no material impact to the safety considerations of cooling, or criticality. There would be no release of radioactive material, and there would be no change in local or offsite dose rates. Next slide.

The canister cooling would not

have been significantly more affected if there had been a load drop. The internal cooling is dependent on geometry and to a lesser extent helium flow through the fuel bundles. The helium inventory would be unaffected since the canister does not breach. The helium flow through the fuel would be mostly unaffected, and conductive heat transfer, which occurs by the metallic components and the surrounding helium is unaffected. External cooling is by air flow down the outside of the divider shell and then back up past the canister. Clearance between the canister and the divider shell is large, six inches radially and 12 inches diametric. Any slight deformation in the exterior dimensions of the canister would not affect flow past the canister. Our conservative analysis shows that the canister will remain cooled.

Next slide.

In summary, the possibility of a canister drop during the 53 minutes that it was on the shield ring was very low. Even if the canister had dropped, we have shown with very conservative assumptions that the canister would not breach. Without a breach, there would have been no release of radioactive material, there would have been no impact to the cooling of the canister. There would have been no change in local offsite dose rates, the canister would have remained cool and safe in a cavity enclosure container. We've performed thorough and conservative analysis that shows that there was no significant radiological risk to our workforce or to the general public.

Thank you.

Now I'll introduce Jim Peattie.

- [Jim] Good afternoon,
my name's Jim Peattie,

I am the General Manager for
Decommissioning Oversight.

So in response to the August 3rd incident,
two cause evaluations were
performed to identify the
causes and the corrective
actions to prevent recurrence.

We utilized third party
cause evaluation experts,
and industry peers to
assist us in the development
and review of the cause evaluations and
the corrective actions.

We performed a root cause
evaluation focused on why
the fuel transfer download team failed to
recognize the unload condition
and stop the download
activities.

We also performed an
apparent cause evaluation,
in order to understand why
management expectations
were not met for oversight.

These expectations included:
thorough review and
acceptance of contractors'
programs and procedures,
ensuring that the
procedures and process are

adhered to by the contractors,
and that we stop work
if compliance or safety
issues are identified.

Next slide please.

Our root cause evaluation
concluded that we failed
to recognize the complexity
and risk associated
with a long duration fuel
transfer campaign while
using a relatively new system design.

SONGS project is a long duration
campaign and is projected
to transfer more than 70
canisters of fuel from
wet to dry storage. This
is different from a typical
fuel transfer campaign
which might move five to
ten canisters using a
stable crew of personnel
with high levels of experience.

Next slide please.

Our root cause evaluation
also identified five
contributing causes.

These include, number one,
a design review process
that did not capture the

unintended consequences
of the design addition of the shield ring.
Resulted in tighter
clearances during downloading
and the potential for hang up.
Number two, inadequate
content and procedures to
recognize the special conditions related
to the new shield ring.
Number three, the training
program did not consider
the uniqueness of the
shield ring addition,
nor did it consider the
challenges of a long-term project.
Four, there was a lack
of a continuous learning
environment promoting the
use of both internal and
operating, and external
operating experience.
Number five, the chain
of command communication
methods in place during
the canister download
were not well defined, within
the procedures or training.
Our apparent cause
evaluation was focused on why
SCE management expectations

were not met for Oversight.
This evaluation identified
one cause, and two
contributing causes.
Our identified apparent
cause was that we failed
to establish a rigorous
oversight process to
ensure that we had in
place technically accurate
contractor procedures
and effective training
to support our oversight
of the contractor,
and sufficient guidance
for Oversight personnel
on when to intervene.
The two contributing causes
linked to the event include,
management observations
of fuel transfer operation
activities were not being
routinely performed,
and management was not
consistently reinforcing the
use of our Corrective Action Program.
This slide provides an
overview of where our
corrective actions are focused from the
root and apparent cause evaluations.

It's also intended to provide an overview of how all of these areas combine to provide for what we consider to be an industry leading dry fuel transfer program.

Starting on the left, there's five areas: our procedures, in Procedures we've added a significant amount of detail for our operating and oversight procedures.

In Training we've completely restructured our training program and made it specific to SONGS.

As we've mentioned in the Equipment, we've added several new enhancements, including load monitoring shackles and use of the cameras.

Our Corrective Action Program, we've mandated the use of a single corrective action program for fuel transfer operations and we've retrained those personnel on low threshold issue identification.

And in Oversight, we now have more robust

procedures and training
to provide more intrusive
and effective oversight. I'd like to go
into more detail in each section.

First section is Procedures.

We've made a significant
number of improvements
in the operating procedures
for the fuel transfer project.

Prior to the event, the
procedures used for the project
were not robust, these procedures
lacked detail and relied
upon experienced supervisors
to make the decisions
in the field. As such, they
lacked detail, and they
failed to identify critical
steps for higher risk
activities. So what's changed?

The corrective actions that
were put in place were focused
on ensuring that the
procedures align with the
requirements of the Final
Safety Analysis Reports
and other regulatory documents.
They identify critical
steps, they list required
qualifications of workers.

They define responsibilities,
they clearly identify
criteria for stopping
work, they incorporate
lessons learned and operating experience.
And they minimize steps
that allow for field
decision making.

All six of the operating procedures listed
have been evaluated by Holtec, SCE, and
independent industry
experts and in addition,
these procedures have also been updated
with the lessons learned
from our recent training
and practice activities.

Our Oversight procedures have
also been greatly enhanced.

Our procedure that defines how
we review and accept a
contractor's procedures
and training programs was
revised, it now includes
verifying the procedures
meet the requirements
of appropriate regulations
and procedures identify
required training
and qualifications.

And in addition, we've

revised procedures describing
how our Oversight personnel are to perform
their effective oversight
of fuel transfer work.

I'd like to talk about training next.

Next slide.

So our corrective
actions for training were
primarily focused on developing our own
site-specific training
program for the project.

So as training was an essential element
of the successful execution
of the project our
vision was to develop a
training program that is
industry leading and
encompasses all fuel transfer
project personnel.

Prior to the event the
training was conducted
under the contractor's program.

It was a generic corporate program, and a
program focused on the
training of the supervisors
and some specialty
contract positions such as
a vertical cask transporter
operator. The craft personnel
were provided very

limited training and they were under the direction of qualified supervisors. We've accomplished our vision by bringing in multiple training experts familiar with the systems approach to training. There was collaboration between us and the contractor to produce a new SONGS specific training program and procedure. The new program now covers 20 fuel transfer project positions. It includes 21 lesson plans, and seven on the job training modules. Some of the key changes that were made are that every individual is required to complete all the required training elements for their position prior to performing work independently. Operating procedures include all required training qualifications within the procedure. On the SCE Oversight side, we've enhanced our training program, which

should improve our technical knowledge, we now require our Oversight personnel to attend and pass the contractors classroom training as part of their Oversight qualification.

In addition we've added a training subject matter expert to our Oversight organization to assess and monitor the effectiveness of the changes we've made in training going forward.

I'd like to talk about some of the equipment changes.

Next slide.

So one of the most beneficial corrective actions we took was to install load monitoring shackles for canister downloading and uploading.

It was an important equipment enhancement.

Later in the presentation as Lou mentioned,

there is a short video and I'll be able to point out some of those equipment features.

During and prior to the August 3rd event, the involved personnel relied on visual indication

of slack in the load handling slings as the primary method of identifying a hang up or interference. The vertical cask transporter controls include the ability to observe the canister's weight and monitor load. However, on the event of the day of August 3rd, the operator had switched the indicator to monitor tower height, and that was due to a concern about maintaining the tower's level.

The use of the load indicator on the controls was not required by procedure, and the operator and rigger in charge failed to properly monitor the load.

Our newly installed load monitoring shackles are calibrated, there are two redundant portable load monitors in use at all times, they are utilized by the transporter operator and the supervisor in charge.

The monitors include an

underload alarm feature
which is set by procedure
to alarm an underload
of 15,000 pounds which is
essentially 50 percent of
a fully loaded canister weight.

If a loss of load is
identified on the monitor,
or if the alarm is received,
the operator would stop
the download and immediately
regain 100 percent of
the load weight.

The load monitoring
shackles have been installed
and verified functional
during recent practices
of the download activity
and management has been
in the field observing their use.

The additional features
also included the use
of a camera. The camera
is installed above the
transfer cask and the
canister and it's in a
position such that the
supervisor has the ability
to remotely observe the
canister download in progress

similar to the rigger.

Finally, we've added a physical tag-line as a method of ensuring the canister is lowering. This tag-line is attached to the canister and it is maintained by a rigger who is in position right next to the operator such that he can detect movement of the canister in a downward position through the physical use of the tag-line.

The next area is Corrective Action Program.

The most noteworthy action we've taken in the area of Corrective Action Programs or commonly referred to as CAP, is that we have integrated the contractor program into the use of our site program into one.

We now allow the use of only one corrective action program for all issues for fuel transfer work.

SCE's program is the primary program for identifying the problems or issues for performing any fuel

transfer work activity.
Previously there were two
Corrective Action Programs.
Holtec was authorized
to use their program,
we took their issues, we
would transfer them to our
program for monitoring,
that's no longer the case.
We've implemented the
use of our corrective
action changes in December.
We've provided training
to both the Holtec staff,
their craft personnel
and the SCE oversight personnel.
Training was conducted to
reinforce the low threshold
for the identification of entries into the
Corrective Action Program.
We've provided examples
of the impact of poor
Corrective Action Program
use in the training,
and this included the
failure to identify the
unexpected difficulties
that were experienced
on July 22nd as a missed opportunity which
should have been entered into the CAP.

The next area I'd like to talk about is Oversight.

Next slide.

So as the Management Owner for Oversight for the fuel transfer project I have overall responsibility in this area. So for background information, prior to the event, the oversight of the fuel transfer project was not sufficiently intrusive. Oversight personnel did not participate in Holtec training. Technical understanding of the work was learned on the job, expectations and guidance on how and when to intervene in the contractors' work were not focused on immediately addressing performance weaknesses. As discussed earlier, one of the Oversight corrective actions was to proceduralize how we review and accept the contractor's procedures and training program to ensure that there is adequate and consistent review.

We utilized this criteria when we reviewed and accepted the new program procedure changes. We've changed our organizational structure to improve our experience by placing a manager with extensive onsite dry fuel project experience in charge of Oversight personnel supporting the work. We've hired several new Oversight specialists with field experience in performing fuel transfer operation activities. Another recent action taken by SONGS is that we've implemented a new senior management observation program. We've identified 20 specific managers that are in the program with four scheduled each week to conduct field observations of fuel transfer activities. All these observations are entered into our Corrective Action Program to be evaluated and tracked. All these observations are

required to be debriefed
with other site leaders
during daily work meetings.
And lastly, I've met
with my Oversight personnel.
And I've clearly defined
what my expectations are
going forward, on how we
engage not only with the
fuel transfer contractor,
but all personnel on
our site and the
expectations are number one,
ensure that work is
being performed safely.
Ensure that work is being
performed in compliance
with the procedures or work instructions.
Perform coaching on the
spot, stopping the work if
necessary to restore
compliance, escalate issues
to the senior management
personnel, and to utilize
the Corrective Action
Program to identify all
observed issues.
Next slide please.
This slide through
slide 48 are provided as

a line-of-sight matrix
identifying the causes to
the corrective actions
for both the root cause
and apparent cause and
corrective actions necessary to
support fuel transfer operations.

The slides were submitted
for the record but it
was not my intent to go through each slide.

- [Man] So we are on slide 49?

48. Okay.

- [Jim] So slide 48.

What you'll see is a short
video of a recent download
practice activity utilizing
a simulated canister
which does not contain fuel.

The things you'll see in the video are the
additional personnel
involved in downloading,
load monitoring equipment, the camera,
the tag-line, and the
headset communications
that personnel are utilizing.

I'll periodically stop
and point out some of the details.

So we can proceed please, and stop.

So in this spot of the video, you can see
first off, there's the aerial lift.

In the aerial lift there
are now two personnel,
both of them are qualified riggers.
One of the individuals
is the Rigger in Charge.
He is the one who directs
the VCT operator on
whether he can proceed or not proceed.
All right, all other
personnel involved can
direct the operator to stop,
but only the Rigger in Charge
can direct the operator to continue.
On the right hand side,
that is the Cask Loading
Supervisor in Oversight.
The Cask Loading Supervisor
has with him, an additional
load monitoring tablet
such that he can see what
the operator is seeing as
far as load weight, and
he can also see what
the camera sees where the riggers are at.
Right above the canister
is a camera that's mounted
directly above the high
truck, or the high track
where the transfer canister
and the canister, the MPC,

such that you can observe
the download of the canister.
Individuals located on the
bottom, many are spotters
for the movement of the
vertical cask transporter.
One of the issues that
resulted from this event was
that the canister wasn't
centered before they
lowered it, such that
they allowed it to catch,
right, it didn't hang up.
The new procedure changes
require the individuals
up top to center as best
as possible, the spotters
down at the bottom ensure
that the operator has
the ability to understand
whether or not the
transporter can impact anything.
So they're there for the
transporter operator's good.
There are RP techs located
in the locations on the pad
to observe from the radiological
control perspective.
And go ahead and proceed.

- [Scott] Hey Jim, just for the benefit-

- [Jim] Stop please.

- [Scott] Just for the benefit of those listening, RP tech.

- [Jim] Oh I'm sorry, RP Tech would be a radiological protection technician responsible for radiological controls.

In this slide you can see that the canister is still in the up position, the rigging is attached and you'll see the two riggers in the aerial lift. In that lower right hand corner of the tower is the location, or excuse me, lower left hand corner of the tower is where the operator and the rigger would be located.

And please proceed, and stop please.

This is a practice activity.

The individual sitting in front of the control panel is the Vertical Cask Transport Operator. Directly behind him to the right is an Oversight Specialist.

To his left, is a rigger and an additional

operator who is in
training that day watching the activity.
The Rigger that's standing
there without the headsets
is the one who would
maintain control of the
tag-line such that he
can direct the operator
to stop if in fact the
tag-line is not moving.
And please proceed.
And stop please.
As you can see here, the
canister is now on its way
in the download, you no
longer can see the shield
cone above the transfer
cask. The two Riggers
are watching the download activity,
the procedure now requires,
that at a certain fixed
height which is 216 inches,
all downloading will
stop, that is a location
above the shield ring.
That's to refocus all
personnel on the download
operation that we are now entering the
interference point and to be very sensitive
to any unusual condition.

Go ahead and proceed please.

Stop please.

What you see in front of
the Transporter Operator
is the load readout screen.

It's a wireless tablet
that directly reads both
load cells and the overall total weight.

And as I mentioned, it
also has a alarm that
will flash from green, normal condition to
red, if in fact it detects
the underload condition.

Please proceed.

This is the downloading continuing.

You can see the slings, you
can see the tower lowering.

Riggers continuing to
monitor and stop please.

This is the camera that I
mentioned that's installed.

It's physically installed onto the VCT and
provides the remote indication.

So please continue.

And stop please.

I mentioned the monitor for the camera.

This is what that monitor looks like.

This is what the supervisor can observe.

In this monitor it's
clear that the canister is

beyond the shield ring
interference based upon
how far down it is and
you can observe that
the slings are clearly visible
going down. Please proceed.

Downloading continues and in this position
the canister is fully
in the down position.

Stop please.

This is the remote tablet that
the Cask Loading Supervisor
would have, so in his
location he has similar
indication to what the Operator
is seeing on the machine.

On this tablet, as I
mentioned, are both of the
chapter read outs individually,
the total weight read
out, you can just make out
that it's green there and
in an underload condition
everything would turn red
to identify the underload.

Please proceed.

Alright, next slide please.

So in conclusion, so as a nuclear worker,
with 37 years of experience
at SONGS as an SCE

employee and now as a
Manager for Oversight of
the fuel transfer project
I believe we demonstrated
the right nuclear safety culture
behaviors to address
the August 3rd incident.
We placed the loaded
canisters in a safe condition,
we stopped all further
fuel handling work and
over the last five months
we've developed thorough
cause evaluations.
We've developed and implemented
effective corrective
actions by utilizing
cause evaluation experts
and industry peers for reviews.
In October we had an
independent assessment team
made up of nine nuclear
industry leaders brought
in to assess not only
our corrective actions
but our progress. Their
action report in December
concluded that with the
completion of our remaining
corrective actions, SONGS

has the tools and the
organization to safely resume
fuel transfer operations.

We are committed to
ensuring that our corrective
actions are sustainable,
through effective reviews and
the use of our Corrective Action Program.

We are also committed
to ensuring that work is
performed to high standards
and to protecting the
health and safety of the
public and our personnel.

This concludes my
discussion on the corrective
actions, I'd like to turn it over to Lou.
Next slide, thank you.

- [Lou] Thank you Jim.

Okay so we're changing subjects now,
we're going to reportability.

So the problem statement,
on August 3rd, 2018
we had a rigging event
that disabled an important
safety load control function
while no other support
function was available.

We failed to formally
report to the NRC within a

24 hour period, next slide.

This is the reporting timeline.

This slide shows the

timeline of the August 3rd

event which I'm not going to go through.

But we immediately suspended fuel movement

at the time of the event

and informed the NRC

by phone at Region IV on August 6th.

We did not formally report

to Headquarters but we

had a narrow understanding

of the regulations.

We are the licensee and we were wrong.

Next slide.

So, the root cause and contributing causes.

The root cause is management

failed to recognize

the transition to fuel

transfer operations as

requiring the integration,

familiarization and

application of the 10 CFR

72.75 reporting requirements

into plant processes.

We had two contributing causes.

Contributing Cause 1

was we did not provide the

shift managers with good

guidance and training on

implementing the requirements of 72.75(d).

This resulted in a narrow understanding of the regulations which complicated the decision making process on August 3rd, and two, we were not consistent in ensuring management expectations where a conservative bias for reporting were understood.

The staff had different views on the requirements to report.

Next slide.

So under the extent of condition of the root cause:

For extent of condition we had a few issues entered in the Corrective Action Program since the beginning of fuel transfer operations.

We interviewed key SCE and Holtec personnel to identify any other reportability lapses, this review identified two additional issues that were required to be reported and this has to do with the HI-PORT and the HI-PORT is just the heavy hauler that travels from the spent fuel pool to

the ISFSI pad.

Two issues with the lateral clearance of fixed objects and the height of the center of gravity. These issues were reported on December 20th, 2018 to the NRC and have been corrected.

Next slide.

The extent of cause.

For extent of cause, we looked broadly at reportability requirements associated with decommissioning activities.

We will enhance training to ensure that shift managers and staff have knowledge and guidance necessary to make timely decisions on reportability.

Additionally, as the Plant Manager I am personally involved as is our Chief Nuclear Officer in ensuring the site embraces a bias for reporting when there is not a clear consensus on reportability of the mission.

Next slide.

So immediate corrective actions.

We have trained the shift

managers and regulatory personnel on this event and the 10 CFR 72.75(d) notification requirements. And we revised our procedures. So we made two significant medium changes as a result of this event. One, we now have a conference call if the shift manager has an issue, with the Senior Plant Manager, Ops Manager, Engineering Manager and NRA Manager. And two, we're continuing a bias to report to the NRC whenever there is a question about the requirement to report. Next slide. So planned corrective actions. We're going to provide enhanced 10 CFR 72.75 training that includes a number of issues. The design basis events, analytical limits, important to safety components and identifying potential failures. We're also establishing biannual refresher training requirement for

reportability so that we ensure that we have sustainability.

Next slide.

So planned corrective actions continue, and the difference is the future corrective actions are more broad so it's going to be the planned corrective actions are reinforced, the shift manager is the person responsible for the final decision on reportability and two, create a reportability check off sheet to be used by the shift manager when needed for reportability calls.

And two, we're going to take a broad look at 72.75 requirements associated with other regulations, associated with extent of cause.

Next slide.

Under effectiveness review, after the required training is complete, SCE Shift Managers, Plant Manager, Operations Managers, NRA personnel and Engineering Manager will be given real

time reporting exercises
once a month and success
will be based on three
consecutive months with no
incorrect reportability calls.
Also, appoint a skeptic at reportability
conference call meetings.
Next slide.

So this slide, through
slide 69 are provided as
a line-of-sight matrix for
the cause/action correlations.

These are submitted for
the record, but it is not my
intent to discuss the
details of each slide.

Please go to slide 68.

Okay, so conclusions.

We conducted a thorough
root cause and developed
effective corrective
actions by using cause
evaluation experts and
independent peers for review.

We are committed to
ensuring that our corrective
actions are sustainable
for effective reviews
and use of our corrective action process.

We are committed to ensuring

work is performed to
high standards protecting
the health and safety
of personnel and the public.

That concludes my area of reportability,
I'm going to turn this over to Al Bates.

- [Al] Thanks Lou.

So I'd like to review the
regulatory considerations
for the two apparent violations now.

Slide 70 please, okay.

So, first of all, looking at the loss of
redundant load protection
apparent violation.

There were no actual safety consequences,
no one was harmed, as you heard
earlier in the presentation.

The vulnerability itself
lasted for a short period
of time, less than one
hour, and then the canister
was safely recovered and stored.

If the canister had
dropped, as we had shown
earlier in the presentation,
the canister remains
intact, there would have
been no radiological release,
and under a postulated
canister drop, no harm to

the health and safety of the public.
However, putting a canister in a situation
where it could have
dropped is unacceptable
and we have taken strong
corrective action to
never let that happen again.
We ask NRC to consider
these factors in determining
the final severity
level. Next slide please.
So next the second apparent violation,
reportability of the event.
Considerations include the
impact on the ability of
the NRC to perform its
regulatory oversight
functions and willfulness.
All downloading work
was immediately stopped
once MPC 29 was safely secured.
The NRC was notified informally
and thoroughly briefed
on the first and second
working day after the event
and there was no intention
to hide, and this was
not a willful act. The NRC
have performed a special
inspection as a result of

the event and have access to all the requested personnel and all the materials. SCE maintained frequent and transparent correspondence and communication with the NRC following the event. And the industry was notified shortly after the event. We ask the NRC to consider these factors when determining the final severity level of this event and this violation. So in terms of the overall regulatory considerations for the two violations. So SONGS has had no violations in escalated enforcement in the last two years. The redundant load drop protection violation was self-revealing. The reportability violation was NRC-identified and as explained earlier in the presentation, we have taken comprehensive robust corrective actions. We believe in many

areas the corrective actions are industry needed. When characterizing the two violations, SCE believes that the loss of redundant load protection and the reportability of violations could be considered a single problem with two examples. Next slide.

In looking at the NRC's Enforcement Policy manual, we believe as I have said, that the violations represent two examples of single problems stemming from the same event and therefore both violations can be considered concurrently running through the full diagram together, not one after the other. Looking at the diagram, the diamond shaped conditional block on the left asks the question, first willful Severity Level III in two years. As I said, we have not had a Severity Level III violation in two years, and

neither of the violations
was- (Inaudible) Non willful violations, sorry.
And then, so the answer
was yes for both of these
violations. The next diamond block
we covered asks the question,
credit for corrective actions.
As discussed earlier in the
presentation, we believe
we have shown for both
violations, comprehensive,
robust, sustainable corrective actions.
Therefore, full credit should be given for
the corrective actions
for both violations,
and the question is answered, yes.
Now we'll turn it over to
Doug for closing remarks.
- [Doug] Thank you Al.
So the San Onofre team
today has brought a lot
of details around the August
3rd downloading event,
what we've done to
improve, and further, how
we have addressed our
reportability knowledge processes.
In summary though, in
conclusion, I would like to
reinforce that SCE takes

the violations, and this incident, seriously. We have performed extensive cause evaluations and implemented timely, and what we think are effective, corrective actions. We will be demonstrating the effectiveness of these corrective actions to the Nuclear Regulatory Commission during upcoming inspections. The incident did not create nor have the potential to create a radiological hazard to the public or our employees. So that's the end of our planned remarks for today, thank you for the opportunity and we'll move into the next section. Thank you Scott.

- [Scott] Well thank you for your presentation, I know it was very helpful for me to understand the scope and depth of the corrective actions you've taken and the significance evaluations that you've performed,

clearly these are significant issues or we wouldn't be here today, a lot of elements to consider and clearly we rely on licensees to meet all of our requirements all the time, because we're not there all the time. You own the license, so it's your overall responsibility to ensure the public health and safety. So that's why these issues are serious and we're here today, so again, I think your presentation was very helpful to help us better understand the scope and breadth of your actions. Nonetheless, as you might expect, I do have a few questions, I'm sure the staff here does as well. I'll just start if that's okay. I was obviously taking notes while you were speaking. Let's see, some of which you have subsequently answered in many of your slides so some of those are no longer applicable. You mentioned at one point

that the shield ring was
analyzed and can carry
the entire weight of the loaded canister.

And I guess, I mean
that was demonstrated on
August 3rd. I'm curious
though, was that an analysis
that was performed before,
was that a later analysis,
has our staff looked at
that, have we seen that?

We have seen that, okay.

- [Linda] Yeah but I think
it's still worthwhile
Scott to maybe have Southern
California Edison answer
your first question whether
that analysis was done at the
time that the design was
changed or subsequent to the
August 3rd event.

- [Scott] Right.

- [Jerry] So subsequent
to the August 3rd event we
asked Holtec to do that
analysis, so the analysis
that I was referencing was
afterwards to confirm it.
It doesn't mean that it
wasn't part of the original

analysis.

- [Scott] I'm not sure what you mean by that last, the end.

- [Jerry] That would mean that you would have to direct that to Holtec.

- [Scott] Oh I see, I understand. Thank you. And with respect to all the analysis that you did, Jerry, with respect to the significance evaluation, have those been provided, did we have those evaluations, have we seen those, do we have those evaluations or is that going to be part of our follow up inspections?

- [Man] As far as the shield ring is concerned?

- [Scott] All of them, the ones about the canister drop, the impact on the fuel cooling, all that kind of stuff.

- [Linda] I think some of us do have questions on those, and to clarify that for members of the public who may be listening, Southern California Edison has

provided several analyses following the August 3rd event to the NRC, many of them were completed by its contractor, Holtec, to the extent possible we asked Southern California Edison to redact some information so that the documents could be placed in a non-proprietary version in the NRC's public docket room, so, there are some, the drop analysis is available on the Spotlight page and in NRC's ADAMS, the electronic docket system, there is another analysis, there are a few analyses that we'll ask questions about this afternoon that remain proprietary.

- [Scott] Yeah, I mean I think that it's appropriate that we do some independent look at that, that's really my point. I wanted to make sure that we had an opportunity to see that, I didn't know if we had seen it, we all hadn't seen it yet or not, so.

You mentioned the changes to the Corrective Action Program and having a single program, combined program, and lowering the threshold, and providing training on how to use it, et cetera, one thing I didn't hear is, when the issues come in and are documented, I don't know what you call those documents, condition reports or whatever, but whatever you call it, how often do those get reviewed and by whom?

- [Jerry] Yeah so we use a system they're called action requests, we call it the AR system, all action requests are reviewed every business day by a screening committee, and the screening committee is leaders including the Operations Manager, Engineering Manager, Plant Manager typically, CAP Manager, so there's some core key individuals that must be there to have a quorum to review those and we also

invite Holtec personnel
to sit in on that discussion
so we have a clear
understanding of the
issues we've identified.

- [Scott] Thanks for
that, so what decisions,
what range of decisions
might you make after having
that screening review?

- [Jerry] So during that
screening process we would look
at the description of
the issue itself, the
grammatical understanding
of what was observed,
what the issue is, we would
also look at the significance
level of that issue, whether
or not that issue is a
CAP item such as a condition
adverse to quality or condition
adverse to regulatory compliance
and then we would also
assign the actual assignment
to an individual as
an owner and then in many
cases we would escalate
that also to a manager
to own the overall issue.

- [Scott] Thank you. Do you have a-

- [Linda] Yeah I have a
remaining question and
you may want to elaborate
a little bit more.

- [Scott] By the way
Linda, we're not following
our own rules which is
that you identify yourself.

- [Linda] Thank you, I'm
Linda Howell, the Deputy
Division Director.

- [Scott] I'm guilty as well, so.

- [Linda] A clarifying
question, if you could
explain in a little more
detail since we have some
members who are observing
the conference and don't
have the benefit of having
some of the information
we've taken, how your current
process, the enhancements
that you have done to
the Corrective Action Program
which you hold high in the
programmatic changes that
you've made, differs today
from how it was being
conducted on August 3rd

and along with that,
some specifics on how you
ensure the field change
report that might be
implemented by a Holtec employee
makes its way to an AR report
and what's done with that
and then I'll follow up
with another question.

- [Jim] Okay, so Jim Peattie,
I'm the General Manager
of Decommissioning Oversight.
Previously I was the
CAP Manager, so.

Prior to this change,
Holtec was authorized to
do their work in their
Corrective Action Program.
They utilized a field
condition report process.
What we did earlier in
the project, based upon
our previous issue, we
decided that all field
condition reports, upon
their generation, would then
be copied into our
Corrective Action Program for
tracking, not necessarily
for assignment of our

actions but mostly to ensure that we understood the issue, the significance of the issue that was identified in the condition report and ensured that an order was assigned with Holtec that we would follow that. The biggest change is the field condition report process in place could not be implemented at the craft level, the Holtec field condition report procedure process allowed it to be executed at the supervisor and project manager level. All right, so a craft person on the project could not generate an FCR without going through management, going through supervision. So that was fundamentally, what we considered a gap in how our process works. So one of the biggest changes was, first off, recognizing that that procedure itself had some weaknesses overall. The

July 22nd event, within the definitions of procedure, would not clearly require them to generate that FCR and that was essentially the position taken whereas ours would say that was definitely an unexpected condition, we would have expected that to be generated. So that was the first change. The second piece to that was, Oversight also was aware of the issue previously of July 22nd, there were Oversight specialists who were aware of the issue but because they were reliant on Holtec to use their process, they didn't take it upon themselves to identify the issue within our station program, so that was also a gap.

- [Linda] If I could just ask you to clarify a couple of things on this Jim just for the benefit of the audience, if you could just very briefly,

a few sentences, remind everybody what the July 22nd event, I don't really know that it was an event, and then go ahead and go on.

- [Jim] On July 22nd we have documentation within our turnovers that there were unexpected conditions, issues that had to be dealt with during the download of a canister. During that canister download it took an extra hour, hour and a half to get the canister downloaded. And in fact there is documented hang ups in the Cask Transport Operator during that evolution it observed a unloading condition. So they followed their procedure, they escalated it internally, they had notified their project manager, they got additional supervisors and ultimately within an hour and a half they were able to recover and lower that canister safely. What

didn't occur is that condition was never identified within either of the corrective action programs to be followed up.

So essentially, management in our case was unaware of that actual issue until we went backwards for root cause (inaudible).

- [Doug] And perhaps Linda, and Jim just for the benefit of the audience again, during the July 22nd incident the load was always supported, the slings were never what you would call slack sling conditions and that's different from the August 3rd event.

- [Jim] Yes.

- [Linda] Thanks for adding that, that was some of the additional feedback. Maybe you could help us understand some of the specific actions that you may have taken to address the transition from going from two Corrective Action Programs or at least

documenting issues to a single program. You noted that the field change report process previously in use by Holtec, who is your contractor, had the potential for the craft workers who are really, you know, the majority of the people who are out there on the pad, doing canister downloading, to not have been able to raise issues up, so now that you've transitioned to a Southern California Edison Corrective Action Program what steps have you taken to ensure that the contractor has trained his craft people to ensure that the information gets to the right level of supervision so that you can ensure that it gets into your Corrective Action Program.

- [Jim] Right, so as the Corrective Action Program Manager I specifically had the existing Corrective Action Program revised, the training

material revised, that was number one. We then delivered that new material, including the recent lessons learned to both the Holtec personnel, all personnel including all the craft people personnel on site and I personally delivered that training, so essentially I was the one who presented the material, and I answered any questions. So that was the primary. The second thing is we took it upon ourselves to go put in computers in their actual craft briefing locations such that the craft personnel had access to the computers and those computers allow them to write an action request anonymously. We were more interested in them writing the issue and putting it in the system than to have to log in and have to put in a name. And we communicated that in the training, we want your input. We've had numerous

action requests written.
Very low threshold, like
the need for batteries
for devices, very low
threshold, so it appears
that it's working. But along
those lines, we're also
weekly going out and
reinforcing during those Holtec
craft briefings what's
occurred. What we've seen,
what's been generated through
the action request system and
providing that feedback to
individuals on what's being
done about the issues
that are raised and that's
an ongoing action that
I'm also tracking as a
CAP action in my change management plan.

- [Linda] Okay. Thank you
Jim, Linda Howell again.

- [Eric] This is Eric
Simpson, I was the lead
inspector for the special
inspection out at SONGS.
You've mentioned the
Corrective Action Program
and how it is now, a single
Corrective Action Program

that will encompass
Southern California Edison
with whatever contractor
they are using, Sonic,
Holtec, how do you communicate?
See, as an inspector,
I know what a low
threshold looks like and a
Corrective Action Program
has it, by reviewing
the corrective actions that
come in for a period
of time, how do you train,
how do you communicate
to bring up low threshold
incidents into the
Corrective Action Program?
- [Jim] I think the primary
means is you provide
examples to them of what
low threshold means.
And then secondary, we do
observations so my Oversight
personnel do observations,
those observations are
looking for low threshold
CAP treated follow up. Right.
If they see issues in the
field, right, where the
craft people are generating

those, are those issues being generated during the observation process. Additionally, SCE management is now in the field, so we're spending quite a bit of our time in the field, also following up with how CAP is being implemented and are our corrective actions or our action requests being generated at the right threshold. So I would say that's to ensure that there's consistency going forward.

- [Eric] So essentially you're saying you also know it when you see it and you see improvement already in lowering the threshold, items being addressed into the Corrective Action Program.

- [Jim] Yes, that is correct.

- [Scott] I'm going to switch topics. I have a question about, this is Scott Morris, I have a question about the, in the process of downloading the canisters into the vaults, because of the shield ring, because of the

tight tolerances which you actively demonstrated today, there is a high likelihood of impacting the canister itself on the shield ring or other parts of the vault, which induces potential flaws, scratches, call them what you will, and I know there's been some evaluation done around the impact of those scratches long-term, short-term, long-term, and I know we've had some conversations, the NRC staff's had a number of conversations with Edison about that. I guess, what my question is, so with that as sort of a preamble, my question is what, because of the propensity to induce scratching because of this design, to what extent have prevention measures been put in place to mitigate or otherwise prevent or minimize the frequency and/or significance of those scratches?

- [Jerry] Okay, so the

significance of those scratches,

I'm sorry Jerry Stephenson,

Engineering for SONGS.

The significance of the scratches has been
evaluated in great detail.

We have not done anything
to mitigate those scratches
because they are so
minor in the first place
and there's no need or
feasibility to reduce it
further so we calculated
that the depth of the scratches using very
conservative analysis is
the thickness of a couple of
sheets of paper at the
worst. We've documented
their existence in the
design, we've added them to
the FSAR and addressed them
in the 72.212, so they
are now officially part
of the design. Okay.

- [Scott] I just want to make sure I
understand that question.

Or that response, this is Scott again.

You captured the
occurrence of scratches on
canisters as part of
the design, it's like,

in other words, it's a
given, it's going to happen
based on the way canisters are manipulated
and the evaluations found
their significance in
your words, not your
words, my words, it's okay,
and we've captured it
in our design document.

Is that what you're-?

I'm just trying to make
sure I've heard it correctly.

- [Jerry] We evaluate- I can say it's been
very thoroughly evaluated,
it's well below the
size of the defect
allowed by the ASME code,
it's well within the
manufacturing tolerances that
Holtec uses in the shop for fabricating
these canisters and it's been thoroughly
documented and evaluated
and will be of course
monitored by our inspection
and maintenance program,
and (inaudible) aging management.

- [Tom] This is Tom from
Oversight. You might have
mentioned the improvements
for the procedures and

the alignment of the
canister to minimize the
incidental contact on the download.

- [Jim] Right, as part of the- I'm sorry,
this is Jim Peattie, General Manager of
Decommissioning Oversight.

As part of the procedure
review changes we recognize
that the centering
of the canister within the transfer cask
was essentially a critical
step prior to download,
so there is additional
steps that are captured
within the procedure
now, focused on ensuring
that the canister is
visually centered before you
attempt to do any downloading
of the canister so
hence the presence of
additional spotters and
that actually takes us
a little bit more time
because we want to spend
as much time as possible
ensuring that a hang up
doesn't occur through
preventive measures by ensuring
the canister is centered

before we download it.

- [Scott] So thanks for
that, this is Scott again.

So that's done before the initial lowering
or that's done when you get
to the, I think you said
the 216 inch or lower.

- [Jim] That's done
before we do any lowering
essentially as you open the
mating device gate and it's
free hanging, validate that
it's centered, and at the
216 inch just above the
shield ring, you evaluate
again that it still
appears centered before you
continue downloading.

- [Scott] Did you have
any follow up questions?

- [Linda] This is Linda,
I do have a follow up
question, and perhaps Jerry is the one to
answer this. You
mentioned that you've done
extensive analysis and
I think that analysis,
are you referring to the
scratch analysis, okay.
So, that analysis was done

based on the NRC's prompting following the August 3rd event, it's based on a slightly different technique than some of the other analyses and its largely based on engineering judgment but the question that we have because the information that was given to us by Southern California Edison employees, the Holtec contractors is that it was not uncommon. And this is documented in our special inspection report for the canisters to come in contact with the CEC even when they were well aligned, something different from the August 3rd event, as they were being lowered to the CEC height. What gives you confidence that the calculations that you've done in that scratch analysis are really and truly representative of the body of canisters that has already been downloaded. Have you done

any additional physical testing, or are there plans to do physical testing to ensure that those canisters and future canisters that you're going to download even with better central alignment are going to be within the manufacturing tolerances that are accepted and assessed as part of the COC design basis?

That is a long question,
I apologize Jerry.

- [Jerry] Yeah so, the calculations that we did were very conservative, they were by established methods developed in the 1800s, it's not new evaluation techniques and we have high confidence that the numbers are very, very well-bounded by the design. We also-

- [Tom] Jerry- again this is Tom. Let me interject. So as Jerry is describing, we do the specific analysis that we've done (microphone fades out)

When we've looked at the
downloading activities,
the depth of scratching is very shallow,
I think we've provided
information that shows
a protective oxide layer forms relatively quickly
in that environment on
one canister's surface.

And as Jerry noted,
we are implementing an
inspection maintenance program
somewhat similar to a
NRC aging program (inaudible)
so we factor all this in
to the need in future
to look at some physical
activities on scratching.
But that provides the basis
for our confidence and
certainly if the staff
has more questions we'll
be glad in the future
to answer those questions for you.

- [Linda] Okay thank
you Tom, it looks like
you're prepared.

- [Doug] I'm just going to follow
up and mention pretty much
what Tom just mentioned
regarding the issue.

We're looking at it, we fully expect as part of our inspection program which will be implemented before November 2020 to take a look at this and so I think as Jerry indicated, we're well-bounded, we have a good analysis, it's a conservative analysis yet we're still interested in it and so we still want to look at it and that will be part of our inspection program which, we indicated, prior to November 2020 but also taking into consideration the NRC's aging management program well in front of that.

- [Linda] Thanks for that addition Doug, we discussed preliminarily some of your plans in that area. I'll leave with that, we may have additional questions concerning the scratch analysis, we have looked at it, it will be part of our continued inspection activity so we'll see if we have

additional questions here this afternoon but we'll probably be looking at it further.

- [Scott] This is Scott again, I've got one more question and then I'm going to yield. The other question I had had to do with, I think it was on slide 54 where you're talking about extended condition of the reportability issue. And specifically the first bullet on that slide, it talks about in the course of the extent of condition of the reportability issue, the two additional issues associated with HI-PORT were noted.

I assume you mean two additional issues associated with reportability or is it-

- [Jerry] Yes, yes.

- [Scott] Okay. And thank you, so, I'm not personally familiar with these other issues, are these lateral clearance of fixed objects, height of center of gravity, this is with the transfer vehicle, while moving the transfer cask.

- [Tom] That's correct.

- [Scott] I'm just trying
to understand from a-
what made those reportable?
And what, well only just
answer, start with that.

- [Lou] Okay, so, during our review,
this is Lou Bosch, I got that right.
So during our review
of the reportablility,
we looked at a lot of
other issues out there.
One of them had to do
with the actual physical
movement of the HI-PORTs,
the, this is the
heavy hauler that goes
from the spent fuel pool
to the ISFSI, that it actually
traveled too close, okay, to
some of our fixed objects.
Okay, so then we reported
that under the same regulation
72.75(d) (1), okay,
and we sent that report to the NRC.

- [Scott] So, just to
clarify, so what made that
reportable because
presumably something in your
design or licensing basis

is specific to the lateral distance allowed during the movement of that cask?

I apologize, you know, I don't have all the details of your exact license.

- [Lou] So, it was, I'll just read it to you here, it says the HI-PORT lateral clearance between the transporter and other structures did not maintain in accordance with the procedure directions, it was less than the analyzed clearance limit, and because of that, the analyzed clearance limit, that's why it made it reportable because it failed its function.

- [Scott] So, I'm not going to go down this rabbit hole too far, but, so there's a body of questions around that issue and what was that about, how significant was that, and I presume our staff is working on those issues with you?

- [Linda] Yeah, I'll supplement that.

There are criteria in the COC that requires a specific vertical height off the ground, as well as the lateral distance away from a big structure and in doing the extent of condition, Southern California Edison made the staff at Region IV aware that those criteria may not have been met, and so that will be part of our future inspection activities prior to making a decision for resuming fuel loading operations because it is considered part of the-.

- [Scott] Okay, that's fine.

- [Al] Yeah and this Al Bates, Scott, to put that into context, that particular issue had been entered in our Corrective Action Program and then when we did the extent of condition, in other words applying our new criteria for our new threshold for reporting, we found this issue.

- [Scott] I see.

- [Man] And that's how it ended up in the, as we report.

- [Scott] And I don't want to get ahead of our inspectors but I would surmise there is probably, we've got a quite a few questions about that I would imagine so we'll, that'll be captured as part of our follow up, okay.

That's all the questions I have for now, let me defer to you Linda.

- [Linda] Okay, thank you, I'm just going to do a follow on here so maybe we can move past reporting issues.

In the Corrective Action Program when we have gone through the matrices that you provided as part of your presentation, I know we didn't talk about it, or you didn't talk about it in detail here this afternoon, but one of the questions that the staff has concerning the upgrades or revisions to the

Corrective Action Program
relative to reportability,
in your daily meetings
that you have now expanded
are you looking at those
entries for reportability
criteria as well? We want
to understand the full
extent that you're
examining reportability.

- [Lou] This is Lou
Bosch, so every morning
we have a screening
committee, and every AR
that's written gets screened
for significance and
reportability, so every one
of- every AR that gets written,
I personally look at on a daily basis,
I look at it and
then we actually have a
management team that actually looks
at this and they screen it.
One of them is its
significance, is it corrected,
is it part of the CAP system, is it a
condition adverse to regulatory
quality and, we also
look at reportability.
The shift manager every

day in real time looks
at these for reportability,
okay, so we're kind of
a back up, the shift
managers looking at it in
real time.

- [Linda] Thanks Lou, I
just wanted to make sure
that you had the opportunity
to get that on the
record since that is
part of your corrective
actions for that apparent violation.

I'm going to turn this
over to Janine in case
she has any questions.

- [Janine] Sure, again,
this is Janine Katanic.
And I did want to go back
to the scratch analysis
if you don't mind so you've
discussed the enhancements
that have been put in
place, and Jim, you talked
about making sure the
canister was centered and
the things you're doing in that regard.
So is it the position that
there won't be scratches
in the future, or given

those very tight tolerances
of a quarter inch, are we
just still accepting of
yes, there will continue to
be scratches going forward?

- [Jerry] This is Jerry Stephenson.

Yeah we put these
scratches into the design
as a potential, not that
they are on every canister,
we don't know if they're
on every canister but there
is the potential for
scratches on every canister.

They've been evaluated,
the same evaluation that we
did applies to every canister.

- [Tom] This is Tom Palmisano, I
would add that the way
we look at this, the incidental contact,
the potential we have for
every download, some
downloads we may not have
any incidental contact but
practically there would
would be incidental contact as there are
for many dry cask storage systems. So it's important to
recognize that as Jerry
said, any scratches
that would occur are well within acceptable limits

and monitored

in the inspection report.

- [Janine] Okay and then
Tom again, this is Janine.

So all that that you've
just stated again is based
on a engineering judgment,
it's just not based on
actual inspections to
confirm that judgment.

- [Scott] Listen I don't
want answer for you but
I will, I think what I heard,
Janine, was the evaluations
that they did were, there
was a calculational
methodology employed, and
it's not just judgment.
That's what I heard, just,
I'll give you an opportunity
to -

- [Tom] I think this
is something that warrants
further discussion but it
is an engineering evaluation. It estimates
the worst case scratch we put it on
canister 29 and found (inaudible) to be
acceptable.

- [Scott] Okay.

- [Janine] I did have a question

in the area of Oversight.

I heard some of the numbers regarding how many Oversight personnel there were and some of the changes that have been made to the training for the Oversight personnel and just as a matter of function, will those Oversight personnel be present during the entire downloading ops or are they people that kind of come and spot check and leave.

- [Jim] This is Jim Peattie.
So the answer to your question is the procedure for downloading actually has the requirement for Oversight to be there.

That one procedure actually has repeated direction for Oversight to be there.

I would also tell you that not only downloading but other canister lifting activities that are medium-high risk, will have an oversight person there, 100 percent of the time for a pre-job brief

through to the end of the actual evolution.

- [Linda] Just a follow
up question on that one.

This is Linda again, I
didn't want to stop you
during the presentation
because I advised everybody
not to do that but in
the video for the changes
that you have made to
equipment and downloading,
could you maybe elaborate,
Jim, for the record,
the true changes you
talked about, more people
in the aerial lift, you have more
people at the VCT control
panel, you now have,
you know, greater ability
to truly monitor the
load but one of the things
that we noticed back
on the August 3rd incident
is that the people who
were supposed to be
monitoring the downloading
basically reduced people
on the pad to two
people and they weren't
really monitoring the

things that we would
have expected, and hence
they didn't notice that
the slings had gone slack.
So, what have you modified
in the downloading
procedure that ensures
that the riggers that
you've got positioned
on the aerial lift will
actually be able to view
in addition to the camera
since you have an
expectation that they are
part of your safety net, the canister
being centered before you actually
lower it down and that
the supervisors will
be able to actually observe
what's going on in a little
more closer fashion, I'll
just turn it over to you Jim.

- [Jim] Yeah so if we go
back to the August 3rd
event as you mentioned,
there was really only one
person that had the
ability to visually monitor
the download activity, right, and that was the
individual that was in the aerial lift.

That individual at that time was not a rigger, they were not qualified as a rigger, they were just a JLG Operator, an aerial lift operator, assigned the duties of a spotter. So what's changed? The procedures been changed now such a they use a pre-scripted pre-job brief. So all the details of lessons learned are all discussed through the pre-job brief as you go through each item. The procedure itself actually lists every required position to execute the download activity. So it identifies the riggers, the Rigger in Charge, the VCT Operator, the Cask Loading Supervisor, the Oversight specialist, every single position is now described in the procedures required here, and they're actually acknowledged. In addition we've put two personnel who are responsible to visually observe the canister physically

going down, so those two individuals are ideally in two aerial lifts but the procedure allows for them both to be in one single aerial lift to monitor, both doing the download observation.

In addition we have the camera.

The camera allows the supervisor to observe essentially what the rigger in the JLG is seeing.

Right? So now the supervisor can ask questions through the headset communication on what the individuals are doing, confirming that he sees what they see, when they say the canister is centered, and then lastly we put a physical tag-line also maintained by a rigger by procedure who understands that, I should expect to see the line move during different downloading activities.

So essentially we've increased from the single person operation to a six

person operation and in addition we've mandated Oversight presence there and I also mandated two Oversight person. One person to directly engage with the CLS, or the Cask Loading Supervisor, and an additional Oversight person to stand back and be that third party observer overall of how the process is doing.

- [Linda] Thank you.

- [Janine] And Jim, this is Janine again.

I appreciate your discussion of all of the enhancements that were made, such as the camera, the load indicator, so those types of equipments and enhancements that have been made, if any of them were to fail during a downloading operation that the camera goes out, the load shackle fails, what would be the process, how would that be handled?

- [Jim] So in the procedure,

those events such as the
loss of a load monitor occurs.
The procedure now drives
the individuals to stop
the work and go to
the abnormal operations
procedure and in that
procedure it will detail
exactly what you're
supposed to go do, what are the steps.
And those steps would
depend on where the position
of the canister is in
relation to the download.
If the canister is in the
position above the shield ring
and you lose load monitoring
the safest position
might be to put it back
within the transfer cask
and close it up. If it's
within the shield ring
on its way down, the
safest position most likely
would be to continue
lowering with additional
sensitivity to visually monitoring that.
But those are now all captured within the
procedure and we've provided gap training
last week to the downloading crews on the

transition between the two procedures.

Additionally during that training we utilized our Oversight personnel to participate in that training so there's a clear understanding between the cask loading supervisors and our Oversight personnel on how those procedures are to be executed.

- [Janine] Thanks Jim, I appreciate that. Another thing I wanted to ask about was, and I was there as an observer during the special inspection but one of the documents that the Special Inspection Team had reviewed was the SCE Program for Abnormal Occurrences and how, you know, this August 3rd event just did not fit into that process so have there been changes made to that Abnormal Occurrence Procedure and, you know, have the experiences from the August 3rd event and the July 22nd incident, have those things been taken into consideration in updating that?

- [Jim] I'm going to have to get back to you

on that Janine, I'm not sure, are you asking about the reporting procedure in which case we review an event to determine how we report or an actual procedure that SCE has-

- [Janine] No there is a procedure for, and I think Tom or Al, you may know what I'm talking about, where there's a procedure that says, if a canister is damaged do X, but there were no criteria for entry into canister damage so in this case, you know, there could have been damage to the canister but that procedure was not entered to and so, has that procedure been enhanced as to what might constitute entry into that procedure?

- [Tom] I think Jim's right, what is (mic interference) we'll provide an answer after the break and if not we'll get back to you.

- [Scott] That's fine. That will be good.

- [Linda] Okay let me do just a few more questions and then we might be ready to caucus. You noted it and I appreciate, you know, your going through several of the analyses, under the safety significance portion of your presentation I think it was around slide 19, you did note that one of the analyses that you completed, although it indicated that there would be no breach of the canister, had a drop occurred on August 3rd that there may have been some fuel damage and hypothetically speaking, I mean, the canister was not dropped, I'm going to make that absolutely clear but hypothetically speaking, knowing what you know today and even with the improvements that you've made, are you looking at any contingency planning should that occur, you know, what you would do if a canister

inadvertently did drop during
downloading operations?

- [Doug] This is Doug
Bauder, so we would as
the procedures would
direct, would stop and
place all equipment at a safe
condition. Hypothetically,
if the canister dropped.
However if that was
to occur, as Jerry
indicated there would be a
potential for fuel damage
inside the canister.
There would be no canister
breach so no release of
radioactivity, no threat
to our employees or
to the public and so since
we know that, we know
that's the case, after
placing the equipment
in a safe condition, we
would have plenty of time
to develop a strategy
as it's such a low, such a long-term
event for us that we would
have plenty of time to
back off, develop a strategy,
engage the appropriate

vendors with specialty equipment, if needed, to address the next steps for the canister and you know, we know that the canister would also remain cool and there would be no criticality inside the canister, there is no moderator that would be introduced during an event like that because the canister stays sealed so, once again, the canister would be in a safe condition and it's a long-term issue for us to deal with at that point.

No threat to our employees or to the public.

- [Linda] Thank you Doug.

- [Scott] I think we're, what questions do we have that haven't been answered?

We're going to caucus very briefly we'll take a ten minute break, tops, and we'll be back here at 20 after the hour, and if we have a couple of extra questions we'll ask them otherwise we'll

go ahead and close up the meeting.

For those of you on the
webinar, we're going to go
silent for about ten minutes.

- [Linda] For NRC staff who are-

- [Scott] Okay, we're back.

As you might expect we do
have a couple of follow up
questions, I'm going to ask
Chris Smith to go first.

- [Chris] Yeah, hi, I'm
Chris Smith, I'm a Reactor
Inspector from the Region IV office.

My question to SCE is, to
perform the drop analysis
for the MPC for a
hypothetical drop, and we
did review that but the question I had is,
did that analysis address potential stress
cracking or the ability to cause cracks?

I know that the conclusion
was there was no
immediate breach but was there any concern
or analysis of the
long-term crack propagation
that would lead to a
release, because the NRC
study comes up with a non-zero probability
of a release for a similar drop event.

- [Jerry] Okay Chris,

I'll answer the last part first, okay. The NRC analysis you're referring to is NUREG-1864?

- [Chris] Yes sir, that's correct.

- [Jerry] Okay that, the analysis in that document is for a different MPC, an MPC 68, with different internals that significantly increase the stresses.

So long-term, the first part of your question was the long-term potential for scratches.

We didn't- this is a long-term potential for cracks.

We analyzed ductile material and the strain rate, strain limits and concluded it wouldn't crack and being the type of material that it is, we wouldn't expect it to crack promptly.

I'll have to get back to you on maybe some longevity of the design after they drop.

- [Chris] Okay, thank you.

- [Scott] All right, this is Scott.

Janine, you had a question?

- [Janine] Sure. And again, this is Janine, and Jerry, this might be for you.

Again, going back to the scratch analysis,

and just recognizing
that, our greater audience
doesn't have the benefit
of having reviewed
or read that analysis as
we have, can you comment
on what was found as
the worst case scratch,
what width and depth
would be the worst case
scratch?

- [Jerry] Okay, so we postulated a worst
case misalignment. Okay
remember the transport
canister cask that goes
right in the canisters
is very tight fit so
you can't misalign much
so we just took just a
simple geometry and came
up with the worst case
misalignment and then
resolved the forces
involved and the maximum
transverse force that
you can come up with is
about 2000 pounds,
about two percent of the
weight of the canister, okay?
With that small transverse

force, and using
conservative assumptions
on the depth of the scratch,
conservative assumptions
on the different inputs
into the equation and I
reviewed the paper that
was produced and there is
an engineering judgment,
there's a few places where
numbers have to be chosen
with some engineering
foresight and the numbers
were chosen conservatively
which is different
than engineering judgment,
choosing a conservative
number and so using the
inputs that were chosen
conservatively, the maximum
depth of the scratch
with the two percent transverse load is
about 10,000ths of an
inch. Compare that, that's
about as thick as two
to three sheets of paper
and I'll compare that
for the layman to the
acceptance criteria which
is a sixteenth of an inch

or 62,000ths so the acceptance criteria for the manufacturing procedure and bounded by the ASME code is six times the maximum depth that we calculated in the paper.

I don't recall the width of it, I'll have to get back to you on the width but the length of it could be the full length of the canister.

- [Janine] Okay, and again, this is Janine and just given that, given the scratch analysis and maybe this is for someone else on the panel, I mean what is precluding Southern California Edison from actually examining the worst case canister that's out on the pad currently?

- [Tom] Yeah this is Tom Palmisano, as I said, this would be an input in consideration of the Inspection and Maintenance Program (inaudible) I think you're all familiar, the NRC's Aging Management Program is required at the 20 year point as

part of the license renewal.
For the Holtec system which
was submitted to an
inspection and maintenance
program much earlier, this
will be one of the inputs
we consider. We see no
need for any immediate
inspection, we think it's
more appropriate to factor
this into the upcoming inspection program.

- [Doug] This is Doug Bauder,
I also want to emphasize
that in a prior statement that
we made, indicated that
we would be inspecting,
I'll choose my words
carefully here, we would
be inspecting on or before
November 2020, in fact our
requirements are to have
the program developed and
ready in place prior to
November 2020. So it's not
a big difference but it's
something we indicated earlier.

- [Scott] Thank you.

That's it.

I had a question, I want
to take you to slide 24,

if we could pull that
up. Basically this is a
statement of your root cause evaluation,
I'm sorry, your root cause for the first
of the two apparent violations and,
management failed to
recognize the complexity
and risks associated with the long-term,
long duration fuel transfer
campaign while using
a relatively new system
design. So, I think what I
would like to focus on,
really the question is,
it wasn't- granted, a relatively
new system design,
right, the UMAX system and
obviously your employment
of that is new to you
certainly. So my question is,
if consistent with your
root cause statement,
if it's true that it's
management failed to
recognize the complexity
and risks associated with
using a relatively new system
design, my question is,
why? I mean it's a simple question but I'm
trying to understand why?

If you have a new design
then it's, you know,
it's, well I don't want to
go too much further than
that because I don't
want to sound overly
pejorative, I'm just trying to
understand, why is it, how is it you
accept that as a root cause?

That's my question.

- [Jim] Yes, this is Jim Peattie.

The root cause of corrective
action for that goes
back to the Holtec
design procedure, the design (inaudible)
procedure and it really,
of the corrective actions
associated with having a
second independent team looking
at it from a site support
services execution side of
the design, more so than
the engineering technical
design itself.

So in the case of the
shield ring, the shield
ring was designed but
that design wasn't
reviewed or challenged by
personnel that had to

go then execute the work
utilizing that new design
so the corrective action there
associated with changing
the design review process.

- [Scott] Okay I think
I understand but it's-
Okay, let me try to repeat back,
so I make sure I have
your answer, clear.

So the shield ring, the
addition of the shield ring
inside the walls was also new, it was an
addition based on, there
was some reasoning that
was applied, presumably for dose reduction
but that introduced additional challenges
associated with tolerance,
clearances and downloading
and so what, are you saying
that management failed
to recognize that the
addition of that shield ring
introduced additional
complexities associated with
the downloading operations
and all the manifestations
of those complexities in terms of training
and procedures and everything else?
Is that what you're saying?

I'm just trying to be clear.

- [Jim] This is Jim Peattie.

So the answer is yes,
that's exactly what we're trying to say.

- [Tom] Scott this is Tom Palmisano,

the addition of the
shield ring is one factor,

it's certainly feasible

to download the canister

successfully with the

shield ring (inaudible).

The real issue in looking at some of this,

looking at the extent of a

73 canister campaign and

the turnover of people

that is going to occur,

I think Jim in his

earlier comments laid out

that when you're doing a five to ten

canister campaign, you

typically have one or two

experienced crews that stay

together during the course

of the campaign, but we

failed to really appreciate

that you'd have of turnover of people

(inaudible)

experience and that's where

the quality of the procedures

and training and supervision, it

became apparent that
we had underestimated the
complexity from that standpoint.

- [Scott] So I'm going to
play that back again
so I understand it. So, the
training, the presumption is,
that the training, the
procedures, the oversight,
was all adequate before,
assuming that it was
a short duration campaign.

- [Tom] And assuming
there was a certain ,say, prior
experience level, and that, you know-

- [Scott] So the root cause statement,
I'm sorry to cut you off Tom.

- [Tom] Yeah and when
you've got a small group
of people on a short
campaign you don't have the
turnover, your lessons
learned are much easier
to deal with, they have
experience, they've learned
the lessons. As you turn
over people in the longer
campaign that's where
some of the weaknesses
contributed to the event.

- [Scott] So, okay. So thank you for that.

So the root cause then
is management failed
to recognize that because
of what you just said,
because it was a long duration evolution,
and because of that, there is turnover,
the changing of the guard, so to speak,
you know, experience
that you might have had
at the beginning was
no longer there because
of turnover, attrition,
whatever, and management
didn't recognize that
that loss of experience,
knowledge, skill, what-have-you, then that
ultimately was why the
quote-unquote, inadequate
training, inadequate
procedures revealed themselves.

- [Tom] Yeah so exactly,
we had procedures and
training that may have been adequate for
the short campaign
but not adequate for
the longer campaign.

- [Scott] Did you have
a follow up on that?

- [Linda] I did, that's a perfect segue,

this is Linda again. You've provided us with a lot of corrective actions here, I know it's not all encompassing, but the benefit of it lies in it gets you on the record, since this is an important element for both of the apparent violations you've identified management oversight as an issue. And there's not a lot of specific corrective actions in your presentation that are directly related to that element and it is related to what Scott was just asking about, so bottom line question is, can you just review for us the corrective actions that directly relate to management oversight because this is not a Holtec activity, this is a Southern California Edison activity, so it's not sufficient to just say, we didn't recognize that they weren't minding the store,

its all of you sitting at
the table minding the store.
And then if you've added
anything into the Corrective
Action Program now that you're using that
maybe a little more
aggressively, or will be in
the future, that also would
capture management oversight
gaps or issues.

And I'll let whoever on
the panel thinks that
you're the appropriate
person to answer.

- [Jim] So I'd like to
start by just explaining
that I am the new General Manager
for Decommissioning Oversight.

I am an SCE employee, I've
been an SCE employee for
37 years, my experience is,
I've been in maintenance,
I've actually been a
refueling supervisor for
I don't know, 13, 14
outages, in fact I was the
Manager in Charge of
safely defueling both units
after we announced the
shutdown, also utilizing

essentially a small crew
of experienced personnel
so, you know, I take this
issue very seriously.
As far as other changes,
I've actually changed
my organization such that
I go back to the model
that works for me which is
Oversight is intrusive,
right, that the personnel
that I put to go oversee
the contractor are in fact in the field
providing guidance to the contractor,
validating that the contractor is in fact
following your procedures
step-by-step, doing
their pre-job briefs, such that
personnel are properly
instructed before they
go out in the field.
In fact, we're doing what
we committed to go do
by our procedures, that is
a full-time responsibility
that I've assigned to my Oversight people.
All right, that is a
separate oversight function
than how it was being performed previously
which was more of a

surveillance activity where
you could plan and then
go monitor and then
basically document what you're observing.
I think that's the primary thing.
In my CAP experience,
the new senior management
observation process where all observations
now have to be entered into
the Corrective Action Program
also helps us ensure
that Management is doing
observations at the level
that Senior Management
would expect right, and
that screening committee
should be challenging those observations
with regard to their
depth, are these management
observations adding value,
are they looking at the
right things, in that
I'll be reporting directly
to Doug with regard to
what we're seeing within
the Senior Management
Observation Program also.

- [Doug] Thank you Jim
and this is Doug Bauder,
I'd like to emphasize a couple of points.

First, although the number of corrective actions around Oversight are not as great as in other areas the impact is pretty high. Some of the key ones Jim discussed, changes in roles and responsibilities, holding his organization accountable. These oversight specialists, some were let go, additional skilled people were brought in, and their expectations to directly coach in the field not just sit back and write an observation sheet. Further, what I've asked for, is a management program for us, that includes me, to be out in the field in teams on a structured basis. So Lou Bosch has put that together. We had our first team in the field last week, I think that's correct, right Lou?

- [Lou] That's correct.

- [Doug] And on Tuesday I spent three and a half hours observing a training download evolution

as we indicated, I had
six or eight comments that
Jim is working through the
process to put in place,
so I completely understand
the perspective here,
Edison owns this, this
is not a contractor issue,
it's our oversight
responsibility, and we take
it serious, I will tell you
that from my perspective
if the right oversight had been in place,
on August 3rd and prior
to that, the other aspects
of shortfalls that have
been talked about here:
procedures, training, they would have been
identified and we wouldn't
have just been relying
on skill of the craft as Tom indicated.
So we talk about Oversight,
maybe the number of
actions isn't as great
but the impact is great.

- [Scott] So thank you for that.

The reason we're boring
in on this issue is
because this is central
to your root cause, right.

So if your root cause is about oversight,
the failure to recognize,
that's why we're trying
to draw out you know, more
precisely, what specific
actions were taken to
address that failure to
recognize, do you have a follow up?

- [Eric] This is Eric Simpson.

I had a question and this
is sort of an inspection
item that we'll fire on you now but, your
Oversight Specialists, are they
going to be in the
field for each and every
evolution or only the most critical tasks?
Or will they be in the
field observing every
task 24/7?

- [Jim] Eric, this is Jim Peattie.

So to answer your
question, the procedures
actually require their presence
in the field for medium
and high risk activities
especially those activities
that have already been pre defined
for lifting. But that is a
requirement by procedure.
Other activities that are

of low risk would not be
a procedure requirement
but it is my expectation
that as long as I have
Oversight personnel
available that they are out
in the field observing the
work activities for that day.

- [Linda] Jim, this is Linda again.
Just for the benefit of the audience and
the benefit of those
of us on the NRC side,
who are participating,
could you just give us
a couple of examples of when
a medium or high risk would be,
so we can kind of understand
what the threshold is?

- [Jim] Yes, so a high risk activity would be
essentially activities
that involved handling
the fuel, so loading of
the canister, removing of a
canister with a NUREG-0612
activity would be a high risk
activity. A medium risk
activity could be a heavy
lift that's outside of
the guidance of NUREG-0612,
so it may not be

handling the fuel but we would still look at that as it's a heavy load, heavy activity, it has risk, industrial safety risk.

We would expect the same behaviors apply.

- [Linda] Okay, thanks Jim.

- [Scott] I think we've reached the end of our questions.

Was there any additional information, Doug, that you or your team wants to provide before we move to close?

- [Doug] I think one item is a follow up to a question that Janine had regarding kind of the procedural flow path we would go through if we had an incident in the dry fuel storage area. So, Jim if you don't mind stepping us through that, or Lou.

- [Jim] Yes Janine, so I think your question was, what action would we take if we found that there was MPC damage, right. The Holtec property procedure

600 which is the Abnormal Operations Procedure has a section in it specific to damage. It does not say canister drop, it's essentially any damage to a canister. That procedure directs the supervisor in charge to place the equipment in a safe condition to move personnel to a safe low dose area, to immediately notify the Shift Manager and Senior Management and then our RP or Radiation Protection Technicians would survey the area for radiological conditions or changes. We would also then write an action request, enter that into our Corrective Action Program with as much detailed information as a supervisor can provide regarding the actual condition, in which case that action request would be evaluated and appropriate action taken, work planned and approved before we

proceed with any recovery.

- [Janine] Jim, thank you for that.

It's Janine and just

to follow on with that,

one of the questions

that underlies all that

is, what is considered MPC damage?

So in this particular

case, it even has been

noted on slide 16 where it talks about the

ductile baseplate locally

conforming to the shape

of the ring, you know,

essentially a dent in

the canister is that something that would

cause you to enter into that procedure?

What is considered MPC damage?

- [Jim] This is Jim Peattie, so, without

having the procedure in

front of me, in understanding

what the definition

within the procedure

was, I can't really

answer that completely,

but I would tell you that

the day of the event,

August 3rd, that in fact

those actions were taken

although personnel may

not have known whether or

not the MPC had damage
or the dent at the time.
So there was a action request generated,
right, to identify that
event which ultimately
led our engineering group to assess it.

- [Tom] So Jim I think
this is probably one
where more- we need to
provide more information
to the inspection team to follow up with
that discussion. Just
to add to what Jim said,
once our Shift Manager is notified, he
assesses the overall
condition, he reviews our
emergency plan for any entry criteria, would
review the radiological
conditions, to ensure
any actions needed on a
broader basis are taken.

- [Linda] Thanks for
elaborating on that Tom,
this is Linda again.
That procedure along with
several of the other
procedures identified in
the presentation, even
though Holtec may have
authored them, I know

they have gone through
Southern California Edison
review, those will be
the subject of our additional future
near-term inspection activities so
just to put that on the record.

- [Scott] All right can I get
the NRC slide 13 up please.

So I'm going to go ahead and
move to close the meeting,
note that, again, as
we said at the outset,
the NRC will consider all
the information we have
obtained today in making
our final enforcement
decision and of course will notify you by
telephone and in writing
which should be publicly
available when we're ready
to announce our decision.

We strive to make that
decision within 45 days,
it could be sooner. At the
outside I would say 45 days.

So what comes next?

We'll make a final
determination as to whether
or not apparent violations constitute
actual violations, and

their severity levels,
consistent with our enforcement policy.
This determination will be communicated to
Southern California Edison
and will be made public.
As we've noted a couple of times, the NRC
staff in Region IV plans
to conduct follow up
inspections to determine
whether corrective
actions are appropriate and adequate to
prevent future recurrence of the issues.
And in addition, the
results of those follow up
inspections will be
communicated to the public
in the form of a public meeting or webinar
prior to or concurrent with the release of
the inspection report.
As Linda mentioned earlier,
a decision on whether or not
Southern California Edison
is ready to resume fuel
loading operations will be
made after our inspection
efforts which I believe
we have planned here
in the next couple of
weeks. That decision will
be shared with the public

during the aforementioned
public meeting or webinar
as well as in writing
on the public record.
I'll remind everyone, that
the apparent violations
discussed at this
conference are subject to
further review and may
be revised prior to any
resulting enforcement action and that any
statements or expressions
of opinions made
by NRC employees made
at this conference, or
the lack thereof, are not intended to
represent final agency positions.

Slide 14.

The NRC is interested in feedback from all
participants and observers
on how it conducts
these meetings and other
meetings, and in particular,
interested in comments
about this meeting today.

We provided written comment
forms which are available
in the back, we invite any
person who has a comment
to complete the form,

please leave the forms
with the individuals in
the back or if you prefer
you can send them in via email or mail.
Persons attending through the webinar
can find the feedback form on our website.
So with that, the business portion of this
conference is closed, thank you.

Slide 15 please.

All right, now that
the business portion of
the conference is
concluded, I'd like to offer
any observers the
opportunity to comment on
the meeting or to ask the
NRC staff present any
questions they may have
about the NRC and/or
our enforcement process.
Doug, you and your team
are welcome to stay and
observe or you're also
welcome to depart, it's
your decision, you're
not going to be asked to
respond to any questions
that we get, so if you're
at the meeting we have
collected comments and

questions through the
webinar application and
in the time remaining
we'll try to answer those questions with a
priority on questions
that relate directly to
our enforcement process.

All questions received via the webinar
will be posted on our Spotlight page on
the NRC homepage, along with closed captioned
video and an audio transcript
of today's meeting,
that will take a couple of weeks, as Linda
mentioned at the outset.

So I'm going to hand this
over to Ryan Alexander
in the back, where's Ryan? There's Ryan.
So Ryan, take it away.

- [Ryan] All right, good afternoon,
thank you Scott, I appreciate it.

My name again is Ryan Alexander, and I'm
actually a member of the
NRC Region IV staff who's
primarily involved with
our operating reactors
and doing inspections and oversight
of those facilities
but I was asked to support
today for the Q&A session.

As Linda and of course now Scott has also

mentioned, our priority in this portion of the meeting is to address your questions related to the NRC's enforcement decision making process.

Now most of those questions that have all been raised have all been from the webinar.

Just for everybody's- and full disclosure, there are no members of the public that have arrived at this meeting that are with us today, so all the questions that we'll be presenting to the NRC staff came from the webinar straight, which myself and several members of the staff have been monitoring throughout the activities this afternoon. So first of all, I want to thank you all for pointing out some of the technical difficulties that we were having at least early on with microphones and volume on the systems. We hope we appropriately

addressed those for you
so you could continue
to participate here as
we went through that this afternoon.
And the other thing is, is that there were
many, many questions that were asked,
most of them, I'll be honest,
were very focused on
some of the technical
aspects which ultimately
either SCE
addressed at least
in its part of the Q&A
session with the NRC
throughout many of these questions.
But as Scott mentioned,
a full transcript of all
the questions will be posted at some point
in the future from this webinar.
What we want to focus on
with the NRC staff right
now is to focus on those
questions related to
the enforcement and
decision making process and
so I'll go ahead and just
pose those questions to staff,
and Scott, and take them or hand them off as
necessary.
One question from one

member of the public,
and these are in no particular order,
is can the public challenge
any NRC enforcement
actions and if so, how?
- [Scott] So really the
only mechanism for the
public to challenge an
enforcement decision
rendered by the NRC is
through what we call,
what we refer to the 2.206
process, it's actually
Part 2 of the Code of
Federal Regulations 10 CFR
part 2, section 2.206 and
that is basically a request
by anyone to take some enforcement action
against a licensee, it's not necessarily a
challenge to a decision
per se, it's another
request to consider an alternate course
of action and that- there is
a very formal process
by which that can be done.

- [Ryan] All right, thank you Scott.
Another question that we received was,
and I think Scott you
may have just touched
on this in your closing

remarks but just to clarify for the individual, what is the expected timeline for the NRC's enforcement actions on each of these apparent violations?

- [Scott] Yeah, so consistent with our own internal metrics and policies, and like I said, we strive to get a final enforcement decision in the public domain within 45 days.

- [Ryan] 45 days, okay, appreciate that. Moving on, third question, a little more technical in nature in terms of the process, is: How does the NRC consider the licensee's failure to identify the July 22nd precursor event in determining the violation, either significance or severity level of the event?

- [Scott] I'll open that up to Linda or anyone.

- [Linda] This is Linda. The July 22nd incident, I don't want to use the term event, has already

been discussed in the inspection report,
and documented the results
of the special inspection
and the other two
apparent violations and it
has been handled in one of
the lesser safety significant
violations at Severity
Level IV, really had to
do with entering information into the
Corrective Action Program, so that has been
dispositioned.

- [Ryan] Along those lines,
there is something that
came in when we were in
caucus with the staff
that also goes back to
the special inspections.

How did the NRC assess the licensee's
implementation of their
fitness for duty program
for those individuals involved during the
August 3rd event?

- [Scott] Eric or Janine?

- [Eric] It was my understanding, and I've
discussed it with the
Licensee, they did perform
a for-cause fitness for duty evaluation
of those individuals
involved in the event and

they both came back negative.
They were not impaired
during this evolution so
there was no fitness for duty
impact to the individuals.
There was no fitness for
duty issue.

- [Ryan] Different line
of question that came up
was regarding what it means,
Southern California used
the term self-revealed in
terms of some of the events,
can the NRC describe what
this means and how the
NRC considers this in
determination
in the enforcement process.

- [Scott] Michael, do
you want to take that?

- [Michael] I'd be happy
to. Self-revealing is a
term that we use when we're
considering identification
credit, some of that is
identification of an event
that was self-revealing
and so when we're looking
at identification credit,
we look at the licensee's

actions in there. Were they self-monitoring and that's how they found it, we look at the ease of discovery, were there prior opportunities to have discovered it, that's the kind of thing we look at for a violation when we're considering identification for that.

- [Scott] But with respect specifically to self-revealing it's an incident that occurs, nobody found it before it occurred, it found you. It's a self-revealing event is, you know, I'm trying to think of a good example.

- [Linda] Let me use the August 3rd example to be you know, very obvious, the redundant safety systems were the slings that were connected to the vertical cask transport system and it was very obvious that they were no longer supporting the load of the canister so that is why we believe Southern California Edison characterized

that one as self-revealing.

- [Ryan] I appreciate the clarification on that.

With that, we actually have one last question that had not been addressed either in Mike's preamble on the enforcement process and it had to do with the NRC's interactions with the US Attorney General or the Department of Justice and specifically, in this case, are the findings turned over to the US Attorney General or Department of Justice for criminal prosecution?

- [Scott] So the short answer to that question is no.

I know that we've had conversations with members of the FBI, maybe Linda you want to just comment on that.

- [Linda] Sure. In this particular case, the NRC has sole jurisdiction over taking a civil action, we have been in communication with the Bureau of Investigations, there has been no expressed interest nor would they

have the primary
jurisdiction at this point in time.
We have coordinated information with them.

- [Ryan] With that I'm
going to look back to my
cohorts in the back, were
there any other process or
enforcement agency
questions that have come up
just in the last few
minutes while I've been up
here that you would share? No.
Okay, we're getting no on
that, so with that, Scott,
I'm going to turn it back to you.

- [Scott] Well remarkably we
were able to get everything
covered within the allotted
three hour window and
I want to thank everybody,
I want to thank the staff.
I want to apologize again to
those of you participating
on the webinar for the
technical challenges you
experienced during this with respect to,
I understand there has
been some feedback and
some difficulty hearing.
This format for conducting

these type of meetings is a relatively new innovation for us, it's not innovative by any stretch, but for us it is and we haven't done too many of these and I think this is actually only our second or third where we've conducted a public meeting like this via webinar and so there's bound to be challenges so again, I apologize for those challenges and I look forward to any and all feedback we get about how we conducted this meeting. With that, we are adjourned, thank you.